

# **TRADABLE GREEN CERTIFICATES SCHEMES UNDER EU LAW**

**The influence of EU law on national support  
schemes for renewable electricity generation**



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# **Part I - Introduction**



# 1 Research topic and central legal issues

## 1.1 National tradable green certificates schemes as a research topic within EU law

Tradable green certificates (TGCs) are market-based instruments allowing for flexibility in compliance with a quota obligation under a support scheme in favour of renewable electricity generation. When a government decides to implement a TGCs scheme, the latter usually plays a central role in the renewable energy strategy of the state. In the context of the European Union (EU), the implementation of national TGCs schemes allows Member States complying with the legally binding targets defined in Directive 2009/28/EC on the promotion of the use of energy from renewable sources.<sup>1</sup>

As of today, TGCs schemes remain national instruments, the regulation of which is decided at Member State level. Meanwhile, several components of the schemes are influenced by EU law provisions. The manner EU law influences the regulatory design of national TGCs schemes is the topic of this thesis. The purpose of the analysis is to reveal the margin of appreciation left to Member States in the choice and regulation of their instruments aimed to support the generation of electricity based on renewable energy sources (RES-E).

The topic is timely and is addressed in a manner that intends to fill a gap in the legal literature. It is timely because European economies are experiencing a period of transition towards a low carbon economy which is based on a further development of the use of renewable energy sources (RES) in electricity generation. This transition must be accompanied if it wants to secure a series of benefits, which is the role of law and one of the central objectives of the regulation of TGCs schemes. European economies also face several budgetary constraints which affect the source of financing of the schemes. This particular policy and regulatory background is further defined in Chapter 2. While the legal literature on energy law and the promotion of renewable energy sources is extensive, very few authors have analysed the use of TGCs in the particular context of EU law.

The thesis is structured around three sets of questions, which are dealt respectively in Parts II, III and IV.

In Part II the question of the *harmonisation* of TGCs schemes under EU law is raised, as well as the margin of appreciation of Member States in the *choice of support instrument*. Chapter 5 starts by observing that there is no harmonisation of RES-E support schemes at EU level at the moment, before inquiring whether the EU has the competence to adopt a harmonised TGCs scheme. EU law does not contain a harmonised definition of TGCs scheme. However, TGCs, which are certificate-based instruments allowing the tracking of electricity generation attributes, must be in accordance with the EU law provisions on electricity tracking. Chapter 6 assesses the nature and effects of these provisions on the

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<sup>1</sup> Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC, OJ L 140 of 05.06.2009, p. 16.

adoption of TGCs schemes. The regulatory relationship between TGCs and guarantees of origin (GOs) is of particular interest.

Part III deals with the EU law provisions conditioning the *regulatory design of national TGCs schemes*. Two main areas of material EU law are identified: competition law and electricity law. Chapter 7 reviews the qualification of TGCs schemes under the state aids regime. It reveals the extent to which a Member State can support RES-E generation without infringing state aids rules. Where elements of state aids exist, possible exemptions can apply. While a TGCs scheme will usually become the central support instrument in the RES-E strategy of a Member State, it is often combined with other support measures, which raises concerns in terms of overcompensation. For this reason, this part of the thesis also raises the question of the cumulation of aids in favour of renewable energy projects under a TGCs scheme, and the limits that EU law sets in that domain. Chapter 8 analyses the extent to which the design and operation of TGCs schemes are conditioned by secondary EU law applicable to the electricity sector, both at wholesale and retail level. The certificates market might be separated from the electricity markets, the regulation of the latter affects the operation of the former under the terms reviewed in this chapter.

Part IV evaluates the conformity of TGCs schemes under *internal market rules*, where two particular issues are raised. Chapter 9 assesses the legality of the possible trade restrictive nature of national TGCs schemes as regards the free movement of electricity. In the absence of a legal definition of TGCs under EU law, Chapter 10 identifies the core issues that the cross-border trading of certificates can raise based on the alternative definitions previously identified in Chapter 4 of this introduction. For the moment, mandatory TGCs schemes allow certificates trading only for purposes of compliance at national level, which means that there is no trading between Member States.

It is not the purpose of this thesis to review all the possible implementation alternatives for TGCs schemes, and all legal issues related to the application of EU law at the different levels of the schemes. Throughout the analysis, two transversal lines of thought are prioritised: (i) *design and trading*, based on the distinction between the scheme and the market place; (ii) *compliance and support*, based on the balance between the legal obligations of the Member States towards the EU and national interests. By following this approach, the thesis reveals the central legal challenges associated to the development of renewable energy policies, which are conducted at both national and EU level. The influence of EU law on national TGCs schemes takes particular account of the fact that: EU law does not require the harmonisation of support schemes; EU law defines mandatory targets for each EU Member State; to reach these targets, cooperation is encouraged and framed by the mechanisms defined in Directive 2009/28/EC; support schemes must be consistent with internal market and competition rules; and the EU aims at the completion of an open, integrated and competitive European electricity market.

## **1.2 Tradable green certificates schemes: a closer look**

The present thesis offers an analysis of TGCs schemes as support instruments in the context of RES-E generation. Various terms are associated with this type of schemes, such as Renewable Energy Certificates (RECs), green tags, support certificates, and electricity certificates. In this thesis, the term *green certificates* will be preferred for various reasons. First, the concept of green certificates has been used primarily for referring to support

instruments. The meaning of other terms (green tags, green labels, RECs) may vary according both to the jurisdiction and their voluntary or mandatory nature, potentially leading to confusion. Second, popular awareness of the concept of green certificates has increased and non-specialists can now readily identify its meaning. The use of the term *green certificates* will consequently allow readers to connect more readily with the topic and, ultimately, permit optimal dissemination and utilisation of the research results of this thesis.

As shortly defined above, TGCs are instruments that allow for flexibility in compliance with a quota obligation. They are also certificate-based tracking instruments of electricity generation attributes for the purpose of implementation of the support scheme. The various components of this definition as well as the different implementation alternatives are detailed separately in the following paragraphs.

### **1.2.1 A compliance instrument**

TGCs are compliance instruments. They permit the fulfilment of a mandatory quota obligation under a support scheme for the production of RES-E.<sup>2</sup> The quota obligation is supposed to reflect government-endorsed objectives in terms of RES-E generation or the share of RES in final energy consumption. National legislation will define, on the one hand, the obligated parties that are subject to the quota obligation (usually electricity suppliers) and, on the other hand, the eligible parties that are entitled to receive TGCs for free (usually RES-E generators). Once a year, the obligated parties must show that they own enough certificates to fulfil their quota obligations. If they do not possess enough certificates, they may buy them from the eligible parties or from other authorised trading parties. This creates a TGCs market. Fines are imposed for non-compliance with the quota obligation.

The level of the quota obligation secures the volume of RES-E generation to be attained, while retail demand for RES-E may be very unpredictable. Accordingly, the TGCs system should be distinguished from a system of voluntary green power offers, whereby suppliers certify by means of disclosure instruments, such as guarantees of origin (GOs), that the electricity they are supplying is of renewable origin and the customer makes a voluntary choice to purchase such electricity, possibly paying more for it. For this reason, the nature of the compliance secured by a TGCs scheme must be distinguished from that secured by a green power offer. TGCs do not guarantee the greenness of the electricity purchased.

The unit of electricity generated to which each TGC applies is defined by law and is generally standardised as one megawatt hour (MWh). The determining element for issuance is often the fact of the electricity being fed into the grid, as confirmed by meter data. This means that the electricity and the TGC are generated virtually simultaneously. The certificate is added to the account of the eligible party, which can then trade the certificate. Trading takes place outside the registry, but changes in ownership must be

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<sup>2</sup> On enforcement in relation to market-based compliance instruments, see the example of emissions trading in D. Zaelke, D. Kaniaru, and E. Kruzikova, *Making Law Work – Environmental Compliance & Sustainable Development* (Cameron May, London, 2005). In particular, Chapter 8 (Vol. 2) deals with 'Emissions Trading Compliance', arguing in favour of the need for strict compliance incentives and enforcement strategies: 'Low or even moderate levels of compliance can destroy markets and undermine the financial incentives' (p. 109).

notified to the competent body or authority responsible for managing the registry. When the obligated party wants to use its certificates for the purposes of compliance, it cancels them in the same registry. Third parties, such as brokers, may also be allowed to have an account at the registry in order to track changes in the ownership of the certificates. It is important to note, however, that the registry is not an exchange or trading platform.

The additional revenues obtained from the sale of TGCs provide RES-E generators with *financial support* in addition to income from the sale of electricity. This support is intended to cover the difference between the costs of generating RES-E and the costs of generating electricity based on other, *e.g.*, conventional, sources. Accordingly the financial support is granted to RES-E plants that are already licensed and that are already supplying electricity to the grid. For this reason, TGCs must be characterised as *operating aids*, and should be distinguished from *investment aids*. An operating aid, sometimes also known as production support, is granted once the plant is already operational. This also means that TGCs are issued in favour of RES-E projects that have already received the necessary primary investments and that are making use of renewable technology in a way that is almost competitive. Revenues from sales of TGCs are intended to allow RES-E generators to compete with other generators that are already competitive, but should not lead to overcompensation.

TGCs allow quota obligations to be met in a *flexible* manner, as they give obligated parties a choice either to obtain TGCs through their own renewable energy procurement or to buy TGCs originating from eligible installations. Non-compliance is penalised by a fine, which itself provides an incentive for the purchase of certificates. The level of flexibility will depend on the design of the scheme and the tradability of the TGCs. The fact that the certificates are defined as *tradable* underlines the fact that they can be exchanged between parties. This characteristic is explicitly defined in most national legislation. A quota-based support scheme that does not allow for trading in green certificates is almost like a command-and-control mechanism. This thesis analyses green certificate schemes that allow for trading, and for this reason refers to *tradable green certificates*, not only to green certificates. A fully tradable TGCs regime allows for three types of flexibility: geographic, temporal, and participatory.<sup>3</sup>

The tradable nature of the certificates reveals another aim of such schemes, which is to support RES-E generation in a *competitive* way. Being a market-based instrument, a TGCs scheme aims to deliver the required quota of additional RES-E generation in the most cost-efficient manner, and at the lowest costs for society, since ultimately it is electricity customers who will bear the costs.

Finally, and in the particular context of EU law, TGCs schemes are used for compliance with the mandatory targets of Directive 2009/28/EC on the promotion of the use of energy from renewable sources. Article 3.1 of Directive 2009/28/EC requires all Member States to achieve individually-defined mandatory targets that contribute collectively to the achievement of the EU target of at least a 20 per cent share of energy from renewable sources in the Union's gross final consumption of energy in 2020.<sup>4</sup> The target for each

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<sup>3</sup> *Renewable Energy Certificates and the California Renewables Portfolio Standard Program*, Staff White Paper, Division of Strategic Planning, California Public Utilities Commission, 2006, p. 8.

<sup>4</sup> Gross final consumption of energy is defined in Directive 2009/28/EC as:

Member State, expressed as a percentage of the gross final consumption of energy, is defined in the third column of table A of Annex I to the Directive. Expressing the EU and national targets in terms of energy consumption rather than generation allows much greater flexibility in compliance.<sup>5</sup> The targets apply to energy consumption as a whole, not only to electricity. This also contributes to flexibility, since efforts are not restricted to the electricity sector, but can also be taken in the areas of heating and cooling and transport. The gross final consumption of energy from RES is calculated by cumulating the total RES used to generate the energy consumed in these three sectors.<sup>6</sup> Further guidance is given in the directive as to this calculation,<sup>7</sup> which must also be based on the methodology and definitions of Regulation (EC) No. 1099/2008 on energy statistics.<sup>8</sup>

The mandatory nature of the target was endorsed by the heads of state and government at the European Council of March 2007.<sup>9</sup> The text of Directive 2009/28/EC emphasises the appropriateness of the adoption of mandatory targets in order to provide certainty for investors and encourage the continuous development of energy technologies.<sup>10</sup> An additional argument is that the mandatory nature of the targets enables the European Commission to commence infringement procedures under Article 258 TFEU, which represents another incentive for Member States to achieve their targets. Non-compliance with its mandatory target would represent a failure by the Member State to fulfil its obligations under the directive and, accordingly, under EU law.<sup>11</sup> The European Commission, being responsible for ensuring the correct application of EU law,<sup>12</sup> may bring infringement proceedings against a Member State that is failing to fulfil its obligations. To enable the Commission to monitor the efforts of the Member States, Directive 2009/28/EC requires them firstly to submit a National Renewable Energy Action Plan (NREAP) to the European Commission by 30 June 2010,<sup>13</sup> and, secondly, to submit a report to the Commission on progress made in the promotion and use of RES by 31 December 2011 and every two years thereafter.<sup>14</sup> A failure to submit the NREAP and/or

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*'the energy commodities delivered for energy purposes to industry, transport, households, services including public services, agriculture, forestry and fisheries, including the consumption of electricity and heat by the energy branch for electricity and heat production and including losses of electricity and heat in distribution and transmission'* (Article 2(a)).

<sup>5</sup> Meanwhile, adapting a TGC scheme to a generation target is not difficult, since it suffices that the quota obligation corresponds to the target to be attained.

<sup>6</sup> Article 5.1, Directive 2009/28/EC.

<sup>7</sup> Article 5.3 of the directive provides further guidance as to the calculation of the gross final consumption of electricity from renewable energy sources, which should correspond to:

*'the quantity of electricity produced in a Member States from renewable energy sources, excluding the production of electricity in pumped storage units from water that has previously been pumped uphill. In multi-fuel plants using renewable and conventional sources, only the part of electricity produced from renewable energy sources shall be taken into account. [...] The electricity generated by hydropower and wind power shall be accounted for in accordance with the normalization rules set out in Annex II.'*

<sup>8</sup> Article 5.7, Directive 2009/28/EC. See Regulation (EC) No 1099/2008 of the European Parliament and of the Council of 22 October 2008 on energy statistics, OJ L 304, 14.11.2008, p. 1, as amended.

<sup>9</sup> Presidency Conclusions, European Council, Brussels, 8-9 March 2007.

<sup>10</sup> Recital 14, Directive 2009/28/EC.

<sup>11</sup> Article 4 TEU.

<sup>12</sup> Article 17.1 TEU.

<sup>13</sup> Article 4.2, Directive 2009/28/EC.

<sup>14</sup> Article 22.1, Directive 2009/28/EC.

the reports would also represent an infringement. A final instrument for monitoring Member States' compliance is the indicative trajectory that they are required to follow and which is '*tracing a path towards the achievement of their final mandatory targets*' in 2020.<sup>15</sup> Failure to follow the indicative trajectory will not constitute a breach of the directive in itself, but non-adaptation of the NREAP if it appears that the trajectory is not being followed may cause a negative decision or recommendation adopted by the Commission (obligation to submit an amended national renewable energy action plan).<sup>16</sup>

Article 3.3 of Directive 2009/28/EC provides that Member States can comply with their mandatory targets in different ways, including, '*inter alia*', support schemes and measures of cooperation between different Member States and with third countries as defined in the directive. The establishment of a national TGCs scheme is one way for a Member State to support RES-E generation, which helps increase the proportion of electricity generated from renewable sources in electricity consumption. In turn this helps the Member State to comply with the Directive's mandatory objectives. For this reason, the TGCs scheme must be defined as an instrument for compliance with the requirements of Directive 2009/28/EC. Directive 2009/28/EC does not however require Member States to adopt support schemes or apply one of the cooperation mechanisms. Doing so remains voluntary. What the directive does require of Member States is to take action through the adoption of measures '*effectively designed to ensure that the share of energy from renewable sources equals or exceeds that shown in the indicative trajectory set out in part B of Annex I.*'<sup>17</sup> According to a strict interpretation of the directive, a Member State that does not adopt '*effectively designed*' RES support measures would be in a situation of non-compliance. As any assessment of the effectiveness of the design of the national scheme by the Court might be a difficult exercise, legal action would seem more likely to be taken on the grounds of absence of measures combined with non-achievement of the 2020 target. The NREAPs notified to the Commission reveal that all Member States envisage or are implementing support schemes and accordingly are or will be complying with the requirement to 'take action'. Details of the scheme must be provided to the Commission both in the NREAP and in the periodic reports. As regards the NREAP itself, the template included a list of questions about national schemes in general, as well as specifically on 'tradable certificates.'<sup>18</sup> Similarly, Member States must provide details in their periodic report as regards the introduction and functioning of their support schemes.<sup>19</sup> While Member States may be free to choose which compliance strategies to use to achieve their

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<sup>15</sup> Recital 19, Directive 2009/28/EC. The indicative trajectory takes 2005 as the reference year because this is the latest year for which reliable data on national shares of renewable energy exist (Recital 21).

<sup>16</sup> Article 4.4, Directive 2009/28/EC.

<sup>17</sup> Article 3.2, Directive 2009/28/EC.

<sup>18</sup> See Commission Decision 2009/548/EC of 30 June 2009 establishing a template for National Renewable Energy Action Plans under Directive 2009/28/EC of the European Parliament and the Council, OJ L182, 15.07.2009, p. 33. The list of questions on tradable certificates is as follows (point 4.3): (a) Is there an obliged share of electricity produced from renewable sources in the total supply? (b) Who has the obligation? (c) Are there technology-specific bands? (d) Which technologies are covered by the scheme? (e) Is international trade in certificates allowed? What are the conditions? (f) Is there a floor bottom price? (g) Is there a penalty for non-fulfilment? (h) What is the average price for certificates? Is it made public? Where? (i) What is the trading scheme for certificates? (j) How long can a plant participate in the scheme?

<sup>19</sup> Article 22.1 (b) (c), Directive 2009/28/EC.



targets, the directive gives the Commission the tools to ensure the close monitoring of the functioning of the schemes.

### **1.2.2 A certificate-based tracking scheme for the purposes of support**

Electricity tracking is the mechanism by which the generation attributes of electricity are identified and assigned. Obviously electricity can neither be tagged in the same way as other physical goods nor stored like oil or natural gas. The electricity grid is often compared to a lake, with electricity – like water – flowing in and out, with no possibility of identifying or labelling it. Identifying the generation characteristics of electricity is consequently difficult. However, while it is not possible to track the electrons flowing into the grid, it is possible to follow the financial transactions related to electricity. This is the role of tracking instruments. In the context of the electricity supply chain, electricity tracking can be defined as the process of assigning electricity generation attributes from generators to other actors in the chain, such as electricity suppliers and consumers.<sup>20</sup>

At the same time, the new structure of the electricity industry is affecting the ability to follow in the same way as before the financial transactions relating to electricity sales and purchases. The liberalisation of the electricity markets has increased the complexity of electricity transactions. Regional power pools are becoming more and more integrated and higher volumes of electricity are being traded between larger numbers of actors. The prospect of a European smart grid<sup>21</sup> adds an additional layer of complexity. All these structural elements specific to the power markets have increased recourse to some forms of tracking.

Electricity tracking is a fairly recent practice that developed during the 1990s in parallel with the electricity market reforms and liberalisation. The first real structured initiatives appeared in Europe in the late 1990s with the foundation of the private initiative RECS International in 1999, followed by the start-up phase of the RECS system in 2000. The first issuance and trading of RECS certificate dates from July 2001 in Finland. In the United States, the concept of electricity tracking dated similarly from the late 1990s, motivated by environmental disclosure.<sup>22</sup> Focusing on the issue of compatibility between

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<sup>20</sup> Definition given by the E-TRACK project financed by the European Union and dedicated to the assessment of electricity tracking instruments in Europe and the development of a common standard. See the E-TRACK website <<http://www.e-track-project.org/tracking.php>>. See also W. Lise, C. Timpe, J.C. Jansen, M. ten Donkelaar, 'Tracking electricity generation attributes in Europe,' *Energy Policy* 35 (2007), p. 5856.

<sup>21</sup> On the potential and challenges represented by the establishment of European smart grids, see: *Smart Grids: from innovation to deployment*, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, COM(2011) 202, 12 April 2011.

<sup>22</sup> See, B. Biewald, D. White and T. Woolf, 'Follow the Money: A Method for Tracking Electricity for Environmental Disclosure,' *The Electricity Journal*, Vol. 12, Issue 4, May 1999, pp. 55-56.

At the beginning of 1998, the US Environmental Protection Agency (EPA) offered the New England Governors' Conference a grant with the aim of assessing the feasibility of a tracking system for electricity transactions on the New England Power Pool. A few months previously, in 1997, the NERC Tag – also called the E-Tag - had been introduced, taking the name of the not-for-profit corporation that was the first to implement an electricity tracking system (the North American Electric Reliability

different tracking systems, the Environmental Tracking Network of North America (ETNNA) developed progressively from 2002 until its official launch in 2008.<sup>23</sup> ETNNA very much resembles its European counterpart, the Association of Issuing Bodies (AIB), which was created in 2002 and is registered in Belgium. A rapid historical overview reveals that most of the private and not-for-profit initiatives aimed at reinforcing electricity tracking have focused on tracking systems that use certificates.

With the increasing maturity of its underlying mechanisms, electricity tracking has progressively come to be perceived as a reliable instrument that can be used for different purposes and beyond national borders. Electricity tracking is used in Europe for three main purposes that have been identified by a research project on the topic: *disclosure*, *target compliance* and *support*.<sup>24</sup> The same classification is used below and also appears in the US literature.<sup>25</sup>

The first purpose listed above is *disclosure*. The tracked information is provided to final customers and covers all generation attributes. This information is often termed ‘fuel-mix disclosure’ or ‘electricity labelling’, as it aims to provide an overview of the different fuel types used for electricity supply and the conditions surrounding their use in electricity generation. Electricity disclosure is interested in the conditions under which electricity is generated, as represented by its ‘generation attributes.’ Electricity generation attributes encompass the sources of energy (*e.g.*, renewable sources, nuclear, natural gas, oil – the so-called fuel-mix disclosure), the type of renewable technology, the characteristics of the plant (*e.g.*, whether it is a high efficiency-CHP plant), the country of origin, the period of production, environmental attributes, and the nature of the support received by the plant. A sub-category of generation attributes mentioned above that focuses on environmental impacts is known as electricity environmental attributes. This sub-category mainly encompasses information concerning: atmospheric emissions of carbon dioxide, nitrogen oxide and sulphur dioxide; or amount of nuclear waste produced. Under certain regimes, there is a risk of double counting of attributes between climate legislation and RES-E

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Corporation). It should be noted that use of the NERC Tag has extended to some parts of Canada and Mexico.

<sup>23</sup> See the ETNNA website at <<http://www.etnna.org/>>.

<sup>24</sup> See recently: C. Timpe, *A European Standard for the Tracking of Electricity*, final report from the E-TRACK project, August 2007. See prior to that publication: J.C. Jansen, ‘Spreading best practice,’ *Environmental Finance*, May 2005, p. 27; J.C. Jansen, ‘Transfer and use of generation attributes,’ *North American Windpower*, June 2005, p. 4; Uytterlinde et al., ‘Guarantees of origin and multiple counting of electricity from renewable energy,’ Doc. ECN-C—04-098, 2004; Van der Linden et al. 2004; K. Kristiansen et al., ‘Energy source disclosure, renewable energy targets and guarantees of origin – A multi-certificate response to multiple regulatory requirements,’ Discussion paper, January 2005.

<sup>25</sup> B. Biewald, D. White and T. Woolf, ‘Follow the Money: A Method for Tracking Electricity for Environment Disclosure,’ *The Electricity Journal*, Volume 12, Issue 4, May 1999, pp. 55-60. In the first sentence, the authors affirm: ‘Tracking systems for electricity are needed to support verification of retail marketing claims, mandatory disclosure policies, and portfolio standards for retail suppliers.’ For an analysis of the development of Renewable Energy Certificates (RECs) in the United States, see C. Banet, ‘Terms and Conditions of Renewable Energy Certificates Trading in the United States’ in Delvaux, Hunt and Talus (eds), *EU Energy Law and Policy Issues*, ELRF Collection, (Euroconfidentiel, 2<sup>nd</sup> edition, 2010), pp. 323-324.

support scheme.<sup>26</sup> All information relating to generation attributes can be displayed directly on the product or, in the case of electricity, on the power purchase agreement or the bill.<sup>27</sup> Directive 2009/72/EC is the central piece of legislation defining and requiring electricity disclosure.

Electricity tracking may serve a second purpose in the context of *target compliance*. Here, electricity generation attributes are used to ascertain compliance with a quantitative target, usually of a mandatory nature. The targets usually refer to a quantity or percentage of renewable electricity generation in final consumption. Targets rarely refer to electricity generation, as such targets would be extremely difficult to comply with in the short term and would remove flexibility in compliance. Most Member States have adopted mandatory targets for electricity suppliers. At EU level, Directive 2009/28/EC defines in Article 3 and Part A of Annex 1 a European target, split into national mandatory targets, for the share of energy from renewable sources in gross final consumption of energy in 2020. The directive does not define how electricity is to be tracked under the different compliance alternatives, although it has strengthened the rules on the use of instruments for the purposes of target compliance. In particular, the directive forbids the use of guarantees of origin for that purpose (Article 15.2).

The third purpose of electricity tracking concerns *support*. Electricity generation attributes are used to provide evidence of the generation of renewable electricity under a support scheme, either voluntary or mandatory. All RES-E support measures or schemes require some form of tracking if they are to be reliable and avoid double-counting. Tracking instruments can be used for any kind of support scheme or measure, whether involving feed-in tariffs, tax exemptions, a quota obligation or public procurement. The Court of Justice of the EU had previously highlighted on several occasions the lack of tracking instruments in connection with support. In Case C-379/98, *PreussenElektra*, the Court emphasised the difficulty of identifying the origin and, in particular, the energy source of electricity once it had been fed into the grid.<sup>28</sup> Similar conclusions were reached by the Court in Case C-448/01, *EVN Wienstrom*.<sup>29</sup> Electricity-disclosure obligations and tracking

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<sup>26</sup> As pointed out by Bertoldi *et al.*: ‘Double counting challenges emerge in relation with project types that have multiple values: e.g. how to treat a project, such as CHP on biomass that may receive emission allowances, and may turn out to be eligible for both green and white certificates.’ P. Bertoldi *et al.*, ‘White, green & brown certificates: How to make the most of them?’, *ECEEE 2005 Summer Study – What Works & Who Delivers*, pp. 1515-1526.

<sup>27</sup> There has sometimes been a tendency to use alternative concepts than electricity disclosure that ultimately results in confusion. While the most recent directives offer some clarification, some confusion may remain. For example, both the Second and Third Electricity Directives refer to the provisions on fuel-mix disclosure, environmental disclosure and customer protection information as ‘energy labelling requirements’ (e.g., Article 47.1(h) Directive 2009/72/EC). In this respect a clear distinction needs to be made with regard to the use of electricity environmental attributes for the purposes of green power quality labelling, which is the result of voluntary initiatives on the retail market.

<sup>28</sup> Case C-379/98, *PreussenElektra AG v Schleswag AG*, [2001] ECR I-02099, para. 79: ‘Moreover, the nature of electricity is such that, once it has been allowed into the transmission or distribution system, it is difficult to determine its origin and in particular the source of energy from which it was produced.’

<sup>29</sup> Case C-448/01, *EVN AG and Wienstrom GmbH v Republik Österreich*, [2003] ECR I-14527, paras. 44-45 and 51-52. Here, the Court takes note of the lack of technical ability to verify whether electricity supplied has actually been generated from RES, and concludes on the consequences for green public procurement (GPP) procedures as regards the respect of the obligation of transparency and the principle of equal treatment. By contrast, the AG recognises in the same case the existence of tracking

instruments can assist in the implementation of RES-E support policies, but are not support schemes in themselves. They require the adoption of a specific support scheme.

Electricity tracking may be either *implicit* or *explicit*. In practice, the two methods are often combined. *Implicit tracking* is the less reliable way of tracking electricity generation attributes. The most common implicit tracking tools are averages and statistics, based on national or European data concerning the overall generation mix. The other way of tracking electricity generation attributes is through *explicit tracking*, which creates a genuine link between generation and supply. There are two methods of explicit tracking: contract-based and certificate-based tracking.<sup>30</sup> In contract-based tracking, the environmental attributes are identified in the power purchase agreement (PPA) concluded either between generators and suppliers in the wholesale electricity market or between generators and big wholesale customers. Contract-based tracking creates a direct link between the generator and the electricity purchaser and thus provides reliable information.<sup>31</sup> However, such details, if they are forwarded successively along the contractual chain, may render the transactions so specific that they will impede the liquidity of the market. There is also a risk of losing the valuable financial benefits of the generation attributes, because of the need to merge different contracted volumes. While contract-based tracking may be cumbersome and reduce market liquidity, *certificate-based tracking* allows for easier verification of information and trading. Certificate-based systems may also be seen as more reliable and more detailed.<sup>32</sup> Under certificate-based tracking, the generation attributes are separated from the electricity at the level of generation and are entered on a certificate. Usually a certificate gathers all the generation attributes relative to one unit of electricity generated. The generation attributes can either

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instruments based on contracts or certificates, that could be used in relation to GPP (Opinion of Advocate General Mischo delivered on 27 February 2003 in Case C-448/01, points 45-48).

<sup>30</sup> Two projects funded by the European Commission have discussed the two approaches: Boardman *et al.*, *Consumer Choice and Carbon Consciousness for Electricity* (4C Electricity) 2003; Palmer *et al.*, *Consumer Information on Electricity – Final Report*, September 2003. Once again, the US literature makes a similar distinction, which reflects consistent international practice. See in particular: Regulatory Assistance Project (RAP), ‘Full Environmental Disclosure for Electricity: Tracking and Reporting Key Information,’ May 1997; B. Biewald, ‘Follow the Money: A Method for Tracking Electricity for Environmental Disclosure,’ *The Electricity Journal*, May 1999; R.P. Sedano, ‘Electric Product Disclosure: A Status Report,’ The Regulatory Assistance Project, National Council on Competition and the Electric Industry, July 2002.

<sup>31</sup> D. Moskovitz, C. Harrington and T. Austin, *Synthesis Report: A Summary of Research on Information Disclosure*, The Consumer Information Disclosure Series, the National Council on Competition and the Electric Industry, October 1998.

<sup>32</sup> The quality of the information contained in the certificate is crucial for the confidence of market players. This is underlined in Directive 2009/72/EC (Article 3.9, last sentence) and Directive 2009/28/EC (Article 15.5), and was previously emphasised in Directive 2003/54/EC (Article 3.6) and Directive 2001/77/EC (Article 5.5). The quality of several aspects of the generation information provided is important to market actors and institutions. These aspects are reliability, accuracy, fraud-resistance and completeness. The European legislation does not define these terms, but (with the exception of ‘completeness’) refers to them. In the absence of any definitions, the European Transmission System Operators (ETSO) in 2003 provided initial definitions as follows: ‘Reliability refers to the level of consistency and credibility of the presented information, and is affected by the complexity of the system design and the robustness against improper manipulation; Accuracy refers to the correctness and precision of the information; Completeness refers to how comprehensive is the information that suppliers will give to consumers, and is therefore closely related to the detail level of gathered data.’ (European Transmission System Operators (ETSO), *Report on Renewable Energy Sources (RES)*, Brussels, 18.12.2003, pp. 5-6.)

be claimed by the first buyer of the certificate or sold on. The fact that certificates are unbundled from electricity opens up wider trading possibilities, maximising the value of generation attributes. It also offers obligated parties more flexibility in their compliance strategy. Finally it provides RES-E generators with greater opportunities to profit from the sale of attributes and cover the difference in generation costs. Limits imposed on trade in certificates usually result from regulatory or legislative measures (see Part IV).

A TGCs scheme is a certificate-based tracking system used for the purposes of compliance with a quota obligation, *i.e.*, for support. In that context, green certificates have sometimes been called ‘support certificates’ in order to distinguish them from ‘disclosure certificates’ such as guarantees of origin.<sup>33</sup> Under a TGCs scheme, the green certificate constitutes the tracking instrument ‘*implementing the support scheme*.’<sup>34</sup> This is reflected by the fact that they can be sold separately, following a regulated issuance procedure, usually defined in the law of the Member State. The rules applicable to the issuing system allow demonstrating the reliability of the information provided in the certificate. These rules are, in the case of TGCs schemes, defined at national level. However, EU law defines precise criteria as to GOs that are to be implemented in all Member States, as reviewed in Chapter 6.

Not all of the three utilisations of electricity generation attributes can be identified in national orders. The utilisations of tracking instruments may overlap, as in the case of TGCs and GOs. The avoidance of double-counting and divergent utilisations of environmental attributes is a strong argument in favour of the harmonisation of tracking instruments, in particular in the context of the EU internal electricity market. Tracking is also a necessary instrument for avoiding the double-counting of attributes when linking different market-based instruments. The fact that environmental attributes such as avoided CO<sub>2</sub> emissions are tracked prevents them from being rewarded twice over.

### **1.2.3 Alternative design elements for TGCs schemes**

The regulatory design of TGCs schemes is subject to multiple alternatives that will reflect both the ambitions of the government in question and the particular national circumstances. The latter may depend *inter alia* on the structure of the electricity market, access to natural resources, and the existence of other RES-E support instruments. The following paragraphs describe the main alternatives for the design of TGCs schemes according to their components. The regulatory design of the scheme will give rise to a new market for the trading of green certificates. A TGCs scheme comprises the following stages: issuance of the certificates by a designated body or authority to the licensed RES-E generation plants; entry of the certificates on the relevant generators’ accounts; trading in the certificates between parties outside the registry; tracking of ownership changes for the TGCs via the registry; cancellation of the certificates in the accounts of the obligated parties for the purposes of compliance. The body or authority responsible for the registry is responsible for verifying the correctness of the information submitted by account holders.

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<sup>33</sup> C. Timpe and H. Sprongl, *Long-Term Developments and Integration of Energy-Related Certification Schemes*, WP6 report of the E-TRACK II project, report prepared as part of the IEE project ‘A European Tracking System for Electricity – Phase II (E-TRACK II),’ 30 November 2009, p. 28.

<sup>34</sup> *Best Practice for the Tracking of Electricity*, Recommendations from the E-TRACK II project, Deliverable 10, Intelligent Energy Europe, November 2009, p. 71.

The demand for TGCs is created by the legal obligation imposed on certain electricity market actors to redeem a certain amount of TGCs at a due date. The starting point is the quota obligation, which may be formulated in different ways. It may be based either on the redemption of a certain number of certificates or on a volume of RES-E calculated on the basis of the redeemed certificates.<sup>35</sup> The level of the obligation usually increases over time (in terms of both length and volume) on the basis of either a fixed growth rate or periodic predetermined increases.<sup>36</sup> It must also take into account variations in electricity consumption. Such variations affect not only the RES-E generation capacity expected to be built, but also investors' confidence. The longer the perspective offered by the scheme, the better the potential rewards for investors in RES-E projects. For example, the UK Renewables Obligation applies to suppliers until 31 March 2037. The common TGCs market between Norway and Sweden is planned to start in 2012 and last until 2036.

The lifetime of a TGC may or may not be subject to limitation. Short lifetimes will ensure liquidity on the market, while long lifetimes will give parties more security as regards compliance costs, as there will be the possibility of banking certificates.

The quota obligation, usually defined by law, may be imposed on different actors (the so-called *obligated parties*) within the electricity value chain: generators, network operators, suppliers, or consumers. The first solution, of imposing the obligation on generators, is less common. This solution directly affects the size of the market, limiting it to a few types of actors. It also requires the obligation on generators to be accompanied by a RES-E purchase obligation on suppliers, in order to ensure that green electricity will be delivered effectively into the network and consumed.<sup>37</sup> The second solution involves imposing the quota obligation on network operators, *i.e.*, transmission or distribution system operators (TSOs, DSOs). The third solution, which is the most common, imposes the quota obligation on suppliers. This is the case in Sweden and in the United Kingdom. The manner in which suppliers are defined in the legislation regulating both the TGCs scheme and the electricity sector in general is of paramount importance for the liquidity of the market, the fairness of the obligation, and the potential effects on trade. To adjust its scheme, the Swedish government decided in 2007 to redefine the category of obligated parties. The final option is to impose the obligation on consumers, reflecting the polluter-pays principle.

Certificates are offered for sale on the TGCs market by eligible RES-E producers. An important legal pre-condition reflecting the scheme's nature - operating aid - is that the generation plant must already be licensed and connected to the network. The next question concerns the eligibility of different RES-E technologies. Technological neutrality will

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<sup>35</sup> In the United Kingdom, England, Wales, Scotland and Northern Ireland amended their legislation with effect from 1 April 2009 as regards the nature of the quota obligation, which changed from a percentage of electricity supplied to an obligation to submit a certain number of ROCs per MWh of electricity supplied. For the period 2011-2012, suppliers must present 12.4 ROCs per 100 MWh they deliver in England & Wales and Scotland, and 5.5 ROCs per 100 MWh delivered in Northern Ireland.

<sup>36</sup> *Options for Design of Tradable Green Certificate Systems*, by the Netherlands Energy Research Foundation (ECN), the Science and Technology Policy Research Unit (SPRU), and Oeko-Institut, Doc. ECN-C--00-032, April 2000, p. 18.

<sup>37</sup> *Options for Design of Tradable Green Certificate Systems*, by the Netherlands Energy Research Foundation (ECN), the Science and Technology Policy Research Unit (SPRU), and Oeko-Institut, Doc. ECN-C--00-032, April 2000, p. 16.

ensure that the most cost-effective RES-E generation will be financed first. A technologically neutral scheme may rapidly lead to dominance by one particular technology that produces electricity more cheaply. Other sources will have much less chance of receiving support in the absence of additional regulation. For this reason, certain TGCs schemes grant differentiated numbers of TGCs according to the technology employed, or define 'technology classes', in order to support all types of renewable energy sources, not only those that are most cost-efficient.<sup>38</sup> Some schemes also defend technological diversity by defining a minimum price for certain technologies. The choice of technological neutrality depends on the objective pursued by the government through the scheme. National schemes that have operated for several years have usually introduced a differentiating element in order to ensure the development of different renewable energy sources. This is the case both in the UK and in Belgium. However, the schemes in Norway and Sweden are based on technological neutrality.

The system of fines has two effects: on the one hand, it motivates distributors to own or buy certificates – the level of the fine is a direct incentive to buy certificates or invest in RES-E projects; on the other hand, it offers distributors a possible way of protecting themselves (a kind of safety net) against high-priced certificates. The level of the fine may evolve over time. The progressive nature of the fine is also justified by the evolution of the renewable electricity market.

#### **1.2.4 Alternative trading terms for TGCs**

TGCs are traded for the purpose of compliance on a so-called *compliance market*. There is a difference here between Europe and the United States, where the certificates can be used on the *voluntary market* as well. The use of RECs in the voluntary market has even become essential in order to secure financing for many renewable energy projects in the United States.<sup>39</sup> Throughout this thesis, the concept of a *TGCs market* refers solely to markets where TGCs are traded, on whatever terms, for the purpose of compliance.

Usually the state itself does not regulate the market for TGCs. Of course, the TGCs market develops on the basis of the regulation of the scheme (obligated parties, eligible RES-E generators, attributes contained in the certificates, lifetime of the certificates, *etc.*), but the forms of trading are left to the discretion of the parties. The authority or body responsible

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<sup>38</sup> *Options for Design of Tradable Green Certificate Systems*, by the Netherlands Energy Research Foundation (ECN), the Science and Technology Policy Research Unit (SPRU), and Oeko-Institut, Doc. ECN-C--00-032, April 2000, p. 19.

<sup>39</sup> In 2008, states' renewables portfolio standard programmes (hereinafter RPS) required utilities to provide a total of 23 billion kWh from 'new' renewable energy generation. In the same year, approximately 24 billion kWh were sold in the voluntary market, primarily for new generation (these plants had generally become operational after the adoption of the voluntary programmes, and consequently qualified as 'new'). During the last few years (2004-2008), the voluntary market for green power has exceeded the mandatory market. However, as noted by the National Renewable Energy Laboratory, the demand for renewable energy for RPS-related requirements is expected to grow rapidly in the coming years: 'By 2010, RPS policies collectively call for utilities to obtain more than 60 billion kWh of new renewables, increasing to about 100 billion kWh in 2012; voluntary market growth rate would have to increase to keep pace.' (L. Bird, C. Kreycik and B. Friedman, *Green Power Marketing in the United States: A Status Report (2008 data)*, National Renewable Energy Laboratory (2009), pp. 6-7.)

for the TGCs registry is not involved in TGCs trading, pursuant to the requirement of independence.<sup>40</sup>

As regards the place of trading, TGCs transactions usually take place in one of three ways: *bilaterally, through brokers or through exchanges*. Practices vary from country to country. Unless there is an exchange, the majority of transactions take place bilaterally, *i.e.*, over the counter (OTC). There are also strategic considerations for market participants. RES-E generators may want to play with market forces and sell their certificates on a market platform, or they may prefer to play safe through long-term agreements in relation to the PPA.<sup>41</sup> The establishment of a trading exchange is usually a sign of fluidity on the TGCs market. An exchange also provides price transparency, in contrast to bilateral contracts where the price is not made public. Exchanges organising TGCs trading are to be found in several countries: SKM in Sweden; Belpex Green Certificates Exchange (Belpex GCE) in Belgium; the Green Certificates Market operated by the Gestore dei Mercati Energetici (GME), which also operates the Italian Power Exchange in Italy; and OPCOM, the power market operator, in Romania. Nordpool also traded Swedish certificates for a period, but the number of trading parties was too low and the platform was closed in 2008. As these examples demonstrate, trading of TGCs often takes place on the same platform as that used for wholesale electricity trading. Other advantages of having an exchange for TGCs include guaranteed delivery for the buyer and guaranteed payment for the seller. In certain circumstances, there could be a tendering procedure in relation to TGCs.

As regards their relationship to electricity as a commodity at the transaction level, TGCs may be either *bundled with or unbundled from the electricity contract*. Unbundling is the most common practice, and allows for greater flexibility in compliance. Electricity traders are generally in favour of trading in unbundled certificates.<sup>42</sup> The green certificate and the electricity are re-bundled at the point of supply to the final customer. Although the manner in which the certificate price is integrated into the electricity price charged to customers lies outside the TGCs compliance trading market, this issue is reviewed in Chapter 8.

Various alternatives exist concerning the electricity generation attributes covered by the certificate. The attributes may be either *aggregated or disaggregated, i.e.*, the certificate may cover either all or some of the attributes. This issue has mainly been raised in relation to a possible overlap with climate-change legislation, and the counting of avoided emissions. The question here is whether the TGC has to cover the carbon dioxide emissions avoided during electricity generation. In the United States, where the issue has

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<sup>40</sup> See the analysis on that point in Section 8.1 and the requirement for the independence of transmission and distribution system operators under Directive 2009/72/EC.

<sup>41</sup> 'Market potentials, trends and marketing options for Distributed Generation in Europe,' Market Access for Smaller Size Intelligent Electricity Generation (MASSIG), Deliverable D2.1, November 2008, p. 26.

<sup>42</sup> The European Federation of Energy Traders (EFET) took the following position during the negotiation concerning Directive 2009/28/EC: '*Only a trade in certificates that is separate from physical trading in electricity will develop the requisite flexibility and volume.*' (Source: EFET, 'Towards an EU target of 20% renewable power production by 2020 – Ideas for the reform and harmonisation of renewable energy support schemes in EU States', 2007, p. 3).



been more debated, the dominant approach is to prohibit disaggregation in order to avoid double counting.<sup>43</sup>

As regards the actual contractual arrangements, and depending on whether the TGCs are traded bilaterally or through an exchange, there has been a tendency towards standardisation, as tends to happen with other traded commodities.<sup>44</sup> *Standardisation of contracts for TGCs* is also a sign of increased liquidity on the market.

Since a TGCs scheme is a market-based instrument, the *price of the certificates* should be decided on the market, through the interaction of supply and demand. Meanwhile, the price may also be affected by external factors. The level of the compliance fee will serve as a floor price in the market. The public authorities may define a minimum or even a fixed price for TGCs issued to certain types of technologies, to ensure that they get enough support. This is the case in Belgium where the Flemish legislation defines a fixed minimum price for the certificates. The price may also be influenced by other attributes (*e.g.*, GO) or a commodity (electricity) included in the transaction. When South Africa was discussing the introduction of a TGCs scheme, a certificate price based on the difference in generation costs between coal-fired and RES-E plants was proposed. However, such a mechanism would operate in a very similar way to a premium system, rather than as a true market-based instrument. A balance has to be struck through the regulation of the certificate's price between the need for free competition on the TGCs market and the necessity of securing sufficient support for certain RES-E technologies. A rapid comparison between the different organised TGCs markets that publish market data shows that the certificates price varies between 17 to 90 Euros per certificate.<sup>45</sup> When a minimum purchase price is defined, it is in general of higher value.<sup>46</sup>

In the United States, derivatives have been developed based on the certificates. This could also happen in Europe, but has not done so yet.

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<sup>43</sup> National Renewable Energy Laboratory (NREL), *Emerging Markets for Renewable Energy Certificates: Opportunities and Challenges*, Technical Report, by Ed Holt and Lori Bird, NREL/TP-620-37388, January 2005, pp. 58-59. The authors note that, to their knowledge, *'the only state that has explicitly supported a disaggregated REC for RPS compliance, in law or rule, is Maryland. However, several states, including California and New York, have explicitly defined a REC for compliance purposes to include all the environmental attributes directly resulting from renewable generation. Most states, however, are silent on the issue.'*

<sup>44</sup> RECS International published in July 2007 a *RECS Certificate and Guarantee of Origin Standard Contract* developed by the Users Group of RECS International. Authors see standardisation of contracts as *'an important step in harmonisation of the markets.'* (Press release, 3 July 2007, RECS International, *'Market Green Certificates becomes mature – RECS International introduces new standard contracts.'*)

<sup>45</sup> GME reported the following average price per green certificate in Euros for 2009, 2010 and 2011 respectively: 85.08; 85.12; 81.90 (data as of May 2011). (Source: GME website <<http://www.mercatoelettrico.org/En/Default.aspx>>.) Belpex GCE reports figures between 75 and 87 Euros for the beginning of 2011 (<<http://www.belpexgce.be>>). SKM reports prices between 17 and 27 Euros for the same period (<<http://www.skm.se/priceinfo/>>). In Romania, OPCOM reports that for the period 2008-2014 the value of one certificate ranges between 27 to 55 Euros (<<http://www.opcom.ro>>).

<sup>46</sup> For example in Flanders, the minimum price for onshore wind is 50 Euros, for hydropower 50 Euros, biomass/biogas 20 Euros, and offshore wind (under CREG jurisdiction) 107 Euros. (Source: VREG website <<http://www.vreg.be/minimumsteun>>.)

Finally, trading in TGCs may take place at both *national and international levels*. As of 2011, national TGCs schemes established in the European Union are limited to the national territories of the Member States. At an EU/EEA level, the forthcoming joint TGCs market between Norway and Sweden will be the first cross-border market to exist for the purposes of compliance. Outside Europe, some international markets exist for the trading of similar certificates, *e.g.*, between the United States, Mexico and Canada.

### **1.2.5 National experiences with TGCs schemes**

The following EU Member States have established TGCs schemes: Belgium, Italy, Poland, Romania, Sweden, and the United Kingdom. Within the EEA, Norway is adopting the necessary legislation for the establishment of a TGCs scheme as from 1 January 2012.

A few other Member States also have support schemes that are sometimes characterised as being based on TGCs, but this is often due to misleading terminology, where guarantees of origin are known as green certificates.<sup>47</sup> In other cases, the certificates are used more as premiums than as tradable certificates.

Denmark and the Netherlands had planned to introduce TGCs schemes, but decided against it. In the Netherlands, which was actually the first European country to introduce green certificates mechanisms, a more subtle and to a certain extent more complex system of support has been established.

Outside Europe, Australia and the United States (at state level) have the most prominent examples of established TGCs schemes.<sup>48</sup> India and Russia are also in the process of establishing similar schemes. South Africa, Turkey and some Latin American countries<sup>49</sup> have evaluated the introduction of TGCs schemes, but these initiatives were not followed up.

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<sup>47</sup> For example, France has transposed the term ‘guarantee of origin’ provided in former Directive 2001/77/EC (now Directive 2009/28/EC) by a term that translates as ‘green certificate.’ The French green certificate scheme is however solely a guarantee-of-origin system. The country is relying on other support schemes for renewables, such as tax exemption, FITs or tenders.

<sup>48</sup> In the case of Australia, it can be noted that two types of certificates have been introduced as of 1 January 2011 under the concept of RECs: the large-scale generation certificates (LGCs) and the small-scale technology certificates (STCs). This corresponds to a splitting of the RES target between two ones for large-scale and small-scale respectively. See Renewable Energy (Electricity) Act 2000, as amended.

<sup>49</sup> Most recently Chile.

## 2 Policy and regulatory background

### 2.1 Financing a green technological revolution

RES-E support policies are no longer in their infancy. Since at least the 1990s all Member States have developed one or several support instruments that have resulted in an increased exploitation of RES, in particular in the electricity sector.<sup>50</sup> Eurostat could therefore report in 2011 that the share of renewable energy in the energy supply mix of the twenty-seven Member States had almost doubled in ten years, from 5 per cent of total gross inland energy consumption in 1999 to 9 per cent in 2009.<sup>51</sup> Some Member States are performing better than others, which also reflects differences in support policies.<sup>52</sup>

Indeed, Member States are conducting different RES policies, including for the support of RES-E generation. In Europe, the majority of the policies favouring RES have been oriented towards the support of RES-E, which represents an important part of the potential increased use of RES.<sup>53</sup> There are different ways by which to classify support instruments in favour of RES-E generation, based on several distinctions.<sup>54</sup> The broadest distinction to be made is between direct and indirect supports. Some measures can indirectly promote RES-E generation while they do not aim directly at it. The trading schemes for carbon dioxide allowances belong in such a category, which, by charging polluting industries, will force them to invest indirectly in renewable generation. Similarly, a tax imposed only on generation plants using conventional energy sources will indirectly favour RES-E. By contrast, a direct support will create a direct link between the RES-E generators as beneficiaries and the source of financing. Public authorities traditionally have better control of the development of the RES-E sector under a direct support scheme. Within the category of direct support, one can distinguish between two types: investment support (capital grants, tax exemptions or reductions on the purchase of goods) and operating support (price subsidies, green certificates, tender schemes and tax exemptions or reductions on the production of electricity). A third distinction can be made, under market-based instruments and direct price support, between: quantity-based market instruments,

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<sup>50</sup> In addition to electricity, other sectors where the use of RES is increasing are transport and heating and cooling.

<sup>51</sup> Eurostat reported at the same time that oil remained the main source of energy in the 27 Member States at a level of 37 per cent in the total gross inland energy consumption in 2009. The share of gas increased from 22 to 24 per cent between 1999 and 2009; nuclear energy remained stable at around 14 per cent. Gross inland energy consumption is defined by Eurostat at the primary production plus imports, recovered products and stock change, less exports and fuel supply to maritime bunkers. Source: Eurostat news release, 11 April 2011, STAT/11/53.

<sup>52</sup> The same Eurostat statistics report that some Member States have seen an important increase of the share of renewable energy in their energy supply between 1999 and 2009 (percentage of total gross inland energy consumption), *e.g.*: Denmark, from 8 to 17 per cent; Sweden, from 27 to 34 per cent; Germany, from 2 to 8 per cent, Portugal, from 13 to 19 per cent. Source: *Ibid.*

<sup>53</sup> On the role played by RES-E in the whole deployment of renewable energy, see: *Renewable Energy Policy in IEA Countries*, Vol. II: Country Reports, Energy and Environment, Policy Analysis Series, 1998, p. 39.

<sup>54</sup> The following categorisation is based in particular on the summary table contained in Re-Xpansion project report, *Support Schemes for Renewable Energy – A Comparative Analysis of Payment Mechanisms in the EU*, EWEA et al., 2005, Table 4.3

like quota obligations, tendering; and price-based market instruments, like FITs and premiums, fiscal incentives. Volume and price are the most common and easy typologies. It can also be noted that the primary source of financing will differ in accordance with the support instruments chosen, but final customers can be deemed to ultimately finance the schemes. The Commission reported in 2011 that for the purpose of supporting the use of RES in electricity generation: FITs are used in 21 Member States; premiums in 6; quota obligations in 6; investment grants in 10; tax exemptions in 10; and fiscal incentives in 7.<sup>55</sup>

The choice of RES-E support schemes by Member States can serve as an indicator of the level of development of the RES-E technologies and the available natural resources in the country in question. Indeed, the choice of support scheme will defer according to the stage of development of the technology.<sup>56</sup> The latter will go through the successive stages of R&D, demonstration project, commercialisation and then competitiveness. Haas has associated the different support schemes according to the level of maturity of technology in time, and has concluded that: investment support corresponds to a phase of 'technology risk' for RES; FITs and premiums will most likely be operated in a phase of regulatory risk; while operating aids in the form of, for example, quota obligation associated with TGCs will correspond to a transition phase between regulatory risk and market risk.<sup>57</sup> When the RES technology becomes competitive, only the market risks remain. When the technology becomes competitive, support should in principle disappear. In the prolongation of Haas' analysis, it is important to note the need to avoid overcompensation by continuing to provide support to a technology that is already competitive.

It can also be concluded that there is no single, perfect scheme. National support schemes for renewable electricity vary widely throughout the EU, both in terms of types and level of support. Indeed, each Member State has adopted one or more support instruments designed to fit the particular national circumstances and needs.<sup>58</sup> Different support mechanisms can co-exist at national level, which reflects a necessary policy mix.<sup>59</sup> Policy mix may be necessary because not all the renewable energy sources will be developed through the same instrument. This issue of technological neutrality has for example

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<sup>55</sup> *Review of European and national financing of renewable energy in accordance with Article 23(7) of Directive 2009/28/EC*, Commission staff working document, SEC(2011) 131 final, 31.01.2011, p. 6.

<sup>56</sup> Certain forms of renewable energy like hydropower or biomass have even been exploited for a very long time. However, the conditions of exploitation of these sources may have become more cost efficient and combined with energy efficiency measures.

<sup>57</sup> R. Haas, 'Market deployment strategies for PV systems in the built environment: an evaluation of incentives, support programmes and marketing activities,' IEA-Photovoltaic Power Systems Programme Report IEA-PVPS T7-06, 2002. On the same differentiation between support instruments in accordance with the maturity of the RES-technology, see: C. Huber, 'Renewable policy in a competitive environment: key issues,' *Int. J. Global Energy Issues*, Vol.29, Nos. 1/2, 2008; D. de Jager and M. Rathmann, *Policy instrument design to reduce financing costs in renewable energy technology projects*, ECOFYS, for the IEA Implementing Agreement on Renewable Energy Technology Deployment (RET-D), 2008; *Financing Renewable energy in the European Energy Market*, ECOFYS et al., 2010.

<sup>58</sup> The fact that Member States often operate several support schemes at the same time is underlined by the wording of Directive 2009/28/EC: 'In order to reach the targets ... Member States may, inter alia, apply the following measures: (a) support schemes; ...' (Article 3.3, emphasis added).

<sup>59</sup> On the need for policy mix, see: C. Fischer and L. Preonas, *Combining Policies for Renewable Energy – Is the Whole Less than the Sum of Its Parts?*, Discussion Paper, Resources for the Future, March 2010.

conducted the UK to introduce differentiation (so-called ‘bounding mechanism’) under its ROCs scheme, and in April 2010 a FITs in favour of small scale generators.<sup>60</sup> Sweden has also introduced a specific support mechanism in favour of solar PV in addition to its *Elcertificates* scheme. Finally, Italy is introducing a premium tariff for solar PV in addition to the *certificate verdi* scheme. These examples underline the fact that TGCs scheme may not be able to deliver support to all RES-technologies at the same time, in particular when these are at different stages of development. This also points out that TGCs are mostly to be used in relation to an almost competitive technology, providing the additional support in the form of an operating aid in an effort to render it competitive.

The European Union has also completed the action of Member States by progressively developing a RES policy at Union level, based on the competences and objectives defined in the Treaty, and the adoption of mandatory targets and regulatory measures in secondary legislation.<sup>61</sup> RES promotion contributes to the pursuit of the sustainable energy paradigm that constitutes the frame of today’s Union energy policy. This paradigm, under its current formulation, is construed around three main objectives of a competitive, secure and environmentally friendly energy policy. The objectives of the EU in terms of renewable energy sources have been recently reiterated in the ‘Energy 2020 Strategy.’<sup>62</sup> They are intimately linked to the climate change policy of the Union, as reflected by the integrated Climate Change and Energy Package proposed in January 2007 by the Commission and endorsed by the Council and the Parliament in December 2008. The now integrated climate and energy objectives are also part of the European 2020 Strategy for smart, sustainable and inclusive growth of 2010,<sup>63</sup> and the flagship initiative ‘Resource efficient Europe.’<sup>64</sup> These are recent measures that attest of a new step in the Union’s effort in the domain of energy, including RES promotion, which started with the adoption of the 1996 Green Paper and the 1997 White Paper.<sup>65</sup> Directive 2009/28/EC establishes a framework for the support of RES in a 2020 timeframe perspective. The second time period envisaged is 2050. In the Energy 2020 Strategy dated February 2011, the Council identified the time period 2020-2050 as the long term perspective, calling upon the adoption of an Energy Roadmap 2050 ‘*illustrating in a technology-neutral way, while placing due emphasis on energy efficiency, the possible future fuel-mixes in Europe and what policy measures are*

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<sup>60</sup> In certain circumstances, the new small generators can even choose between receiving support under the FITs or the Renewables Obligation. It should be noted that the FITs was not introduced in Northern Ireland.

<sup>61</sup> The extent to which the EU has competence to intervene in the area of renewable energy sources is analysed in Chapter 5.2.

<sup>62</sup> For the last formulation of the EU objectives and priorities in terms of energy, see Conclusions of the European Council dedicated to Energy, 04.02.2011. See also *Energy 2020: A strategy for competitive, sustainable and secure energy*, adopted by Energy Ministers Council of 28.02.2011.

<sup>63</sup> *Europe 2020 – A strategy for smart; sustainable and inclusive growth*, Communication from the Commission, COM(2010) 2020, 03.03.2010.

<sup>64</sup> *A resource-efficient Europe – Flagship initiative under the Europe 2020 Strategy*, Communication from the Commission to the European Parliament, the Council, The European Economic and Social Committee and the Committee of the Regions, COM(2011) 21, 26.01.2011.

<sup>65</sup> *Energy for the Future: Renewable Sources of Energy. Green Paper for a Community Strategy*, European Commission, COM(1996) 576, 20.11.1996; Communication from the Commission, *Energy for the future: renewable sources of energy: White Paper for a Community Strategy and Action Plan*, COM(97) 599 final, 26.11.1997.

required to get there.’<sup>66</sup> This Roadmap should be coordinated with the Roadmap for moving to a low-carbon economy by 2050. Renewable energy sources play a central role in the attainment of this 2020/2050 vision, while they will not alone suffice to supply the whole EU.

RES are progressively becoming competitive for the purpose of electricity generation.<sup>67</sup> Nevertheless, some barriers remain to the development of RES in order to make them fully competitive with other energy sources. These barriers are both cost-related and non-cost related barriers (e.g., administrative procedures, access to the network, consumer information).<sup>68</sup> In its 2011 report on the progress towards the 2020 target, the Commission points out another traditional barrier to the development of RES, namely financing. The Commission speaks about the need for ‘closing the investment gap’ by a ‘better and more integrated financing of renewable energy’ at the lowest possible costs.<sup>69</sup> Many national governments are currently reforming their national support schemes in order, on the one hand, to address the remaining barriers, and, on the other hand, to avoid overcompensation.<sup>70</sup> Finally, the barriers may come from foreign elements. It may in particular be difficult to assess when RES-E will be able to compete with conventional energy, when the price of the latter may be distorted and conventional energy sources still subsidised.

Since RES-E support policies are no longer in their infancy but are still necessary to complete the green technological revolution that the EU and its Member States aim to achieve, the current period should be described as one of transition.<sup>71</sup> Regulation plays an important role in accompanying this transition, which is reflected by the choice and design of the support scheme. It is in that particular context that TGCs, an operating aid, must be appraised. The financial support granted through the sale of TGCs aims to correct a market failure, cover the remaining difference of costs with competing energy sources, for the benefit of a RES-E technology that is almost competitive.

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<sup>66</sup> Council Conclusions on *Energy 2020: A Strategy for competitive, sustainable and secure energy*, 3072th Transport, Telecommunications and Energy Council meeting, Brussels, 28 February 2011, point II.b.

<sup>67</sup> In a Communication dated 2006, the Commission already noted the continuous and significant reduction in the costs of RES during the past twenty years. It gives as example the cost of wind energy per kWh that ‘has fallen by 50% over the last 15 years while at the same time the size of the turbines has increased by a factor of 10.’ As regards solar PV systems, it noted that, as of 2006, they were more than 60 per cent cheaper than in 1990. Source: *Renewable Energy Road Map – Renewable energies in the 21<sup>st</sup> century: building a more sustainable future*, Communication from the Commission to the Council and the European Parliament, 10.01.2007, COM(2006) 848 final, p. 15. The progressive reduction of cost difference is also noticed in the 2008 Community Guidelines on State Aid for Environmental Protection, (OJ C 82 of 01.04.2008, p. 1), point 48: ‘...due to technological developments in the field of renewable energy and to gradually increasing internationalisation of environmental externalities ... the cost difference has shown a decreasing trend over the past years, thus reducing the need for aid.’

<sup>68</sup> OPTRES- Assessments and Optimization of Renewable Energies Support Schemes in the European Electricity Market-Final Report (Intelligent Energy Europe, 2007), Chapter 10.

<sup>69</sup> *Renewable Energy: Progressing towards the 2020 target*, Communication from the Commission to the European Parliament and the Council, COM(2011) 31 final, p. 7 and p. 14.

<sup>70</sup> See recent reforms of the support schemes conducted in 2010-2011 in France, Germany, Spain, the United Kingdom and Bulgaria.

<sup>71</sup> On the characteristics of this transition period, see: *Beyond the carbon economy: energy law in transition*, (Oxford University Press, 2008), p. 3 and Part I.

## 2.2 Promoting RES-E generation in competitive electricity markets

The promotion of RES-E in the EU regulatory framework for electricity of 2011 inscribes itself in the particular circumstances of liberalised markets, where competition and cost-efficiency work as guiding principles. The establishment of competitive electricity markets, at both national and EU level, has required a series of electricity market reforms which constitute the regulatory background for the promotion of RES-E (2.2.1). Making electricity generation competitive is an essential objective of the resulting restructuring of the electricity market (2.2.2), but should be distinguished from the separate, supplementary objective of making RES-E generation competitive and ensuring a level playing field between the different sources of energy for electricity generation (2.2.3).

### 2.2.1 Market reform for a competitive electricity market

The reforms experienced during recent decades by the electrical industry are perfect illustrations of the regulatory life cycle and patterns of electricity market reform. Regulatory reform is an evolving process where restructuring and liberalisation are necessary steps, but not ultimate goals. Governments have always been discussing and implementing regulatory reforms, influenced by the particular circumstances of their time. For that very reason, *'[t]he history of regulatory reform is not one of coherent government strategy, but rather of reactions to changing crises and opportunities across countries, industries, and policies.'*<sup>72</sup> Market restructuring is a continuous process, and cannot be entirely completed since the model evolves according to contemporary priorities. Indeed, in 2005, the International Energy Agency observed that the liberalised electricity markets were just beginning to mature.<sup>73</sup> In 2007, about ten years after the process of liberalisation started in the EU, the Commission concluded that *'the process of developing real competitive markets is far from complete,'*<sup>74</sup> a statement that it reiterated in 2011.<sup>75</sup>

Within the process of regulatory reform in modern free market economies, some common patterns can be identified. American authors have depicted the whole process as the *'life cycle of government regulation,'* which evolves from free market to market failure, government regulation to regulatory failure, eventual regulatory reform to deregulation, and back again to the free market stage.<sup>76</sup> Conversely, one may foresee that the regulatory trend will evolve in the future towards another regulatory model, or that the regulatory model should be adapted to the particular industry in question. An important stage in the regulatory cycle has often been described under the term 'deregulation', a term mostly used

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<sup>72</sup> *The OECD Report on Regulatory Reform* (Organisation for Economic Co-operation and Development, 1997), p. 9.

<sup>73</sup> *Lessons from Liberalised Electricity Markets*, Collection Energy Market Experience (International Energy Agency / Organisation for Economic Co-operation and Development, 2005), p. 14.

<sup>74</sup> Explanatory Memorandum, Proposal for a Directive of the European Parliament and of the Council amending Directive 2003/54/EC concerning common rules for the internal market in electricity, COM(2007) 528 final, 19.9.2007, p. 2.

<sup>75</sup> *The internal energy market – Time to switch into higher gear*, Non-paper, European Commission, 24.02.2011.

<sup>76</sup> *Energy Law*, J. P. Tomain and R. D. Cudahy, see paragraphs describing the *'Life Cycle of Government Regulation'* (Thomson West, 2004), pp. 33-36.

in the U.S. context. Deregulation entails a decrease or removal of government regulation on certain economic activities. Deregulation has often been confused with restructuring. In the particular case of a network industry such as the electrical power industry, the word 'restructuring' should be preferred instead of deregulation, because deregulation in imperfect markets – as electricity markets often are - may lead to situations of distortions of competition or monopoly abuse, which would then need to be corrected by regulation. As clearly put by Bradford:

*'restructuring never – in any country – means "deregulation". Deregulation was a term applied to restructuring a few years ago in the United States in order to capitalize on the public hostility to the term regulation. However, even with regard to the introduction of competition into power supply (which comes the closest to eliminating the need for regulation) substantial regulatory presence remains necessary to prevent market manipulation. With regard to other types of restructuring, regulation may be improved and redesigned, but is never eliminated.'*<sup>77</sup>

There are some elements of deregulation in electricity restructuring insofar as some aspects of market regulation are removed in order to let market forces play freely. For example, the deregulation of tariffs in favour of competitive prices allows pricing and investment decisions to be made by the confrontation of supply and demand, following a market-based approach.<sup>78</sup> But since the deregulation of the electrical industry did not in practice entail less, but rather more, regulation because of the imperfections of the market to cope with, the term restructuring is deemed more appropriate, in particular in the EU context. As underlined by the abovementioned expression, 'life cycle of government regulation,' it is more a question of variation in the degree and nature of government intervention than it is the total disappearance of regulation.<sup>79</sup> The amount of EU legislation, regulation and decisions to ensure free and fair competition in liberalised electricity markets has been on the constant increase.

Like deregulation, liberalisation has been understood in various ways. The literature has sometimes distinguished market deregulation and trade liberalisation,<sup>80</sup> while the energy law literature mainly refers to energy market liberalisation. In Europe, liberalisation has been used as a generic term for describing the national market reforms implemented since the 1990s for the purpose of opening energy markets to competition and moving towards

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<sup>77</sup> P. A. Bradford, 'Some Environmental Lessons from Electricity Restructuring,' in Bradbrook A. J., Lyster R., Ottinger R. L. and Xi W. (eds.), *The Law of Energy for Sustainable Development*, IUCN Academy of Environmental Law Research Studies (Cambridge University Press, 2005), p. 409.

Other authors made the same comment, e.g. C. Genoud, M. Arentsen and M. Finger, 'Regulation in Liberalised Energy Sectors: Introduction and Concepts,' in D. Finon and A. Midttun, *Reshaping European Gas and Electricity Industries – Regulation, Markets and Business Strategies* (Elsevier, 2004), p.13, where they write that '*deregulation or liberalisation are inevitably followed by reregulation*', and that the concept of deregulation is '*obviously misleading*.'

<sup>78</sup> B. Barton, "Electricity Market Liberalization and Energy Sustainability", in Bradbrook A. J., Lyster R., Ottinger R. L. and Xi W. (eds.), *The Law of Energy for Sustainable Development*, IUCN Academy of Environmental Law Research Studies, (Cambridge University Press, 2005), p. 454.

<sup>79</sup> For an appraisal of the restructuring of the Norwegian electricity market, with the same conclusion on the appropriateness of the term restructuring over deregulation, see: U. Hammer, *Tilrettelegging av kraftmarkedet*, (Cappelen Akademisk Forlag, 1999), p. 24.

<sup>80</sup> Trade liberalisation refers essentially to the removal of barriers to trade.



market-based pricing.<sup>81</sup> In this thesis, the term liberalisation is used in the particular meaning it has been given by the European legislator and the Commission, which builds on the same objectives. In 2011, the Commission stated that the implementation of the third liberalisation package was ‘*a precondition for the development of an open, integrated and competitive energy market in the EU,*’ serving the higher objectives of competitive energy prices, energy security and sustainability.<sup>82</sup> The benefits of liberalisation have also been extended to the completion of a competitive internal market for electricity, which justifies the intervention of the Union in the area.<sup>83</sup>

In this sense of the term, competition plays a central role. Liberalisation has become the main expression of the introduction of competition in the electricity sector as a consequence of the market reform initiatives that started in the 1990s.<sup>84</sup> This is reflected in EU secondary legislation.<sup>85</sup> In the Recitals of the first Electricity Directive it was already made clear that the objective of conducting liberalisation at EU level was to achieve ‘*a competitive market in electricity.*’<sup>86</sup> In its proposal for a second electricity directive, the European Commission recalled that ‘*the objective of the directives is to open up the electricity and gas markets through the gradual introduction of competition, thereby increasing the efficiency of the energy sector and the competitiveness of the European economy as a whole.*’<sup>87</sup> The European Commission also used the competition provisions enshrined in the Treaties as a starting point for the liberalisation and regulation of the energy sector. As noted by Jones, this was motivated by the fact that in the 1980s-1990s there was ‘*no realistic chance of getting the agreement of all or probably even a qualified*

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<sup>81</sup> IEA, *Electricity Reform, Power Generation Costs and Investment* (1999), p.17; H. Bjørnebye, *Investing in EU energy security – Exploring the regulatory approach to tomorrow’s electricity production*, PhD-thesis, (Unipub, 2009), p. 35. There is a consensus in the literature to trace the origin of liberalisation of the electrical industry to the UK (in particular England, Wales and Scotland), which was the first country to adopt and implement a wide liberalisation agenda, followed by the United States and Norway. See for a historical review of these national experiences: K. L. Lo and Y. Shan Yuen, ‘Deregulation of Electric Utilities,’ in Loi Lei Lai (ed.), *Power system restructuring and deregulation: trading, performance and information technology*, (John Wiley and Sons, 2001), Chapter 2, pp. 50-75. Similar reforms had started in the 1970s in other industrial sectors such as telecommunications, transport and water services.

<sup>82</sup> See Recitals 1 and 2, Directive 2009/72/EC. See also *The internal energy market – Time to switch into higher gear*, Non-paper, European Commission, 24.02.2011, p. 3.

<sup>83</sup> See e.g., *Prospects for the internal gas and electricity market*, Communication from the Commission to the Council and the European Parliament, COM(2006) 841 final, 10.01.2007, p. 2. The Commission makes a clear link from the beginning between the liberalisation packages and the implementation of a competitive internal market for electricity and gas.

<sup>84</sup> As noted by the IEA, competition has not always been the final objective of restructuring in the past, but it became the acknowledged justification of liberalisation legislation. See: *Electricity Market Reform – An IEA Handbook*, (IEA / OECD, 1999), p. 26.

<sup>85</sup> It should be noted that competitiveness is not explicitly mentioned as an objective of the Union energy policy in Article 194 TFEU. Nevertheless, competitiveness of the European ‘*social market economy*’ is referred to in particular in Article 3.3 TEU, and in Article 173 TFEU in relation to EU industrial policy. This can be explained by the fact that competition is a policy area for the EU and an interim objective serving other purposes as pointed out in this section of the thesis.

<sup>86</sup> Recital 9, Directive 96/92/EC of the European Parliament and of the Council of 19 December 1996 concerning common rules for the internal market in electricity, OJ L 027, 30.01.1997, p. 20.

<sup>87</sup> Communication from the Commission to the Council and the European Parliament, *Completing the internal energy market*, COM(2001) 125 final, 13.3.2001, p. 2.

majority of Member States to agree to liberalise the energy or other markets at the Community level.’<sup>88</sup> After several law cases resulting in the Court’s confirmation of the Commission’s approach, Member States became favourable to negotiating harmonisation of liberalisation conditions at EU level instead of individual actions by the Commission.<sup>89</sup> This proves that competition, which may be one objective of the EU liberalisation legislation, is above all an instrument in the attainment of objectives of a higher value, as noted in the previous paragraph.<sup>90</sup> This is because it is argued that competition yields several benefits – efficiency, innovation, cost reduction, progress –<sup>91</sup> which can help in the attainment of the ultimate objectives of EU energy policy.

Finally, it should be noted that the liberalisation of European electricity markets is a progressive process, which does not, however, progress at a constant rate. First, the speed of progression and nature of the measures adopted under liberalisation reforms depend on the starting point, i.e. the national circumstances as regards ownership, structure of the sector and level of regulation.<sup>92</sup> The literature has insisted on the importance of ‘sequencing’ electricity market reforms, to adapt to these circumstances.<sup>93</sup> It must be noted here that the EU liberalisation legislation does not require harmonisation of the

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<sup>88</sup> C. Jones, ‘Introduction’, in C. Jones (ed.), *EU Energy Law*, Vol.1 The Internal Energy Market – The Third Liberalisation Package (Claeys & Casteels, 2010), p.2. The author adds that ‘*The Commission decided therefore to use the Articles of the Treaty relating to Competition Law to force Member States to abandon these monopolies, beginning with the telecoms sector. It argued that these monopoly rights were contrary to the Treaty requirements on the free movement of goods and establishment, and could not be justified on the grounds of public service obligations, pursuant to Article 86(2) EC Treaty.*’

<sup>89</sup> W. Geldhof and F. Vandendriessche, ‘European Electricity and Gas Market Liberalisation. Background, Status, Developments’, in B. Delvaux, M. Hunt and K. Talus (eds.), *EU Energy Law and Policy*, ELRF Collection (Euroconfidentiel, 2008), p. 33. On the attitude of Member States, see C. Jones, ‘Introduction’, in C. Jones (ed.), *EU Energy Law*, Vol.1 The Internal Energy Market – The Third Liberalisation Package (Claeys & Casteels, 2010), p. 3. As noted by Talus, the Court played more specifically EU competition law later in the beginning of the years 2000 (K. Talus, ‘Role of the European Court of Justice in the opening of Energy Markets,’ *ERA Forum* (2007) 8, p. 441). See e.g., Case T-87/05 *EDP v Commission* [2005] ECR II-3745.

<sup>90</sup> On the definition of competition policy as an instrument in the attainment of diverse EU objectives, see: A. Jones and B. Sufirin, *EC Competition Law*, 2<sup>nd</sup> edition, (Oxford University Press, 2004), pp. 35-40.

<sup>91</sup> Benefits defined by P. D. Cameron, *Competition in Energy Markets*, 2<sup>nd</sup> edition, (Oxford University Press, 2007), pp. 5-6, by reference to T. Prosser, *The Limits of Competition Law: Markets and Public Services* (Oxford University Press, 2005), Chapter 2.

<sup>92</sup> See *Electricity Reform – Power Generation Costs and Investment*, Energy Market Reform, International Energy Agency, 1999, p. 18.

<sup>93</sup> See Y. Zhang, D. Parker and C. Kirkpatrick, ‘Competition, Regulation and Privatisation of Electricity Generation in Developing Countries: Does the Sequencing of Reforms Matter’, CRC Working Paper 62/2004, p. 3. The authors raise the issue of whether there is an optimal sequencing of the reforms, between, for example, privatisation, establishment of a regulatory system, and the introduction of competition. On sequencing and the necessity of transition periods, see also: P.L. Joskow, ‘The Difficult Transition to Competitive Electricity Markets in the United States,’ in J.M. Griffin and S.L. Puller (eds.), *Electricity Deregulation – Choices and Challenges* (University of Chicago Press, 2005), pp. 31-39. Finally, see the definition given by the International Energy Agency of market liberalisation as covering a ‘number of related reforms to electricity supply industries,’ namely corporation, privatisation, deregulation and introduction of competition, ‘*not necessarily all pursued at the same time.*’ *Electricity Reform – Power Generation Costs and Investment*, Energy Market Reform, International Energy Agency, 1999, p. 18.

structure of national electricity markets.<sup>94</sup> Second, the speed of progression may not be constant. Joskow noted in 2009 that ‘*Despite continued enthusiasm for comprehensive reforms to support the development of competitive electricity and natural gas markets from the EU authorities in Brussels, there are indications that the liberalization process has slowed down or even stalled in some European countries.*’<sup>95</sup> On that point, it should be noted that conducting liberalisation reforms at EU level constitutes an additional challenge. It requires striking a necessary balance between the adoption of ambitious common policy objectives, generally proposed by the Commission, and a necessary pragmatism related to the defence of national interests and lengthy implementation procedures at national level. This also affects the regulatory path towards the establishment of competitive electricity markets.

## 2.2.2 Making electricity generation competitive

Electricity generation is one of the segments of the electricity sector that is considered capable of being opened to competition. Other ‘competitive segments’ consist of electricity retailing activities (including associated services such as ancillary services and metering), trading in electricity network capacity and wholesale trading.<sup>96</sup> Segments considered to be natural monopolies, such as transmission, distribution and system operations, are usually regulated (‘regulated segments’).

The introduction of competition within the generation sector is primarily justified by reasons of cost efficiency. Prior to the introduction of competition, the generation segment was not necessarily characterised by shortage of capacity, as has been pointed out in the literature. In fact, the situation was perhaps even the reverse, with an excess in generation capacity hampering cost efficiency and the development of a sustainable, competitive and secure generation sector.<sup>97</sup> Accordingly, the purpose was not to increase generation capacity, but to make it more cost efficient. Making the generation segment more competitive will ultimately benefit all the other segments of the industry, right through to retail supply.<sup>98</sup>

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<sup>94</sup> See Recital 22, Directive 2009/72/EC: ‘*Under this Directive different types of market organisation will exist in the internal market in electricity. The measures that Member States could take in order to ensure a level playing field should be based on overriding requirements of general interest. The Commission should be consulted on the compatibility of the measures with the Treaty and Community law.*’ (Emphasis added)

<sup>95</sup> P. L. Joskow, ‘US vs. EU electricity reforms achievement,’ in J.-M. Glachant and F. Lévêque (eds.), *Electricity Reform in Europe* (Edward Elgar, 2009), p. xiii.

<sup>96</sup> OECD, ‘Report on Experiences with Structural Separation’, Competition Committee, June 2006, p. 9.

<sup>97</sup> H. Bjørnebye, *Investing in EU energy security – Exploring the regulatory approach to tomorrow’s electricity production* (University of Oslo, 2009), p. 34. The author observes here that ‘... the process of market reform that has come to be known as liberalisation was, in many countries and regions, including Europe, commenced at a period characterised by excess electricity generation capacity. This helps explain the focus on cost efficiency, rather than new investment, during the early phases of the liberalisation process.’ See also on the benefits of liberalisation and integration on the elimination of excessive generation capacity: L. Bergman, ‘Addressing market power and industry restructuring,’ in J.-M. Glachant and F. Lévêque, *Electricity Reform in Europe* (Edward Elgar, 2009), p. 71.

<sup>98</sup> P. L. Joskow, ‘US vs. EU electricity reforms achievement,’ in J.-M. Glachant and F. Lévêque (eds.), *Electricity Reform in Europe* (Edward Elgar, 2009), pp. xvi-xviii.

Introducing competition into the generation segment of the electric industry involves both horizontal and vertical restructuring. Horizontal and vertical restructuring will enable the entry into the market of new generators and the mitigation of the dominant position of incumbent generators.<sup>99</sup> While the completion of electricity reform implies the introduction of competition into all the different segments of the electricity industry, rendering generation more competitive has been the focus of many reforms to date.<sup>100</sup> Some authors argue that the reverse has occurred in the EU, where legislation has focused primarily on the supply segment.<sup>101</sup> On the contrary, a detailed analysis of the three liberalisation packages adopted by the EU since 1996 reveals that European legislation has been intended to act at the levels of both supply and generation.<sup>102</sup>

The objective of a competitive generation segment has been reflected in the three successive electricity directives. It was already a goal in Directive 96/92/EC. Directive 2003/54/EC aimed to 'ensure a level playing field in generation,' as a manner to answer shortcomings and bring possible improvement after the first Electricity Directive.<sup>103</sup> Directive 2009/72/EC reiterates succinctly the same objective of a competitive generation

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<sup>99</sup> P. L. Joskow, 'US vs. EU electricity reforms achievement,' in J.-M. Glachant and F. Lévêque (eds), *Electricity Reform in Europe* (Edward Elgar, 2009), pp. xvi-xviii; B. Barton, 'Electricity Market Liberalization and Energy Sustainability,' in A.J. Bradbrook, R. Lyster, R.L. Ottinger and W. Xi (eds), *The Law of Energy for Sustainable Development*, IUCN Academy of Environmental Law Research Studies, (Cambridge University Press, 2005), p. 454; P. A. Bradford, 'Some Environmental Lessons from Electricity Restructuring,' in A.J. Bradbrook, R. Lyster, R.L. Ottinger and W. Xi (eds), *The Law of Energy for Sustainable Development*, IUCN Academy of Environmental Law Research Studies, (Cambridge University Press, 2005), p. 408.

<sup>100</sup> *Electricity Reform – Power Generation Costs and Investment*, Energy Market Reform, International Energy Agency, 1999, p. 18.

<sup>101</sup> P. L. Joskow, 'US vs. EU electricity reforms achievement,' in J.-M. Glachant and F. Lévêque (eds), *Electricity Reform in Europe* (Edward Elgar, 2009), pp. xviii-xix.

Professor Joskow's impression of a primary focus on supply might have arisen from the objective of the first pieces of EU legislation on electricity, namely: Council Directive 90/377/EEC of 29 June 1990 concerning a Community procedure to improve the transparency of gas and electricity prices charged to industrial end-users (OJ L 185, 17.7.1990, p. 16–24); and Council Directive 90/547/EEC of 29 October 1990 on the transit of electricity through transmission grids (OJ L 313, 13.11.1990, pp. 30–33). Third party access (TPA) was also a central preoccupation of the European Commission in 1990-1991, followed up in the first Electricity Directive. It is in this context that Joskow's comment should be evaluated when he writes: 'Curiously, the EU's efforts at liberalization started at the retail level ('third party access') and moved rather slowly to focus on wholesale market and transmission institutions that are necessary to support efficient retail competition programs. The EU and its member states are now in the process of 'backfilling' with policies aimed at remedying some of deficiencies caused by inadequate attention to industry restructuring and regulatory reform as they affect both wholesale and retail market behaviour and performance' (p. xviii).

<sup>102</sup> Proposal for a Council Directive concerning common rules for the internal market in electricity, COM(91) 548 final, SYN 384, 21.02.1992. See in particular point 6.3 (i): '*...it is necessary to create a transparent and non-discriminatory system for granting licences for the production of electricity and the building of electricity lines ... The aim here is to open up investment in production and transport to independent operators, and in particular to large industrial users.*' See also the explanatory notes to the legislative proposal at p. 15: '*2. Opening up generation to competition and the role of the Member States as regards security of supply*'.

See also Recitals 2, 22 of Directive 96/92/EC of the European Parliament and of the Council of 19 December 1996 concerning common rules for the internal market in electricity, OJ L027, 30.01.1997, p. 20.

<sup>103</sup> Recital 2, Directive 2003/54/EC.

segment, but provides for additional tools to secure that goal. It does however insist on investments in new electricity generation, in particular from renewable energy sources.<sup>104</sup> The provisions of the directive are supplemented by non-sector specific rules that also contribute to the establishment of a competitive electricity generation market.

Besides the three liberalisation packages, the electricity generation segment in most EU Member States cannot be considered totally competitive as yet.<sup>105</sup> The EU rules consequently aim to ensure competition, even in a context of dominated market.

### **2.2.3 Making RES-E generation competitive and ensuring a level playing field**

A distinction must be made between the objective of turning electricity generation into a competitive segment and that of making RES-E generation competitive. Making RES-E generation competitive requires the use of instruments applied to the whole sector, together with a set of additional instruments intended solely to benefit RES. On the one hand, Directive 2009/72/EC aims to ensure competition within the electricity generation segment and to establish a level playing field. On the other hand, Directive 2009/72/EC contains several provisions allowing additional support to RES-E generation in order to enable it to compete with generation based on conventional energy sources. To that end, EU liberalisation legislation has harmonised some of the support measures to be implemented by Member States in order to promote renewable energy. The first tool consists of the definition of public service obligations (PSOs).<sup>106</sup> A second set of tools is contained in the preferential regime for grid access, connection, and dispatch in favour of RES-E.<sup>107</sup> A third tool is environmental disclosure, which was defined previously in section 1.2.2. The authorisation and tendering procedures also allow for the favouring of RES-E generation, under the terms described in section 8.1 below. These rules form an integral part of Directive 2009/72/EC.

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<sup>104</sup> E.g., see Recitals 6, 56, 57, 60, Directive 2009/72/EC.

<sup>105</sup> The 2007 Sector Inquiry pointed out the existing distortions of competition on the generation market characterised by a remaining high degree of concentration (DG Competition report on energy sector inquiry pursuant to Article 17 of Regulation (EC) No 1/2003 into the European gas and electricity sectors (SEC(2006)1724, 10 January 2007), pp. 132-134). Similarly, the European Commission noted in 2009 that concentration in generation was still an issue and that in 15 Member States the three biggest generators ‘still’ controlled more than 70 per cent of the generation capacity (*Report on progress in creating the internal gas and electricity market*, Communication from the Commission to the Council and the European Parliament, COM(2009) 115 final, 11.03.2009, p. 5).

<sup>106</sup> Article 3.2, Directive 2009/72/EC. For a detailed analysis of PSOs in relation to the promotion of RES-E generation, see section 8.3.2.2 below.

<sup>107</sup> First, the provisions of Directive 2009/72/EC and Directive 2009/28/EC provide for a preferential regime for grid access (‘into’ the grid): Recital 61, Article 16.1, 16.3-6, Directive 2009/28/EC. Second, Directive 2009/28/EC requires the adoption of preferential conditions for RES based on a priority or guaranteed grid access regime: Recitals 60 and 61, Article 16.2 (b) Directive 2009/28/EC. Directive 2009/28/EC. Third, Directive 2009/28/EC requires TSOs to give priority in dispatch to RES-E generation installations: Article 16.2 (c) Directive 2009/28/EC.

See comments in: A. Hercsuth, ‘Grid Issues,’ in P. Hodson, C. Jones, and H. Van Steen (eds), *Renewable Energy Law and Policy in the European Union*, EU Energy Law – Volume III – Book One, (Clàys & Casteels, 2010), pp. 143-172; C. Banet, *Preferential access for renewables into the grid: legal problems in EU law*, conference paper, European Union Institute, Florence School of Regulation, EU Energy & Policy Workshop, 28.05.2010, available at <<http://www.florence-school.eu>>.

As the ultimate objective is a low-carbon electricity generation sector able to deliver cost efficiency and security of supply, competition in the electricity market is an essential precondition for achieving this.<sup>108</sup> In the absence of these competition safeguards, introducing a market-based instrument such as TGCs would make little sense. The TGCs received by the RES-E generators should allow them to compete with other producers by balancing the difference in operating costs. If competition is distorted, the difference in operating costs that is intended to be covered by the TGCs will always prevent RES-E generators from operating on a level-playing field. In other words, a TGCs scheme requires a competitive electricity generation market.

### 2.3 Policy paradox and legal equilibrium

As noted in section 2.2, the sole introduction of competition into electricity markets does not ensure the attainment of all policy objectives such as, for example, the promotion of RES-E generation. Pursuant to Recital 6 of Directive 2009/72/EC, 'a well-functioning internal market' should be able to meet a series of additional objectives:

*'A well-functioning internal market in electricity should provide producers with the appropriate incentives for investing in new power generation, including in electricity from renewable energy sources, paying special attention to the most isolated countries and regions in the Community's energy market. A well-functioning market should also provide consumers with adequate measures to promote the more efficient use of energy for which a secure supply of energy is a precondition.'*<sup>109</sup>

The sole introduction of competition can even have negative effects on the attainment of these other objectives of EU energy policy. For example, the negative consequences of electricity restructuring reforms on the protection of the environment have been largely addressed by the literature.<sup>110</sup> It should be retained from the latter that the introduction of competition does not secure by itself the protection of the environment, and can even involve negative effects on it, entailing the need to be compensated by regulation.<sup>111</sup> The comparison with the restructuring reforms in the United States and the development of renewable energy policies (Renewables Portfolio Standards, RPS) is illustrative in this

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<sup>108</sup> C. Huber, 'Renewable policy in a competitive environment: key issues,' *International Journal of Global Energy Issues*, Vol.29, Nos. 1/2, 2008.

<sup>109</sup> Emphasis added.

<sup>110</sup> For a European perspective on the issue, see: J de Sépibus, 'The Liberalisation of the Power Industry in the European Union and its Impact on Climate Change,' NCCR Trade Regulation, Working paper No 2008/10, May 2008.

<sup>111</sup> Restructuring reforms adopted in the 1970s-1990s set the background, but never had as a primary objective to develop renewable energies. The competitive environment established by restructuring reduced the price of conventional energy sources. One concern raised during restructuring was the impact on the environment. The argument was that in a competitive market, some old, conventional and polluting energy sources such as coal-fired plants will be the least cost options, and will increase air pollution and decrease investments in renewable energy generation capacity unless something was done to counteract this purely economic effect. Some other facilities, including nuclear, might appear too costly and may also be closed. In other words, restructuring might even entail an increase in emissions. See: K. Palmer and D. Burtraw, 'The Environmental Impacts of Electricity Restructuring: Looking Back and Looking Forward,' 1(1) *Environmental & Energy Law & Policy Journal* (Symposium 2005), University of Houston Law Center, pp. 172-173.

respect. The adoption of RPS programmes by U.S. states in parallel with restructuring reforms was instrumental in ensuring the concomitant development of RES-E generation.<sup>112</sup> The U.S. experience corroborates the conclusion reached by Lyster that '*the restructuring of the electricity industry will only be climate friendly by design.*'<sup>113</sup> In other words, regulation is needed, at least in a transitory period, to ensure the other objectives of energy policy.

The coexistence of these different objectives is tantamount to a policy paradox.<sup>114</sup> Today's major challenge is to conciliate the competitive environment created by law at the generation and end-user supply levels with support to RES-E generation and energy efficiency measures, which are likely to distort competition. It represents a paradox because of the competing nature of the objectives, which must be reached at the same time.<sup>115</sup> On the one hand, competition rules and secondary legal provisions create a level playing field between generators, while, on the other hand, EU legislation provides derogatory regimes or allows for supporting measures in favour of RES-E that distort or may distort competition. This paradox is well reflected in the European Commission's State Aids Guidelines on Environmental Protection which endorse the need for public support in favour of renewable energy.<sup>116</sup> The management of this policy paradox, which is not specific to RES-E,<sup>117</sup> should not lead to legal inconsistency in addition to economic ineffectiveness due to overcompensation.

The management of the policy paradox and the maintenance of a necessary legal equilibrium can be appraised under two associated concepts of consistency and coherence

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<sup>112</sup> J. Hamrin et. al., *Affected with the Public Interest* (NARUC, 1994). J. Hamrin makes clear that, as regulatory commissions were losing jurisdiction over the utilities' resource planning and procurement, additional policies were necessary to secure investment in renewable energy generation at the state level. It is in this particular context that RPSs were promoted. (E-mail correspondence of 11.09.2009 with Jan Hamrin, Secretary General, ETNNA, California.)

<sup>113</sup> R. Lyster, 'The Implications of Electricity Restructuring for a Sustainable Energy Framework: What's Law Got to Do with It?', in Bradbrook A. J., Lyster R., Ottinger R. L. and Xi W. (eds.), *The Law of Energy for Sustainable Development*, IUCN Academy of Environmental Law Research Studies, (Cambridge University Press, 2005), p. 436. As regards the nature of the regulation to be adopted, she also insists on the fact that '*negative externalities of restructuring must be internalized through regulation, not voluntary programs.*'

<sup>114</sup> The existence of a policy paradox in the domain ('*The Paradox of Market-Friendly Policies*') was notably observed by Paul Komor, *Renewable Energy Policy*, (iUniverse, 2004), p. 12.

<sup>115</sup> The Treaty and secondary EU law has also increasingly made cross-references to the different objectives of EU policies. On that point, the thesis makes often references to the intertwined objectives of EU RES-E policy.

<sup>116</sup> The predominant reason for granting state aid in the context of renewable energy promotion lies in the stimulation of a part of the industry that otherwise would not receive the sufficient stimulus to take off. In economic terms, it intends to correct a market failure and some negative externalities. As formulated in the Guidelines: '[Aid for renewable energy sources] *addresses the market failure linked to negative externalities by creating individual incentives to increase the share of renewable sources of energy in total energy production.*' (Community Guidelines on State Aid for Environmental Protection, Notices from European Union Institutions and Bodies, European Commission, 2008/C 82/01, OJ C82 of 01.04.2008, p. 1, point 48.)

<sup>117</sup> The same paradox reappears for conventional energy sources under the electricity and gas directive, which provides for the adoption of several derogations to the general rule of competition (e.g., derogation to third party access regime). These derogations are mostly justified on grounds of security of energy supply.

referred to by EU law. To include here a full elaboration of these concepts would require a longer digression than is necessary in the context of this thesis. Nevertheless, it should be retained that the solution to be given to this policy paradox is related to the requirement of coherence of EU law, in the sense that it allows ‘synergies’ between the different policies,<sup>118</sup> while limiting, as much as possible, contradictions between them (consistency).<sup>119</sup> EU law does not define coherence or consistency, leaving the literature to debate the issue extensively, with varying interpretations.<sup>120</sup> The concept of consistency is nevertheless to be found in the primary EU law to a greater extent than coherence, and as a separate requirement in particular in: Article 13.1 TEU<sup>121</sup>; Article 7 TFEU<sup>122</sup>; and Article 256 TFEU.<sup>123</sup> It is nevertheless used to underline the necessity to avoid inconsistencies between the different EU policies. Coherence can consequently be interpreted as a requirement of wider scope than consistency.<sup>124</sup> The requirement of *horizontal* coherence is deemed to be the most appropriate in relation to the management of the policy paradox at stake here.<sup>125</sup>

Still on the subject of coherence, a particular interpretation given to the articulation between EU competition law and sector specific regulation should be noted, as one of the core issues identified above. Some authors have advanced that the application of competition rules and other EU law provisions are subject to a sort of sequencing, based

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<sup>118</sup> P. Gauttier, ‘Horizontal Coherence and External Competences of the European Union,’ *European Law Journal*, Vol. 10, No. 1, 2004, pp. 23-41. The author places his rationale in the particular context of the former pillar structure of the EU, but his conclusions can be extended to the coherence between different EU policies under the current form of the Treaties.

<sup>119</sup> Here, a distinction is made between coherence and consistency, since it is necessary in order to introduce certain nuances in application of the terms.

<sup>120</sup> Certain authors argue that coherence and consistency are synonyms, and that their alternative use depends on variations in national languages. See: M. Carbone ‘Mission impossible: the European Union and policy coherence for development,’ *European Integration*, (2009) 30, p. 323; R. Picciotto, 2005. *The Evaluation of Policy Coherence For Development* (Sage, 2005), p. 312; S. Nuttall, ‘Coherence and Consistency’ in C. Hill and M. Smith (eds.) *International relations and the European Union* (Oxford University Press, 2005), p. 93.

<sup>121</sup> Article 13.1 TEU: ‘*The Union shall have an institutional framework which shall aim to promote its values, advance its objectives, serve its interests, those of its citizens and those of the Member States, and ensure the consistency, effectiveness and continuity of its policies and actions.*’

<sup>122</sup> Article 7 TFEU: ‘*The Union shall ensure consistency between its policies and activities, taking all of its objectives into account and in accordance with the principle of conferral of powers.*’

<sup>123</sup> Referring to the role of the Court of Justice of the EU in ensuring the unity and consistency of Union law.

<sup>124</sup> After a comprehensive review of the different interpretations given to the two concepts in the literature, Hertog and Stroß conclude that: ‘*Policy consistency is ... defined ... as the absence of contradictions within and between individual policies [negative connotation] while policy coherence refers to the synergic and systematic support towards the achievement of common objectives within and across individual policies [positive connotation].*’ (L. den Hertog and S. Stroß, ‘Policy Coherence in the EU System – Concepts and Legal Rooting of an Ambitious Term,’ Conference Paper presented in Madrid, 7-8 April 2011, ‘The EU as global player,’ p. 4.)

<sup>125</sup> Vertical coherence would refer to the requirement of coherence between policies conducted at EU level and Member States level. See on the distinction between horizontal and vertical coherence: L. den Hertog and S. Stroß, ‘Policy Coherence in the EU System – Concepts and Legal Rooting of an Ambitious Term,’ Conference Paper presented in Madrid, 7-8 April 2011, ‘The EU as global player,’ pp. 6-7.



on the distinction between competition law and regulation. According to this interpretation, regulation would act *ex ante* (in advance), while competition law would act *ex post* ('reacting to conduct which is taking place or has taken place').<sup>126</sup> Meanwhile, the increasing regulatory nature of EU competition law cannot be disregarded, as well as the fact that secondary EU legislation systematically makes reference to competition law as a frame for the adoption of sector regulation.<sup>127</sup> The present author would consequently tend to agree with Ibáñez Colomo when he recognizes the potential for developing a theory on the *ex ante* application of competition law.<sup>128</sup> In the context of RES-E support schemes, the respect of state aids rules goes beyond an *ex post* assessment as it works as a precondition in the regulatory design of the schemes (cf. chapter 7).

Finally, market-based instruments like TGCs schemes represent an important innovation in the management of the policy paradox. TGCs pertain to a new generation of support instruments that guarantee renewable electricity 'a market share rather than a guaranteed market.'<sup>129</sup> When the wind industry proposed the introduction of market-based instruments for the support of RES-E generation by the means of RECs in the United States, the idea was precisely to 'guarantee market share,' but in a tradable and competitive way.<sup>130</sup> TGCs schemes may not be totally 'market conform' because they necessarily introduce an element of support,<sup>131</sup> but they offer an example of the manner to regulate RES-E promotion in a restructured and competitive environment.

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<sup>126</sup> A. Jones and B. Sufrin, *EC Competition Law*, 2<sup>nd</sup> edition, (Oxford University Press, 2004), p. 42. For a reiteration of the distinction between competition law and sector regulation, see: Richard Cawley, 'The new European Union approach to sector regulation in network industries,' *Network Industries Quarterly*, Vol. 10, no 1, 2008, p. 23.

<sup>127</sup> E.g., Article 3.3, Directive 2009/28/EC, provides that the choice made by Member States to support RES-E generation that occurred in another Member State should be without prejudice to the Treaty provisions on state aids.

<sup>128</sup> P. Ibáñez Colomo, 'On the Application of Competition Law as Regulation: Elements for a Theory,' in P. Eeckhout and T. Tridimas (eds.), *Yearbook of European Law*, 29<sup>th</sup> ed. (Oxford University Press, 2010), pp. 261-306.

<sup>129</sup> Renewable Energy Policy in IEA Countries, Vol. II: Country Reports, Energy and Environment, Policy Analysis Series, 1998, p. 39.

<sup>130</sup> Reference is made here to the U.S. experience, and in particular to the contribution of N. Rader who was the first to formulate in comprehensive terms the concept of TGCs in California, under the terms of RECs. See: E. Wood, 'Green trading: Why the chase is on for US RECs,' 1 May 2007, Renewable Energy World. See also See P.E. Morthorst, 'A Green certificate market combined with a liberalised power market,' *Energy Policy* 31 (2003), pp. 1393-1402.

<sup>131</sup> The economic literature does not conclude that energy certificates are more market-conform than other support instruments such as feed-in tariffs. According to these authors, it is a mistake to believe so, and 'market conformity' would be a wrong criterion in the choice of a support instrument. N. I. Meyer, 'European schemes for promoting renewables in liberalised markets,' *Energy Policy* 31 (2003), pp. 674-675. The author develops his argumentation on the market conformity of tradable certificates schemes and feed-in tariffs on the results from research conducted by Hvelplund in: F. Hvelplund. 'Political prices or political quantities?,' *New Energy* (2001) 5, 18-23; and F. Hvelplund, Renewable Energy Governance Systems, Report from Aalborg University, Denmark, 2001.

## 3 Methodology and scope of research

### 3.1 Methodology

National TGCs schemes are the central study object of this thesis and are analysed from the perspective of EU law, with a focus on the content of EU law and its relationship with the national laws of the Member States. In that respect, the thesis primarily concerns EU public law. However, the relationships between electricity undertakings under TGCs schemes are also a subject for analysis where these relationships come within the scope of EU law. In these particular circumstances, rules pertaining to so-called EU private law are also referred to, but to a much more limited extent.<sup>132</sup>

The thesis refers to the term of *European Union* law, rather than *Community* law, even though many of the provisions referred to were adopted before the entry into force of the Lisbon Treaty,<sup>133</sup> which resulted in the abolition of the three-pillar structure to which Community law pertained. Although the titles of certain legislation and documents continue to refer to the Community,<sup>134</sup> because the European Union has absorbed the Community, this is the correct entity to which to refer.

For the interpretation of EU law provisions applicable to TGCs schemes, the traditional method for interpreting EU law, as it is used by the Court of Justice of the EU, has been employed. In its case law, the Court employs three main interpretive approaches: literal, contextual and teleological. Although the teleological approach is identified as dominant in the literature, the Court refers to all three.<sup>135</sup> These approaches may be applied separately or in combination.<sup>136</sup> This thesis applies such methods of interpretation, both alternatively and in combination, under the modalities described below. As a starting point, it has proved necessary to rely on a literal interpretation to deduce that a directive leaves discretion to the Member States as regards the adoption or non-adoption of a measure (as indicated by the use of the word ‘may’ in English).<sup>137</sup> Versions in all the 23

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<sup>132</sup> See comments on the nature of European Union private law (EUPL) by C. Twigg-Flesner, ‘Introduction: key features of European Union private law,’ in C. Twigg-Flesner (ed.), *European Union Private Law*, (Cambridge University Press, 2010). The author notes that ‘EUPL is created through the adoption of legislation which seeks to harmonise selected aspects of private law’ (p. 3).

<sup>133</sup> The Treaty of Lisbon entered into force on 1 December 2009. It amended the Treaty on the European Union (TEU), and the Treaty establishing the European Community (ECT). The latter was renamed the Treaty on the Functioning of the Union (TFEU).

<sup>134</sup> E.g., Community Guidelines on State Aid for Environmental Protection.

<sup>135</sup> A. Arnulf, *The European Union and its Court of Justice*, 2<sup>nd</sup> ed., (Oxford University Press, 2006); J. Bengoetxea, *The legal reasoning of the European Court of Justice: towards a European jurisprudence* (Oxford University Press, 1993); T. Koopmans, ‘The Theory of Interpretation and the Court of Justice,’ in D. O’Keeffe and A. Bavasso (eds.), *Judicial Review in European Union Law* (Kluwer, 2000).

<sup>136</sup> See, e.g., the following case where the Court explicitly applied the three interpretative approaches successively: Case T-387/04, *EnBW Energie Baden-Württemberg AG v Commission of the European Communities*, [2007] ECR II-01195, paras. 102-119.

<sup>137</sup> For an example of a literal interpretation by the Court, see Joined Cases T-22/02 and T-23/02 *Sumitomo Chemical and Sumika Fine Chemicals v Commission* [2005] ECR II-4065, paras. 42, 44 and 45. The Court recalled that the application of the literal interpretative approach required the comparison of the

official languages have not been checked, but an analysis of a couple of language versions has generally sufficed to reach this conclusion. It should be noted here that while the Court itself employs the literal approach to interpretation, it has been keen to defend the principle of autonomous interpretation of EU law.<sup>138</sup> In other circumstances, or where a literal interpretation has not been sufficient, it has been necessary to consider the relevant provision in its systematic context within the EU provisions on energy or the internal market as a whole,<sup>139</sup> and/or – taking a more dynamic and teleological approach – in relation to the objectives of the measure. In addition, reference to the preambles of directives and to preparatory works has been instrumental in interpreting the texts. In this regard academic commentators have distinguished a fourth approach consisting of historical or comparative interpretation, using references to the *travaux préparatoires*.<sup>140</sup> The thesis contains several references to working documents deriving from negotiations undertaken during ordinary legislative procedures (formerly co-decision), which is not an approach commonly employed by the Court. This has, however, been useful in identifying the position of certain institutions, such as the Council, as regards, *e.g.*, the strict limitation of the use of GOs to disclosure, which is evidenced through the reinforcement of the language used throughout the negotiating period.

The following paragraphs look more closely at the different sources of EU law and materials used in this thesis.

*Primary EU law* remains a central source for the assessment of, *inter alia*, the repartition of competences between the Union and its Member States, and the choice of legal basis. The entry into force of the Lisbon Treaty, and the enactment of a new Title on Energy policy (Title XXI – Article 194 TFEU) have certainly shed a new light of the objectives pursued by the EU in that domain. Meanwhile, the analysis in the thesis also relies heavily on other provisions of the Treaty. As the thesis reveals, some of the objectives of EU RES policy are intimately intertwined in primary – and secondary – law, which does raise some issues concerning their legal basis and/or frame of reference. Article 194 TFEU will certainly bring some changes to the limits underlined in Chapter 5 but, until now, the EU legislator and the Court have been consistent in ranking environmental protection as the primary objective of RES policy, even if objectives or policy priorities such as security of

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different language versions of the provision of EU law, as all are equally authentic. See also Case 283/81 *CILFIT* [1982] ECR 3415, para. 18. For a comment on linguistic transparency in EU law provisions or in the texts of the Court itself, see E. Sharpston, ‘Transparency and Clear Legal Language in the European Union: Ambiguous Legislative Texts, Laconic Pronouncements and the Credibility of the Judicial System,’ in C. Barnard and O. Odudu (eds.), *The Cambridge Yearbook of European Legal Studies* (Hart Publishing, 2010) (Volume 12, 2009-2010), pp. 409-423, especially pp. 411-413.

<sup>138</sup> See, *e.g.*, Case 283/81 *CILFIT* [1982] ECR 3415, para. 27, as commented on by N. Reich, *Understanding EU Law – Objectives, Principles and Methods of Community Law*, 2<sup>nd</sup> ed., (Intersentia, 2005), p. 27.

<sup>139</sup> This is consistent with the practice of the Court that establishes that, where literal interpretation does not suffice and in order to preserve a uniform interpretation of EU law, the provision ‘*must be interpreted by reference to the purpose and general scheme of the rules of which it forms part.*’ Joined Cases T-22/02 and T-23/02 *Sumitomo Chemical and Sumika Fine Chemicals v Commission* [2005] ECR II-4065, para. 46, and case law cited. On the need for a contextual approach, see Case 292/82 *Merck* [1983] ECR 3781, para. 12.

<sup>140</sup> In addition to the doctrine cited in the previous footnotes, see N. Reich, *Understanding EU Law – Objectives, Principles and Methods of Community Law*, 2<sup>nd</sup> ed., (Intersentia, 2005), pp. 24-25.

supply and competitiveness are close behind. The analysis also relies heavily on treaty provisions on the internal market and competition policy.

The *secondary EU law* provisions referred to in this thesis derive primarily from directives rather than regulations. Directives are binding upon the Member States to which they are addressed as to the result to be achieved, but leave to the Member States ‘*the choice of the form and methods.*’<sup>141</sup> This may lead to divergences in implementation, reflecting the principle of subsidiarity. Such potential or actual divergences are pointed out where they are apparent.

EU legislation in the field of renewable energy has expanded rapidly over recent years, making renewable energy a dynamic area of EU law. As a consequence, the legislation referred to in this thesis is relatively recent, having entered into force only a couple of months before submission. Two comments are worth making in view of the fact that the directives referred to are newly adopted. First, although these directives are new, they build on the provisions of previous directives and practices (*e.g.*, provisions on electricity disclosure and guarantees of origin), the implementation of which is referred to in the analysis. There has not been in that respect, and in accordance with the principles of legitimate expectations and legal certainty, any drastic change in the legislation. Where entirely new provisions have been adopted, these have been closely scrutinised. Second, a directive may have some effects even before the expiry of the deadline for transposition.<sup>142</sup> The Court has defined a ‘*duty to refrain*’ during the period of transposition. In Case 129/96 *Inter-Environnement Wallonie*, the Court said that ‘*during that period [Member States] must refrain from taking any measures liable seriously to compromise the result prescribed*’ by the directive.<sup>143</sup> Such duty to refrain is equally applicable to the courts of the Member States.<sup>144</sup> The Court has, however, taken a different position as regards the interpretation to be given in the absence of national transposition measures prior to the expiry of the deadline. The current position of the Court, since its decision in Case C-212/04 *Adeneler and Others*, is that the obligation imposed on a national court to interpret its domestic legislation in a manner that is consistent with the directive, if the directive is implemented belatedly or incorrectly, applies only after the expiry of the transposition deadline.<sup>145</sup> The entry into force of directives takes place by

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<sup>141</sup> Article 288 TFEU.

<sup>142</sup> Deadline for the transposition of Directive 2009/28/EC was 5 December 2010, pursuant to its Article 27.1. Deadline for the transposition of Directive 2009/72/EC was, for most provisions, 3 March 2011, pursuant to its Article 49.1.

<sup>143</sup> Case C-129/96, *Inter-Environnement Wallonie ASBL v. Région Wallone* [1997] ECR I-7411, para. 45.

<sup>144</sup> Case C-212/04 *Adeneler and Others* [2006] ECR I-6057, paras. 121-123, and case law cited. Para. 123 of the decision reads as follows: ‘*It follows that, from the date upon which a directive has entered into force, the courts of the Member States must refrain as far as possible from interpreting domestic law in a manner which might seriously compromise, after the period for transposition has expired, attainment of the objective pursued by that directive.*’

<sup>145</sup> Case C-212/04 *Adeneler and Others* [2006] ECR I-6057, para. 115. The Court’s decision in Case 80/86 *Kolpinghuis Nijmegen* tended to suggest this possibility (Case 80/86 *Criminal proceedings against Kolpinghuis Nijmegen BV.* [1987] ECR 03969, paras. 15-16). A.G. Mengozzi points out the similar position defended by several Attorneys General in favour of extending the obligation to include the period of transposition in his opinion in Case C-477/09, but concludes that the current case law of the Court does not allow for such a solution. See Opinion of Advocate General Mengozzi delivered on 17 November 2010 in Case C-477/09, *Charles Defosse*, point 33 and footnote 13. On the fact that

default, and unless specified otherwise, on the 20th day following that of their publication in the Official Journal.<sup>146</sup>

This thesis also refers extensively to the case law of the Court, as an integral and essential source of EU law.<sup>147</sup> The Court's case law is extensive in certain areas of the law of interest for this thesis, such as harmonisation, competition, and the internal market. Fewer decisions have concerned the energy sector directly, although it does represent a growing area.<sup>148</sup> Even fewer decisions have concerned renewable electricity.<sup>149</sup> A ruling that has continued to draw attention, and which is discussed in several places in this thesis, is the decision of the Court in the *PreussenElektra* case.<sup>150</sup>

The interpretation of the provisions of EU law applicable to TGCs schemes is also based on references to non-legally binding documents and provisions, *e.g.*, opinions of Advocates General,<sup>151</sup> Communications and interpretative notes from the European Commission.

This thesis relies on academic commentary in several respects. The quantity of academic writing on EU law is voluminous, with the number of works on energy and renewable energy having increased considerably throughout the process of liberalisation,<sup>152</sup> and even

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directives have vertical direct effect only after the expiry of the transposition deadline, see Case C 148/78 *Criminal proceedings against Tullio Ratti* [1979] ECR 1629, para. 43.

See also comments on the divergent interpretation in time in P. Craig and G. de Búrca, *EU Law – Text, Cases, and Materials*, fourth ed., (Oxford University Press, 2008), pp.291-292.

<sup>146</sup> Article 297.1 TFEU.

<sup>147</sup> See, on the dynamic role played by the Court in the development of EU law: P. Craig and G. de Búrca, *EU Law – Text, cases, and materials*, 4<sup>th</sup> ed. (Oxford University Press, 2008), pp. 72-73.

<sup>148</sup> Following the enactment of Article 194 TFEU, a few cases referring to this provision have been commenced as at the time of submission of this thesis. No judgments have yet been delivered in these cases. See, *e.g.*: Case T-150/11, *Government of Aragón and Others v Council* - Action brought on 14 March 2011 (in relation to coal subsidies and the objective of energy supply); Case C-490/10, *European Parliament v Council of the European Union* – Action brought on 12 October 2010 (challenging the dual legal basis of Council Regulation (EU, Euratom) No 617/2010 of 24 June 2010 concerning the notification to the Commission of investment projects in energy infrastructure within the European Union, in favour of Article 194 TFEU); Case C-2/10 referred to below.

<sup>149</sup> The first case concerning the application of Directive 2009/28/EC was recorded in 2010: Case C-2/10, *Azienda Agro-Zootecnica Franchini s.a.r.l. and Eolica di Altamura s.r.l. v Regione Puglia*, Reference for a preliminary ruling from the Tribunale Amministrativo Regionale per la Puglia (Italy) lodged on 4 January 2010. See Opinion of Advocate General Mazák delivered on 14 April 2011.

<sup>150</sup> Case C-379/98, *PreussenElektra AG v Schlesweg AG*, [2001] ECR I-02099.

<sup>151</sup> On the role of Advocates General and EU law, see: R. Greaves and N. Burrows, *The Advocate General and EC Law*, (Oxford University Press, 2007); R., Greaves, 'Reforming some aspects of the role of Advocates General,' In A. Arnull, C. Barnard, M. Dougan & E. Spaventa (eds.), *A Constitutional order of states? Essays in EU law in honour of Alan Dashwood*, (Hart Publishing, 2011), pp. 161-177.

<sup>152</sup> See, in particular: T. Daintith and S. Williams, *The Legal Integration of Energy Markets*, (Walter de Gruyter, 1987) (Integration Through Law, Volume 5); L. Hancher, *EC Electricity Law*, (Chancery Law Publishing, 1992); M. M. Roggenkamp and U. Hammer (eds.), *European Energy Law Report I*, (Intersentia, 2004) (Energy § Law 1), which is the first of a series; M. M. Roggenkamp, C. Redgwell, I. Del Guayo, A. Rønne (eds.), *Energy Law in Europe*, 2<sup>nd</sup> ed. (Oxford University Press, 2007).

more rapidly during recent years.<sup>153</sup> Academic writing on the implementation of Directive 2001/77/EC and Directive 2009/28/EC has also expanded over the last few years. However, it has been possible to identify only a few central contributions on the legal aspects of implementing a RES-E support scheme under EU law<sup>154</sup> and none at all on TGCs schemes under EU law.

With the aim of reflecting both practices in the implementation of previous directives and the position taken by certain Member States and national authorities as regards the implementation of the newest provisions, reference is made in this thesis to, on the one hand, national legislation and, on the second hand, a number of reports and position papers, including those originating from the Council of European Energy Regulators (CEER), the European Network of Transmission System Operators (ENTSO-E),<sup>155</sup> and the former European Regulators' Group for Electricity and Gas (ERGEG).<sup>156</sup>

The material EU law sources used in this analysis are both sector specific and non-sector specific. *Sector-specific legislation* here means EU legislation applicable to the energy sector and, most particularly, the electricity industry. Besides some legislation of general character or of trans-fuel application, secondary EU law provides for rules that are distinctively applicable to the electricity industry. The TGCs schemes apply primarily to RES-E generation, although a few schemes also cover cogeneration and the CHP Directive is referred to when applicable. However, the main purpose of this thesis is to look at the application of support schemes for RES-E generation, and for that reason reference is made to EU electricity law as a sub-category of EU energy law. EU electricity law has been singled out in this way before,<sup>157</sup> although not by many authors. However, the literature on energy law comes rapidly to the same distinction based on the primary energy sources either fossil or renewables,<sup>158</sup> and the transformation processes. As concerns the *non-sector-specific legislation* referred to in this thesis, this mainly relates to EU competition law, in particular the state aids regime, and internal market rules. Ultimately some conclusions will be drawn as the extent to which the regulation of RES-E support schemes requires, or integrates the requirements of the environmental legislation.

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<sup>153</sup> It must be noted here that there has been a marked tendency for EU Commission officials to publish comments on the interpretation to be given to the new legislation. However, these publications reflect the opinions of the authors, not the institution that employs them. See *e.g.*: C. Jones (ed.), *The Internal Energy Market – The Third Liberalisation Package*, (Claeys & Casteels, 2010) (EU Energy Law, Volume I); C. Jones, *The Internal Energy Market* (Claeys & Casteels, 2004) (EU Energy Law, Volume 1); P. Hodson, C. Jones, A. Piebalgs, and H. Van Steen, *Renewable Energy Law and Policy in the European Union*, (Claeys & Casteels, 2010) (EU Energy Law, Volume III – Book One). For another form of commentary on binding EU energy law, see N. Hunt and K. Talus, *The EU Energy Directory*, (Euroconfidentiel, 2008).

<sup>154</sup> See *e.g.*: A. Johnston, K. Neuhoff, D. Fouquet, M. Ragwitz, G. Resch, 'The Proposed New EU Renewables Directive,' *EEELR*, June 2008, pp.126-145; A. Gunst, 'Impact of European Law on the Validity and Tenure of National Support Schemes for Power Generation from Renewable Energy Sources,' in *Journal of Energy & Natural Resources Law*, 23 (2005) pp. 95-119.

<sup>155</sup> Besides the establishment of the Agency for the Cooperation of Energy Regulators (ACER) in 2010, no particular activities of relevance to the topic of this thesis could yet be identified.

<sup>156</sup> ERGEG has ceased to exist in 2011 as ACER became fully operational. See Commission Decision 2011/280/EU of 16 May 2011 repealing Decision 2003/796/EC on establishing the European Regulators Group for Electricity and Gas, OJ L 129, 17.05.2011, p. 14, with effect from 1 July 2011

<sup>157</sup> L. Hancher, *EC Electricity Law*, (Chancery Law Publishing, 1992).

<sup>158</sup> *E.g.*, coal, oil, natural gas (as regards fossil fuels); nuclear fuels; renewables.

To assess the variety of implementation alternatives and the margin of appreciation left to Member States in the regulatory design of their TGCs schemes, it is necessary to refer to national legislation. References are made based on the author's own research into the national laws of those Member States that have implemented TGCs schemes, as well as information provided by the European institutions through, notably, reports and the Transparency Platform.<sup>159</sup> Comparisons are also made with alternative methods of implementation adopted in countries outside the EU. TGCs schemes in the United States, in particular the RECs system implemented in the state of California, are referred to, based on this author's previous research.<sup>160</sup> The national legislation of EU Member States is also extensively referred to in relation to state aid cases, where the Commission has had the opportunity to assess the details of several notified schemes.<sup>161</sup> Reference is also regularly made to the forthcoming common TGCs market between Norway and Sweden, due to commence on 1 January 2012. This will be the first time that two countries have established such an extensive level of cooperation as regards their support schemes, and envisage the cross-border trading of TGCs for compliance. It must also be noted that Norway, which is a party to the EEA Agreement but not a member of the EU, is nevertheless negotiating the incorporation of Directive 2009/28/EC into the EEA Agreement, which would require Norway to implement the provisions into its domestic law. This was a precondition to the establishment of a common TGCs market with Sweden, as otherwise Norway would be treated as a third country under the directive.

It should be stated here that TGCs schemes have sometimes been criticised and that voluminous economic literature exists comparing their performance with that of FITs.<sup>162</sup> This economic literature aims to answer a different question than the one investigated by this thesis. It is not an objective of this thesis to argue either for or against the adoption of TGCs schemes as *the* best support scheme or to compare the results of TGCs schemes and FITs in terms of additional RES-E generation.<sup>163</sup> While carrying out her research, the present author has become convinced that the choice of support scheme depends on a series of factors including the level of development of the RES technologies, the status of liberalisation and competition on the electricity market. There is no single perfect support scheme, instead there are well designed schemes suited for particular circumstances. The aim of this thesis is to identify whether the regulatory design of the scheme is, on the one

<sup>159</sup> Transparency Platform website, European Commission, Directorate-General for Energy, available at <[http://ec.europa.eu/energy/renewables/transparency\\_platform/transparency\\_platform\\_en.htm](http://ec.europa.eu/energy/renewables/transparency_platform/transparency_platform_en.htm)>.

<sup>160</sup> C. Banet, 'Terms and Conditions of Renewable Energy Certificates Trading in the United States' in B. Delvaux, M. Hunt and K. Talus (eds.), *EU Energy Law and Policy Issues*, 2<sup>nd</sup> ed. (Euroconfidential, 2010), pp. 323-360 (ELRF Collection).

<sup>161</sup> The facts may have changed since, however, so they must be put in perspective.

<sup>162</sup> See, e.g.: P. E. Morthorst, 'Interactions of a tradable green certificate market with a tradable permits market, Energy Policy,' Volume 29, Issue 5, April 2001, pp. 345-353; R. Golombek and M. Hoel, *Pliktige elsertifikater*, Ragnar Frisch Centre for Economic Research, Report 1/2005; T. Bye, *On the Price and Volume Effects from Green Certificates in the Energy Market*, Discussion Paper 351, Statistics Norway, June 2003; O. V. Marchenko, 'Modeling of a green certificate market,' *Renewable Energy*, Volume 33, Issue 8, August 2008, pp. 1953-1958; E.S. Amundsen and G. Nese, *Market Power in Interactive Environmental and Energy Markets: The case of Green Certificates*, Working paper No. 14/04, Department of Economics, University of Bergen.

<sup>163</sup> See, for an example of a vigorous attack on TGCs schemes and a plea for FITs: M. Mendonça, D. Jacobs and B. Sovacool, *Powering the Green Economy – The feed-in tariff handbook*, (Earthscan, 2010), p.177.

hand, influenced by EU law, and, on the other hand, consistent with EU law. These are the two issues on which this thesis takes a position. Although this thesis is discussing a market-based instrument, an analysis under the law-and-economics approach would fall outside its intended scope, which is to discuss not the background or the economic effects of TGCs schemes, but their regulatory design and their legal effects.

A major part of the thesis concentrates on the identification of the EU rules applicable to national TGCs scheme, necessarily adopting a *de lege lata* perspective. Here the issues examined concentrate on what is legally possible under EU law, with respect to, e.g., counting imported electricity under national TGCs scheme, differentiating between technologies, delimiting the size of the TGCs market, and avoiding the involvement of state resources. Where gaps, weaknesses, implementation challenges, failures in application or potential areas of improvement of EU law are identified, a *de lege ferenda* perspective is included. It must nevertheless be conceded that the primary preoccupation of this thesis has been the analysis of the law as it is, or as it could and should be implemented, notably because of the novelty of the EU legislation.

## 3.2 Delimitation of the scope of research

Some limitations have been necessarily placed on the scope of the research. These have primarily concerned the comprehensiveness of the review of design alternatives to TGCs schemes, of related market-based instruments, and of relationships to other jurisdictions.

Because this thesis deals with the content and application of rules of EU law, it is not intended to cover all considerations related to the implementation and regulation of a TGCs scheme. Its scope is limited to regulatory considerations interacting with EU law.

This thesis addresses to a limited extent the interaction between TGCs schemes and emissions trading schemes, in particular the EU ETS. A more comprehensive examination of this topic would have raised another series of issues in addition to the central topic of this work. However, some comparisons with the legal treatment of emissions trading are included where most appropriate, such as in relation to the legal definition of certificates or state aids. Similarly, the comparison between green and white certificates is not explored. While the relationship between the three types of ‘certificates’, *i.e.*, green, brown and white, was a preliminary working hypothesis that gave rise to publications by the present author,<sup>164</sup> a careful and detailed analysis of TGCs schemes has required limitations to be placed on the scope of research. Various studies, in particular in economic fields, have examined the interaction between the three instruments.<sup>165</sup>

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<sup>164</sup> See in particular: C. Banet, ‘The use of Market Based Instruments in the Transition from a Carbon Based Economy’, in D. Zillman, C. Redgwell, Y. O. Omorogbe, and L. Barrera-Hernandez (eds.), *Beyond the Carbon Economy*, (Oxford University Press, 2008), pp. 207-230.

<sup>165</sup> E.g., a report from NERA concluded in 2005 that ‘*the major point of intersection of these three policy instruments is in their effects on the electricity market.*’ (NERA Economic Consulting, *Interactions of the EU ETS with Green And White Certificate Schemes*, study for the European Commission Directorate-General Environment, 17 November 2005, p. i.). See also the conclusion reached in the report: *Options for Design of Tradable Green Certificate Systems*, by the Netherlands Energy Research Foundation (ECN), the Science and Technology Policy Research Unit (SPRU), and Oeko-Institut, Doc. ECN-C--00-032, April 2000, p. 16: ‘*A clear advantage of an obligation on producers is that this*



The law applicable to the World Trade Organization (WTO) is also relevant to TGCs schemes. Reference can briefly be made to some recent research results in the field<sup>166</sup> and the conclusion reached by authors that there may even be some inconsistency between the WTO regimes and the margin left to the EU Member States under EU law in terms of national support instruments.<sup>167</sup> However, an examination of issues concerning the trade barriers raised by TGCs scheme in the context of international trade regimes would once again be outside of scope of this thesis, because it would require a different series of questions to be addressed.

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*particular position of the obligation could make interaction with the Carbon Emissions Trading (CET) easier, as electricity producers may well be involved in CET.'*

<sup>166</sup> See in particular: P. Delimatsis, 'Financial innovation and climate change: the case of renewable energy certificates and the role of the GATS,' *World Trade Review* (2009) 8:3, pp. 439-460; P. Delimatsis, *GATS, Financial Services and Trade in Renewable Energy Certificates (RECs) – Just another Market-based Solution to cope with the Tragedy of the Commons*, Swiss National Centre of Competence in Research (NCCR), Working Paper No. 2006/31, September 2007.

<sup>167</sup> L. Hancher notes the following: '[...] in many respects the GATT/WTO disciplines are much stricter than those applying within the European Union (EU). This means that additional care must be taken in drawing up appropriate national instruments to promote and sustain the use of renewable energy resources.' L. Hancher, 'Trade-Neutral Policies for the Promotion of Electricity from Renewables,' in J. Bielecki and M. Geboye Desta (eds.), *Electricity Trade in Europe – Review of the Economic and Regulatory Challenges* (Kluwer Law International, 2004), p. 286.

## 4 On the legal definition of TGCs under EU law

The legal nature of TGCs becomes an issue for EU law when they are traded between Member States or when they affect other EU policies. As endorsed by Directive 2009/28/EC, the RES-E support schemes operated by Member States are mostly applicable to energy from renewable sources at the national level.<sup>168</sup> As of 2011 there is consequently no cross-border trade of TGCs. Certificates trading for compliance purposes will take place for the first time at EU/EEA level only when the joint TGCs market between Norway and Sweden enters into force. The certificates generated thereby in Norway and Sweden, however, will not be in free movement in the internal market, since they are limited to the two countries.<sup>169</sup> But the perspective of an extension of such mechanisms, even potentially, to several states as Directive 2009/28/EC opens for, makes the clarification of the legal status of TGCs under EU law a relevant question.

Current TGCs schemes being national in scope, the first appraisal of their legal nature must be done under national law (4.1). Then, the different possible definitions of TGCs under EU law are reviewed (4.2). Finally, the necessity to agree on a common definition for the purpose of trading under a coordinated TGCs scheme is pointed out (4.3).

### 4.1 Alternative definitions of TGCs under national law – An overview

The answer to the question of the legal nature of green certificates under national law is not as obvious as it first appears. Indeed, the establishment of almost all the national schemes has involved a preliminary discussion on the legal status of the certificates. The following paragraphs provide a necessary overview, but not an in-depth analysis, of the legal qualification proposed or given to green certificates in the national law of the Member States. The following is necessarily a short overview as the purpose of this thesis is limited to a review of TGCs schemes under EU law, and detailed scrutiny of each national legislation would be beyond the scope of this research. However, it shows the challenges represented by divergent definitions for a potential trading of certificates between Member States.

The most common proposals or existing definitions to be found in national legislation are that TGCs are: intangible assets; intangible goods; titles or securities; generators of property rights; evidence of RES-E generation. These definitions cover very different legal concepts, each subject to a different regulatory framework. An additional difficulty in the legal qualification of TGCs is that the legislation often provides an imprecise definition, which must later be interpreted. Two remarks can already be made on the reasons for divergences in legal qualifications. First, the definitions may vary because they are based on different legal traditions, without allowing a categorisation according to civil or

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<sup>168</sup> See Recital 25, Directive 2009/28/EC: *‘The majority of Member States apply support schemes that grant benefits solely to energy from renewable sources that is produced on their territory.’*

<sup>169</sup> The issue of the trade restrictive nature of TGCs schemes as regards certificates is addressed in Chapter 10.

common law countries.<sup>170</sup> The same happens with EU emissions allowances, which are subject to different national definitions while their trade between undertakings is organised at EU-level under the harmonised rules of the EU ETS. Second, the qualification may differ according to its purpose, that is, whether it is for reasons of taxation, accounting or transfer of ownership.

The most common definition adopted in national legislation is that of an *intangible asset* or *intangible good*. Based on civil law tradition, Belgium follows this definition. Pursuant to the federal legislation (for RES-E generation based on offshore resources), green certificates are intangible goods (*biens meubles transmissibles*),<sup>171</sup> like in Flanders (intangible tradable good).<sup>172</sup> The definition given by the Walloon legislation is slightly different in the text as it refers to green certificates as *transmissible immaterial titles*, but has been interpreted as being in line with the other regional definitions.<sup>173</sup> It should be noted that the certificates issued in the different regions in Belgium are not mutually interchangeable, i.e. not fungible, even if they have a similar definition. In the United Kingdom, there is only a broad definition of the Renewables Obligation Certificates (ROCs) in the legislation.<sup>174</sup> In practice, the accounting rules applied by undertakings to ROCs tend to conclude in favour of a qualification as *intangible assets* too.

Several legislations refer to the certificate as a *proof* of renewable electricity generation. The Swedish green certificates (*elcertifikater*) are defined as such, but the government has also discussed the legal interpretation to be given, and even changed its position, reconsidering its primary evaluation of certificates as financial instruments in favour of a concept closer to intangible assets requiring physical delivery.<sup>175</sup> The legal definition to be

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<sup>170</sup> As pointed out below, countries with civil law tradition may categorise TGCs differently.

<sup>171</sup> Article 1.4, Royal Decree of 16 July 2002, as amended (Arrêté Royal du 16 juillet 2002 relatif à l'établissement de mécanismes visant la promotion de l'électricité produite à partir des sources d'énergie renouvelables, M.B. 23.08.2002), which defines a green certificate as an intangible good providing the proof that the producer has generated a certain quantity of electricity from renewable energy source, within a given timeframe ('*bien immatériel attestant qu'un producteur a produit une quantité déterminée d'électricité verte, au cours d'un intervalle de temps déterminé*').

<sup>172</sup> Art. 1.1.3., 60°, the Energy Decree. *Decreet houdende algemene bepalingen betreffende het energiebeleid (Energiedecreet)*, 08.05.2009 (M.B. 07.07.2009, p. 46145): '*groenestroomcertificaat : uniek, verhandelbaar en overdraagbaar immaterieel goed dat aantoon dat een bepaalde productie-installatie in een bepaalde periode 1 000 kWh elektriciteit heeft opgewekt uit hernieuwbare energiebronnen.*' The same qualification applies to CHP certificates in Flanders which are defined in Decree of 10 July 2003 as '*a transferable intangible good which proves that the related CHP installation, in the mentioned year, achieved a CHP saving of 1000 kWh.*'

<sup>173</sup> Article 2.14, Décret relatif à l'organisation du marché régional de l'électricité, du 12 avril 2001 (M.B. du 01/05/2001, p. 14118), as amended: '*"certificat vert": titre transmissible octroyé aux producteurs d'électricité verte en vertu de l'article 38 et destiné, via les obligations imposées aux fournisseurs et gestionnaires de réseaux, à soutenir le développement d'installations de production d'électricité verte;*'

<sup>174</sup> Pursuant to Article 2(1), Renewables Obligation Order 2009, as amended, ROC means '*a renewables obligation certificate issued by the Authority under this Order.*'

<sup>175</sup> The current definition is given in Chapter 1, §2.2, Act on elcertificates, *Lag (2003:113) om elcertifikat: 'elcertifikat: ett av staten utfärdat bevis om att en megawattimme förnybar el har producerats med iakttagande av bestämmelserna i denna lag och i föreskrifter som meddelats med stöd av lagen.*'

Concerning the previous legal definition as financial instrument, see: *Proposition 2002/03:40 Elcertifikat för att främja förnybara energikällor*, 16 January 2003. For an appraisal under a Norwegian perspective,

given to green certificates in Norway has also been heavily debated. The 2011 law proposal also defines the certificates as a *proof* of RES-E generation, but the government has declared itself in favour of considering certificates as *assets* and not financial instruments, including for reasons of taxation and accounting.<sup>176</sup>

In Poland, the green certificates, which are termed certificates of origin, are defined as *exchangeable commodities* giving rise to *property rights*.<sup>177</sup>

Italy defines green certificates (*certificati verdi*) as *titles* and more exactly *bearer bonds* (*titoli al portatore*), which are traded on the same electronic platform than the power exchange.<sup>178</sup> Defining TGCs as titles or bearer bonds suggests qualification as securities, that is, as negotiable financial instruments. In Romania, a green certificate seems to be defined as a *title* proving the production of renewable energy sources to a quantity of 1 MWh electricity.<sup>179</sup>

Outside the European Union and the EEA, reference can be made to the United States where the legal definition of the certificates (so-called TRECs or RECs) has also been subject to debate. Engel has described RECs as *marketable goods* and opposed them to *tradable rights*. According to her, this type of ‘*market-based environmental regulation involves marketing the obligation to improve the environment, as opposed to the right to harm it. While marketable permit schemes trade rights to take action (in the present context, to exploit the environment), marketable obligation schemes trade requirements to take action such as to improve the environment by providing environmental public goods.*’<sup>180</sup> Another author, Elder, discussed the definition of RECs by interpreting contracts on RECs, and is of the opinion that, when electricity is defined as a good – which varies according to state legislation in the United States – the sale of RECs as a provision in an electricity PPA should also be interpreted as a sale of goods. He adds that ‘[e]ven standalone contracts for the sale of RECs could reasonably be treated as contracts for the sale of goods,’ and that ‘contracts for unbundled RECs seem to fit the definition of

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see: *Om innovasjonsverksemda for miljøvennlige gasskraftteknologiar mv.*, St. meld. nr. 47 (2003-2004), Norwegian Ministry of Petroleum and Energy (OED), point 8.4.

<sup>176</sup> Høringsnotat (forslag til lovvedtak) om lov om elsertifikater, 08.12.2010, Olje- og energidepartementet, p.24. See also similar interpretation in the law proposal: To compare, the the first law proposal in 2006 suggested that certificates could be financial instruments.

<sup>177</sup> Energy Act, Article 9.e, §6: ‘*The property rights arising of the certificate of origin are transferable and constitute an exchangeable commodity, referred to in Article 2 point 2 letter d of the Act of 26 October 2000 on the commodity exchanges.*’ (Non official translation.)

<sup>178</sup> Legal basis: Article 11 of the Legislative Decree No. 79/1999 (*Decreto Ministeriale 11 novembre 1999 - Direttive per l'attuazione delle norme in materia di energia elettrica da fonti rinnovabili di cui ai commi 1, 2 e 3 dell'art. 11 del D.Lgs. 16 marzo 1999, n. 79*) (so-called Bersani Decree). As amended.

<sup>179</sup> The definition adds that the green certificate can be subject to transactions, distinct from the quantity of electricity it represents, on a market organized by law. See Article 2(g), Law Nr. 220/2008 on the system to promote the producing energy from renewable energy sources (Lege nr. 220/2008 stabilirea sistemului de promovare a producerii energiei din surse regenerabile de energie, M.O., Part I nr. 743 of 03.11.2008) ‘*Certificat verde – titlul ce atesta producerea din surse regenerabile de energie a unei cantitati de 1 MWh energie electrica. Certificatul verde se poate tranzactiona, distinct de cantitatea de energie electrica pe care acesta o reprezinta, pe o piata organizata, in conditiile legii.*’

<sup>180</sup> K. H. Engel, ‘The Dormant Commerce Clause Threat to Market-Based Environmental Regulation: The Case of Electricity Deregulation,’ 26 *Ecology L.Q.* (1999), p. 261.

"movable goods", since RECs may be purchased for value, and then transferred or moved.<sup>181</sup>

## 4.2 Tentative legal definition of TGCs under EU law

The EU legislation does not provide for a definition of green certificates as it does, although in broad terms, for white certificates<sup>182</sup> or emissions allowances.<sup>183</sup> It refers to them in Directive 2009/28/EC as one of the compliance instruments with renewable energy obligation support schemes.<sup>184</sup> This qualification allows classifying TGCs in terms of policy instruments, but it falls short of providing a *legal* definition.

The Commission has provided a general definition of green certificates in state aid case N504/2000 concerning the UK Renewables Obligation, a qualification reiterated in latter decisions. It recognises there both the immaterial nature and economic value of the certificates and qualifies them as *intangible assets*.<sup>185</sup> The qualification of TGCs as intangible assets is consequently common to both national and EU practice. In the EU law context, the term is primarily used to refer to state aid cases and characterises the presence of an economic advantage.<sup>186</sup> In relation to state aids, the Court has for example qualified as intangible assets a NOx credit,<sup>187</sup> a hydroelectric production concession,<sup>188</sup> and an

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<sup>181</sup> B. Elder, *Renewable Energy Credits (RECs) in California – Status after Passage of Senate Bill 107 of 2006*, Energy Policy Initiatives Center, University of San Diego School of Law, June 2007, pp. 23-24.

<sup>182</sup> White certificates are defined in Directive 2006/32/EC as being: ‘*certificates issued by independent certifying bodies confirming the energy savings claims of market actors as a consequence of energy efficiency improvement measures.*’ (Article 3 (s) of Directive 2006/32/EC of the European Parliament and of the Council of 5 April 2006 on energy end-user efficiency and energy services and repealing Council Directive 93/76/EEC, OJ L 114 of 27.04.2006, p. 64.)

<sup>183</sup> An allowance is defined in Directive 2003/87/EC as being: ‘*an allowance to emit one tonne of carbon dioxide equivalent during a specified period, which shall be valid only for the purposes of meeting the requirements of this Directive and shall be transferable in accordance with the provisions of this Directive.*’ (Article 3(a), Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC, OJ L 275 of 25.10.2003, p. 32, as amended.)

<sup>184</sup> Article 2, definitions in para. (k) of ‘support scheme’ and in para. (l) of ‘renewable energy obligation’, Directive 2009/28/EC.

<sup>185</sup> State aid case N 504/2000 of 28.11.2001 – Renewables Obligation and Capital Grants for Renewable Technologies, p. 2, published in OJ 2002 C30: ‘*They [the producers of green electricity] can sell these certificates to the suppliers on the (future) green certificate market, hence the State offers them intangible assets. [...] The State only provides an authorized proof that the green electricity is actually produced.*’

<sup>186</sup> Reference is made to ‘intangible asset’ in the Community Guidelines on state aids for Environmental Protection, para. 70 (23): ‘*intangible assets, means, for the purposes of calculating eligible costs, spending on technology transfer through the acquisition of operating licences or of patented and non-patented know-how where the following conditions are complied with ...*’

<sup>187</sup> Case T-233/04, *Kingdom of the Netherlands v Commission of the European Communities*, [2008] ECR II-00591, para. 76. The case relates to the nitrogen oxides (NOx) emission trading scheme established by The Netherlands in order to comply with the requirements of Directive 2001/81/EC of the European Parliament and of the Council of 23 October 2001 on national emission ceilings for certain atmospheric pollutants (OJ L 309 of 27.11.2001, p. 22). The Court made the distinction of legal nature for the purpose of state aids between the NOx credits and the green certificates.

electronic client base.<sup>189</sup> In the particular case of the client base, the Court recognises that it is an intangible asset with a positive economic value, but that it has no value in accounting terms. That contrasts with the TGC, which can be qualified as an intangible asset and has a value in accounting terms. However, this analysis does only provide a satisfactory clarification for the purpose of Article 107 TFEU, but not for the purpose of Article 26 TFEU (internal market). An important point which is made here is that the definition of TGCs will vary according to the legal perspective from which EU law tries to perceive it, that is, as rules governing internal market and free movement or state aids.

As TGCs remain national instruments, it has not yet been necessary for the European legislator or the Court to clarify further their definition under EU internal market rules. Since the issue has not yet been settled, the following analysis is a tentative evaluation of the different possible definitions to be given to TGCs under EU law. The analysis starts by looking at the suitability of the concept of goods (4.2.1), and then moves to the alternative definitions of services (4.2.2), and financial instruments/securities (4.2.3).

#### 4.2.1 Adequacy of the definition of TGCs as goods

First is examined the adequacy of the definition of TGCs as goods. The Treaties do not provide a definition of the concept of goods. Alternative terms like products, objects, articles, items or merchandises are sometimes referred to and associated to the concept of goods, a fact that may create confusion as to the concrete scope of application of the concept. The definition of goods that has been given by the Court based on Treaty interpretation is taken as a starting point here. The legal literature has also reviewed the Court's case law on goods, mainly with a view to drawing conclusions as to their trade within the internal market.<sup>190</sup>

The Court ruled early in its case law that there are three constitutive elements in the definition of goods for the purposes of Article 28 TFEU (free movement of goods). In case C 7-68, the Court ruled that under Article 9 of the EEC Treaty (now Article 28 TFEU), the Community (now the EU) is based on a customs union '*which shall cover all trade in goods.*' The Court concluded that '*by goods, within the meaning of that provision, there must be understood products which can be valued in money and which are capable, as such, of forming the subject of commercial transactions.*'<sup>191</sup> According to this interpretation, the three constitutive and cumulative elements of the concept of goods are:

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<sup>188</sup> Case T-53/08, *Italy v Commission*, [2010] ECR (not yet published), para. 28.

<sup>189</sup> Joint Cases C-341/06 P and C-342/06 P, *Chronopost and La Poste v UPEX and Others*, [2008] ECR p. I-4777, para. 124; Case T-613/97 *UFEX* ECR [2006] II-01531, para. 165.

<sup>190</sup> C. Barnard summarises the main constitutive elements of goods as defined by the ECJ in *The Substantive Law of the EU – The Four Freedoms*, 3<sup>rd</sup> edition, (Oxford University Press, 2010), p. 34. Another analysis of the constitutive elements of the definition of goods is provided in F. Sejersted, F. Arnesen, O.-A. Rognstad, S. Foyn and O. Kolstad, *EØS-Rett*, 2<sup>nd</sup> edition (Universitetsforlaget, 2005), pp. 283-285. Lorna Woods gives a more detailed analysis of the definition in L. Woods, *Free Movement of Goods and Services in the European Community* (Ashgate, 2004), Chapter 2 on 'Meaning of Goods' p.13.

<sup>191</sup> Case 7/68 *Commission v Italy* [1968] ECR 423, p. 428. The case concerned paintings, objects of artistic, historic, archaeological or ethnographic interest that were recognised as constituting goods. The very fact that the contested Italian tax varied in proportion to the value of the articles indicated that they could be valued in money.

the existence of a product; the value of the product can be estimated in monetary terms; the product can be sold and purchased through a commercial arrangement.

Starting with the second and third criteria, it is undeniable that TGCs are monetarily valuable and are the object of a financial transaction. It is because they have a financial value that the TGCs provide support. The TGCs will provide a financial income for the RES-E generator at the time of the transaction with the first buyer who can sell further to other parties. The seller and the buyer agree on the terms and conditions of the sale and purchase according to the trading modalities reviewed in section 1.2.4. The Court has set that it is not necessary for a good to have a positive value in order to fall under the provisions of free movement.<sup>192</sup> Here, the competent authority or designated body issues the certificates for free, and credits them to the account of the holder. But the certificates acquire value once they are sold. TGCs will never acquire a negative value, but will remain of zero value if they are not sold because of lack of demand or expiry of their validity. Because TGCs are national compliance instruments, they will also lose all their economic value when exported, except if agreed otherwise with the importing country, subject to the application of the cooperation mechanisms defined in Directive 2009/28/EC. TGCs cease to exist when they are cancelled in the registry. In conclusion, the two last criteria of the definition of goods, of being valuable in money and subject to a commercial transaction, are met by the TGCs.

The first criterion of being a *product* is more ambiguous. Indeed, TGCs are not of a tangible nature. They are primarily electronic data, the existence of which is very rarely printed out on paper.<sup>193</sup> In its form, the TGC can be compared to the GO that is defined in Directive 2009/28/EC as ‘*an electronic document*.’<sup>194</sup> The directive also provides that GOs shall be issued, transferred and cancelled electronically.<sup>195</sup> National definitions of TGCs support this characterisation of the certificates as electronic documents.<sup>196</sup>

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<sup>192</sup> Case C-2/90 *Commission v Belgium* [1992] ECR I 4431. In that case, the Court had to evaluate the legality of the legislation enacted by the Belgium region of Wallonia that banned the storage, tipping or dumping in its region of waste originating in foreign Member States. As to the qualification of waste, the Court concluded that ‘*objects which are shipped across a frontier for the purposes of commercial transactions are subject to Article 30, whatever the nature of those transactions*’ (para. 26). Consequently, ‘*waste, whether recyclable or not, is to be regarded as "goods" the movement of which, in accordance with Article 30 of the Treaty, must in principle not be prevented*’ (para. 28).

<sup>193</sup> In that case, the energy supplier which owned or bought the certificates uses the latter for information purposes, but the certificate is already cancelled in the registry and has ceased to exist. The electricity supplier is only informing its customers of its compliance with the quota obligation. This must be clearly distinguished from energy labelling, which can occur by the means of a guarantee of origin.

Until the harmonised definition given Directive 2009/28/EC, additional practices for the sale and purchase of GOs and energy certificates included paper format and PDF format. Directive 2001/77/EC did not harmonise the definition of GO on that point.

<sup>194</sup> Article 2(j), Directive 2009/28/EC.

<sup>195</sup> Article 15.5, Directive 2009/28/EC.

<sup>196</sup> E.g., in Sweden, Law 2003:120 concerning Elcertifikater, 18 § ‘Elektronisk hantering’. See also hearing document on the Norwegian law proposal (OED høringsbrev 08.12.2010 (forslag til lovvedtak) om lov om elsertifikater), which proposes to develop the certificates registry on the model of an electronic bank system (*nettbank*). Proposal reiterated of the law proposal put forward in April 2011 (see chapter 1 §3(e); Prop. 101 L (2010-2011), *Lov om elsertifikater*, Olje og energidepartementet, tilråding fra Olje- og energidepartementet av 15. april 2011).

Similarly, the E-Track project developed a standard based on ‘*electronic certificates*’ used for tracking, in the same manner that TGCs are tracking instruments.

The central question, therefore, is whether an electronic document that qualifies as asset of intangible nature, which carries out an economic value and is subject to a commercial transaction, can be assimilated to a product or whether it should be defined differently. The legal literature has argued that it is a clear requirement that goods are physical objects, the exception being energy.<sup>197</sup> As regards in particular the qualification of electricity as goods, Advocate General Fennelly noted in his Opinion in Case C-97/98 *Jägerskiöld*, that this qualification was ‘*perhaps justifiable by virtue of its function as an energy source, and, therefore, its competition with gas and oil,*’ which themselves are of tangible nature. He also noted that the tangible physical characteristics of the goods remain a decisive criterion.<sup>198</sup> In Joined Cases 60 and 61-84 *Cinéthèque SA and Others v Fédération nationale des cinémas français* the Court also insisted on the fact that the goods considered were ‘*manufactured*’ material objects.<sup>199</sup> It can therefore be concluded that to qualify TGCs as goods would require an extension of the current definition given by the Court. It can be noted in that respect that the national legislations having recognised TGCs as intangible goods usually precise that the electronic certificates are ‘*materialised*’ by their inscription on the holder’s account.

#### 4.2.2 Adequacy of the definition of TGCs as services

Under a second alternative, the adequacy of the definition of services to TGCs is now evaluated. Within the meaning of the Treaties, services are defined in Article 57 TFEU as services which ‘*are normally provided for remuneration, in so far as they are not governed by the provisions relating to freedom of movement for goods, capital and persons.*’ Article 57 provides an illustrative list of services that includes ‘*activities of an industrial character*’ and ‘*activities of a commercial character.*’<sup>200</sup> The question is to know whether the TGCs should be considered as forming part of a commercial activity or should be identified as separate legal objects. The Court had several opportunities to make a pronouncement on the distinction to be made between services and other concepts subject to free movement. As noticed by Advocate General Fennelly, the Court in such cases tends to apply a functional approach more than an exhaustive definition. The legal literature also describes the Court’s approach as closer to a centre of gravity test between the different provisions of the Treaty.<sup>201</sup> The Court itself refers to the determination of an order of priority in the application of the different freedoms, where one would ‘*prevail*’

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<sup>197</sup> F. Sejersted, F. Arnesen, O.-A. Rognstad, S. Foyen and O. Kolstad, *EØS-Rett*, 2nd ed. (Universitetsforlaget, 2005), p. 283.

<sup>198</sup> Opinion of Advocate General Fennelly delivered on 17 June 1999 in Case C-97/98 *Peter Jägerskiöld v Torolf Gustafsson (Jägerskiöld)*, point 20.

<sup>199</sup> Joined Cases 60 and 61-84 *Cinéthèque SA and Others v Fédération nationale des cinémas français* [1985] ECR 2605.

<sup>200</sup> The non-exhaustive list also includes ‘*activities of craftsmen*’ and ‘*activities of the professions*’, but these are deemed not to be relevant for the purpose of TGCs.

<sup>201</sup> C. Barnard, *The Substantive Law of the EU – The Four Freedoms*, 3<sup>rd</sup> edition, (Oxford University Press, 2010), p. 357. Barnard refers in particular to cases where the Court had to assess the application of the provisions on the free movement of services *versus* those on the free movement on capital and establishment. See case law cited.



over the others.<sup>202</sup> For purposes of exemplification, television signals have been characterised as the provision of services and not of goods.<sup>203</sup> The granting of fishing rights and the issuance of fishing permits have also been defined as services.<sup>204</sup> The Court has also relied upon another distinction. It ruled in *Schindler* (concerning lotteries and the commercialisation of advertising materials and tickets) and latter in *Läärä v. Kihlakunnansyöttäjä* (concerning gaming and slot machines) that where goods are merely ancillary to the main activity, other provisions of the Treaty will apply, including those on services.<sup>205</sup>

It appears reasonable to conclude from the application of the gravity test and the *Schindler* case law that any economic activity related to commercial operations on TGCs is to be qualified as service, the regime of which falls under the provisions of Articles 56 *et seq.* TFEU.<sup>206</sup> However, the TGC itself will hardly qualify as a service provided for remuneration or one of the activities defined in Article 57 TFEU. Similarly, the extended definition provided by Directive 2006/123/EC on services in the internal market may relate to the issuing and trading of TGCs, but cannot be assimilated to the certificates themselves.<sup>207</sup>

### 4.2.3 Adequacy of the definition of TGCs as financial instruments

A last alternative examined as regards the legal definition of TGCs under EU law would be to qualify them as financial instruments. The main reference is Directive 2004/39/EC on markets in financial instruments (so-called MiFID Directive)<sup>208</sup> that defines the latter

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<sup>202</sup> Case C-452/04, *Fidium Finanz AG v Bundesanstalt für Finanzdienstleistungsaufsicht* [2006] ECR I-9521, para. 34, and case law cited.

<sup>203</sup> Case 155/73, *Sacchi* [1974] ECR 409, para. 6.

<sup>204</sup> Case C-97/98, *Peter Jägerskiöld v Torolf Gustafsson*, [1999] ECR I-07319, paras. 36 and 39.

<sup>205</sup> Case C-275/92 *Customs Excise v Schindler* [1994] ECR I-1039, para. 37. The Court ruled that lottery activities are not economic activities related to 'goods' but have to be regarded as services within the meaning of the Treaty (paras. 24-25). The large-scale sending and distribution of advertisement material and lottery tickets constitutes only one step in the wider process of a lottery. In another case, *Läärä v Kihlakunnansyöttäjä*, the Court had to assess the application of the *Schindler* judgment to another case in law raised in Finland and concerning exclusive operating rights to operate slot machines. The Court re-stated the distinction between the gaming activity and the machine allowing the exercise of that service (para.18). While *the lotteries must be regarded as services, slot machines must be regarded as goods and be covered by Article 30 of the Treaty*' (para. 20). Case C-124/97 *Läärä v Kihlakunnansyöttäjä* [1999] ECR I-6067.

<sup>206</sup> It is settled case law that the cross-frontier provision of services for remuneration is to be considered as an economic activity for the purpose of the Treaties (Case 13/76 *Donà v Mantero* [1976] ECR 1333, para.12; Case 196/87 *Steymann v Staatssecretaris van Justitie* [1988] ECR 6159, para. 10.)

<sup>207</sup> Directive 2006/123/EC of the European Parliament and of the Council of 12 December 2006 on services in the internal market, OJ L 376 of 27.12.2006, p.36. Service is defined in Article 4 (1) of the directive as meaning 'any self-employed economic activity, normally provided for remuneration, as referred to in Article [57] of the Treaty.' An extended definition is also provided in Recital 33 of the directive, which mentions the activity of certification. The latter in this understanding is intended to cover another type of activity than the issuance of tradable certificates.

<sup>208</sup> Directive 2004/39/EC of the European Parliament and of the Council of 21 April 2004 on markets in financial instruments amending Council Directive 85/611/EEC and 93/6/EEC and Directive

by way of enumeration.<sup>209</sup> Besides this framework definition, Moloney observes that some differences remain between the different directives adopted under the Commission's Financial Services Action Plan (FSAP) as to the definitions of financial instruments and securities, '*raising consistency and regulatory risk.*'<sup>210</sup> The enumeration covered by Section C of Annex I to Directive 2004/39/EC includes in the notion of financial instruments:

'(1) *transferable securities*; [...]

(6) *options, futures, swaps, and any other derivative contract relating to commodities that can be physically settled provided that they are traded on a regulated market and/or an [multilateral trading facility] MTF*; [...]

(10) *Options, futures, swaps, forward rate agreements and any other derivative contracts relating to climatic variables, freight rates, emission allowances or inflation rates or other official economic statistics that must be settled in cash or may be settled in cash at the option of one of the parties (otherwise than by reason of a default or other termination event), as well as any other derivative contracts relating to assets, rights, obligations, indices and measures not otherwise mentioned in this Section, which have the characteristics of other derivative financial instruments, having regard to whether, inter alia, they are traded on a regulated market or an MTF, are cleared and settled through recognised clearing houses or are subject to regular margin calls.*'

It appears from this list, from which only the most relevant points are quoted, that TGCs could at best be qualified as transferable securities – dependent on national classification – and that the qualification as derivatives could apply to TGCs contracts in particular circumstances.

The notion of transferable securities is detailed in Article 4.1(18) of Directive 2004/39/EC, which is an open ended list.<sup>211</sup> Besides this framework definition, surveys conducted by the Commission show that the definition of securities is not yet equivalent in all Member States, which has motivated the Commission to launch an additional process of harmonisation of securities legislation.<sup>212</sup> Indeed, the notion of securities is not precisely

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2000/12/EC of the European Parliament and of the Council and repealing Council Directive 93/22/EEC (OJ L 145 of 30.04.2004, p. 1), as amended.

<sup>209</sup> Article 4.1 (17), Directive 2004/39/EC provides that financial instruments are '*those instruments specified in Section C of Annex I.*'

<sup>210</sup> N. Moloney, *EC Securities Regulation*, 2<sup>nd</sup> edition (Oxford University Press, 2008), p. 404 and footnote 106. As a matter of example, Article 1.3 of Directive 2003/6/EC, the so-called MAD Directive, provides a definition of financial instruments, which is slightly different than the one in Directive 2004/39/EC. (Directive 2003/6/EC of the European Parliament and of the Council of 28 January 2003 on insider dealing and market manipulation (market abuse), OJ L 96 of 12.04.2003, p. 16, as amended.)

<sup>211</sup> Article 4.1 (18), Directive 2004/39/EC defines '*transferable securities*' as: '*those classes of securities which are negotiable on the capital market, with the exception of instruments of payment, such as:*

- (a) *shares in companies and other securities equivalent to shares in companies, partnerships or other entities, and depositary receipts in respect of shares;*
- (b) *bonds or other forms of securitised debt, including depositary receipts in respect of such securities;*
- (c) *any other securities giving the right to acquire or sell any such transferable securities or giving rise to a cash settlement determined by reference to transferable securities, currencies, interest rates or yields, commodities or other indices or measures.*'

The definition builds on the previous definition of transferable securities contained in repealed Directive 93/22/EEC, Article 1.4.

<sup>212</sup> *Questionnaire – Horizontal answers*, Legal Certainty Group, EU Clearing and Settlement, European Commission, Internal Market and Services DG, Financial services policy and financial markets, MARKT/G2/MNCT D(2005), April 2006. See the Commission's website dedicated to the 'Harmonisation of Securities Law' at <[http://ec.europa.eu/internal\\_market/financial-markets/securities-law/index\\_en.htm](http://ec.europa.eu/internal_market/financial-markets/securities-law/index_en.htm)>.

defined in the directive, but is associated to other securities like bonds or shares in companies. This entails that TGCs may be qualified as financial instruments in certain national legislations but not in others, as pointed out above. The full implementation of Directive 2004/39/EC will contribute to the further harmonisation of the definition of financial instruments such securities at EU level under the framework definition, but Member States keep a relatively large room of appreciation for the qualification of a new legal object like the TGCs. Consequently, it makes it difficult to identify criteria for defining securities under EU law and apply them to TGCs except by reference to national legislations or by association to other securities. Simultaneously, the meaning given to transferable securities in the directive does not fit exactly with the nature of the certificates. However, when TGCs are defined in national legislation as securities such as titles or bearer bonds (like in Italy), and if they are transferable and negotiable on the capital market and fungible within the same class of security,<sup>213</sup> it seems reasonable to conclude that they would qualify as securities in the sense of the MiFID Directive. At least, they would be subject to the national legislation implementing the MiFID Directive.

When traded on spot markets, contracts on TGCs will be qualified as spot contracts and thus fall outside the scope of financial instruments. Under this practice, they usually require physical delivery of the certificates. TGCs in themselves would not qualify under the notion of commodity derivatives listed in Section C of the Annex.<sup>214</sup>

Meanwhile, derivative contracts such as forward contracts, futures contracts, swaps and options can be developed on TGCs. This already occurs in the United States, and similar trading has been recorded in the UK in relation to ROCs. If derivatives on TGCs qualify as financial instruments, and under the conditions set by the MiFID and MAD directives, the trading regime of the two directives would apply.

One can note an evolution in the recognition of derivatives on new types of commodities such as TGCs or emissions allowances.<sup>215</sup> The starting point is that derivative contracts can only be developed on commodities, the definition of which is strictly given in secondary EU law. Pursuant to Regulation (EC) No. 1287/2006, commodity means ‘*any goods of a fungible nature that are capable of being delivered, including metals and their ores and alloys, agricultural products, and energy such as electricity.*’ Such definition does not seem to allow the qualification of TGCs as commodities, unless they are defined as goods under the conditions previously reviewed. Again, the requirement for the good to be of tangible nature is a strict criterion.<sup>216</sup> Regulation (EC) No. 1287/2006 makes clear that a derivative contract must relate to a commodity or ‘*other factors*’ in order to serve as

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<sup>213</sup> Article 35.1, Commission Regulation (EC) No. 1287/2006 of 10 August 2006 implementing Directive 2004/39/EC of the European Parliament and of the Council as regards record-keeping obligations for investment firms, transaction reporting, market transparency, admission of financial instruments to trading, and defined terms for the purposes of that Directive, OJ L 241 of 02.09.2006, p. 1.

<sup>214</sup> For an analysis of the definition of commodity derivatives, including in the context of electricity markets, see O.-H. Berg Wasenden, *EU Market Abuse Regulation in Energy Markets*, (Cappelen Akademisk Forlag, 2008), p. 28 *et seq.*

<sup>215</sup> Those are often termed ‘exotic commodities.’

<sup>216</sup> See Recital 26, Commission Regulation (EC) No. 1287/2006: ‘*The concept of commodity should not include services or other items that are not goods, such as currencies or rights in real estate, or that are entirely intangible.*’

the basis of a derivative contract, where the term ‘factor’ relates to a production process.<sup>217</sup>

However, there has been an evolution in the application of the provisions on derivatives in order to adapt to new types of commodities. A first indicator of this is given by the wording of Section C(10) of Annex I to Directive 2004/39/EC, which includes, in the scope of financial instruments for the purpose of the directive, derivative contracts relating to ‘climatic variables’, ‘emission allowances’, or ‘any other derivative contracts relating to assets, rights, obligations, indices and measures not otherwise mentioned this Section.’ The Commission has detailed the content of this open list in Article 39 of Commission Regulation (EC) No. 1287/2006, which states that:

*‘In addition to derivative contracts of a kind referred to in Section C(10) of Annex I to Directive 2004/39/EC, a derivative contract relating to any of the following shall fall within that Section if it meets the criteria set out in that Section and in Article 38(3):*

*[...]*

*(d) an allowance, credit, permit, right or similar asset which is directly linked to the supply, distribution or consumption of energy derived from renewable resources;*

*(e) a geological, environmental or other physical variable;*

*(f) any other asset or right of a fungible nature, other than a right to receive a service, that is capable of being transferred;’*

Paragraph (d) is particularly applicable in the context of TGCs as it can be clearly interpreted as including them. While TGCs and RES-E are two different commodities for the purpose of the financial markets, TGCs are derived from RES-E generation, distribution and supply. Paragraphs (e) and (f) could also be applied. Based on this provision of the regulation, derivative contracts on TGCs will qualify as financial instruments to the extent the contracts meet the requirements set out in Commission Regulation (EC) No. 1287/2006, Article 38.3.

### **4.3 Legal definition of TGCs under a joint market: the necessary harmonisation**

Article 11 of Directive 2009/28/EC opens for the partial or total coordination of the national support scheme of the Member States that agree to it.<sup>218</sup> The coordination of two national TGCs schemes can result, as in the case of Norway and Sweden, in a joint market, where Norwegian certificates and Swedish certificates will be exchanged between the two national registries.<sup>219</sup> For the certificates to be inter-exchangeable, they must be fungible. It is therefore preferable that a joint TGCs market, in order to be liquid enough, is based

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<sup>217</sup> See Recital 25, Commission Regulation (EC) No. 1287/2006: ‘A derivative contract should be understood as relating to a commodity or to another factor where there is a direct link between that contract and the relevant underlying commodity or factor. [...]’ The French translation of ‘factor’ is ‘facteur de production’ which entails a production or generation process with which TGCs are difficult to associate.

<sup>218</sup> It is remembered that Norway, which is not a Member State of the EU, is nevertheless not treated as a third party under Directive 2009/28/EC, due to the forthcoming integration of the directive into the EEA Agreement.

<sup>219</sup> See on that point of agreement: *Overenskomst om prinsipper for videre utvikling av et felles marked for elsertifikater*, Arlanda, 7 September 2009, annexed to the press release from the Norwegian Ministry of Petroleum and Energy, *Enige om prinsippene for et felles elsertifikatmarked*, Nr. 102/09.

on a harmonised definition for TGCs. Having a similar legal definition will indeed facilitate trading, aligning regimes such as taxation (whether the certificates are or are not liable to value-added tax, VAT)<sup>220</sup> or the rules applicable to the trading market (*e.g.*, general regime of competition law versus specific rules applicable to trade in securities or derivatives, like transparency or market abuse). The discussion on the harmonisation or at least agreement on the legal nature of TGCs is consequently expected to take place first at Member-States level at the same time than the establishment of a joint TGCs market. As trade develops, it may be necessary to further clarify the issue under EU law.

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<sup>220</sup> It is here expected that commercial operations on TGCs at national level are subject to VAT, but not when trade occurs between Member States. In the latter case, VAT would not be added to the sale of certificates to purchaser in another Member State, except if the purchaser is not taxable in its own country. The place of residence and condition of the purchaser are consequently decisive, such as the nature of the operation. Sale and purchase of TGCs will be considered as services. In the perspective of a common green certificates market between two or more Member States, some authors have already called upon a harmonised treatment of certificates under VAT rules. See for example, G. Goulard and M. Rodrigues, 'EU needs VAT policy on green certificates,' Comment, *International Tax Review* (19), November 2008, p. 10.



## **Part II - On the harmonisation of TGCs schemes under EU law**





## 5 Lack of EU harmonisation of green certificates schemes

The European Commission likes to stress that the ‘27 Member States operate 27 different national support schemes.’<sup>221</sup> This very fact reflects the diversity of the support schemes operated within the EU and the absence of harmonisation. Beyond the observation already made in section 2.1 that different national support schemes are available and even co-exist at national level, this chapter assesses the legal reasons for the lack of harmonisation of green certificates schemes at EU level.

Indeed, a key issue since the adoption of the first Commission communication on EU RES policy has been whether it is necessary to harmonise support schemes. The adoption of Directive 2009/28/EC revived the debate although the same conclusion was reached: no harmonisation for the time being. This contrasts with the strong political statements regarding the Union-wide development of energy from renewable sources.<sup>222</sup> This offers an example of the intrinsic difficulty of balancing the powers and interests that are inherent to the Union’s relationship with its Member States.

Although harmonisation of RES-E support schemes has long been proposed, it has never been adopted (5.1). This lack of harmonisation must be assessed against the background of the competences of the Union in RES policy. Whether the Union has competence to harmonise and whether harmonisation at EU level is the best course of action are the first questions to ask. The analysis of the possible legal basis for an EU harmonisation of RES-E support policies provides an opportunity to identify the legal grounds on which the EU one day may propose a common TGCs scheme (5.2). As long as no harmonisation exists, EU institutions and EU law argue strongly in favour of and promote cooperation in renewable energy support mechanisms (5.3).

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<sup>221</sup> This formulation can be found in several documents from the Commission, e.g.: *The support of electricity from renewable energy sources*, Commission Staff Working Document, accompanying document to the proposal for a directive of the European Parliament and of the Council on the promotion of the use of energy from renewable sources, SEC(2008) 57, 23.01.2008, p.4; *The Renewable Energy Progress Report*, SEC(2009) 503 final, 24.04.2009, p. 5.

<sup>222</sup> See conclusion of the European Council of March 2007, where the European Council reaffirmed ‘the Community’s long-term commitment to the EU-wide development of renewable energies beyond 2010,’ and endorsed a mandatory target of 20 per cent share of renewable energy in overall European energy consumption by 2020. European Council, Presidency conclusion, 8-9 March 2007, Annex I ‘European Council Action Plan (2007-2009) – Energy Policy for Europe (EPE),’ point 7.

## 5.1 Harmonisation of RES-E support schemes: long proposed, never adopted

### 5.1.1 Long proposed

The European Commission, which has a monopoly to initiate legislation,<sup>223</sup> has several times called for the harmonisation of support schemes at EU level. While the political environment has never been very positive towards harmonisation, especially at Member State level, the Commission and other EU institutions continue to envisage and propose harmonisation as a long-term goal.<sup>224</sup>

The adoption of a European wide green certificates scheme was already envisaged by the European Commission in the mid-1990s. In 1996, the Commission explicitly mentioned the adoption of an EU-wide system of renewable energy credits.<sup>225</sup> Interestingly, many – not to say all – of the elements of the RES-E support debate could already be identified at that time and few new arguments have been put forward since. In 1999, the Commission presented the different ‘*possible contents of a Community proposal*’ that involved a quota-based scheme as one of three options.<sup>226</sup> Green certificates were explicitly mentioned as possible compliance instruments under such a scheme.

This first round of discussion resulted in the formulation contained in Directive 2001/77/EC that, while not harmonising support schemes at EU level, mentioned harmonisation from a long-term perspective.<sup>227</sup> The directive aimed to increase the share

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<sup>223</sup> Article 17.2 TEU. While the Commission has a monopoly on initiating legislation (except in some few fields), other parties can request the Commission to draft legislative proposals (the Council, the European Parliament, the European citizens’ initiative).

<sup>224</sup> It should be noted that organisations promoting RES industry interests as well as environmental organisations have not either been in favour of harmonisation of support schemes.

<sup>225</sup> *Energy for the Future: Renewable Sources of Energy. Green Paper for a Community Strategy*, COM(1996) 576, 20.11.1996, pp. 34-35:

*‘Consideration could be given to the idea that a certain percentage of a Member State’s electricity requirements will have to be met by renewables, enforced on each individual retail electric supplier, with individual obligations tradeable through a system of “renewable energy credits”. Such a system, which to a large extent would resemble the system proposed for tradeable CO2 permits, could serve a two-fold purpose if introduced at an EU-wide scale. Firstly it would promote renewables and secondly it would prevent market distortions arising from similar measures introduced by individual Member States. A renewable energy credit system could, if appropriate, and if judged compatible with current and future EU wide electricity taxation schemes, be coupled with an electricity surcharge mechanism similar to the UK non-fossil fuels obligation. There are, however, a number of unresolved issues which will have to be further clarified if such a system was to be introduced at EU level. These concern, in particular, the practical and administrative aspects and the questions related to sanctions to be imposed in case of non-compliance with the obligations.*

*If workable solutions to these matters can be found, a flexible market based implementation of a renewable energy credit system could play an important role in ensuring the achievement of policy goals related to renewables at least cost.’*

<sup>226</sup> *Electricity from renewable energy sources and the internal electricity market*, Commission Working Document, SEC(1999) 470 final, 13.04.1999, p. 26.

<sup>227</sup> Recital 14 refers to the necessity of ensuring the proper functioning of national schemes ‘*until a Community framework is put into operation.*’ Recital (15) makes it clear that ‘*It is too early to decide on a Community-wide framework regarding support schemes.*’ However, Article 4 and Recital (16) require the Commission to ‘*monitor the situation*’ and ‘*evaluate the application*’ of national support

of RES in electricity production in the internal market for electricity ‘*and to create a basis for a future Community framework thereof.*’<sup>228</sup> That framework was not to be limited to support schemes, but could have included them. Indeed, Article 4.2 of the directive enumerated some requirements for the establishment of an EU-wide scheme.<sup>229</sup>

Complying with the reporting obligations established in Directive 2001/77/EC, the Commission took as a separate issue the question of ‘co-existence or harmonisation’ in its 2005 report, but mostly restricted itself to a list of pros and cons ‘*for the medium to longer term development.*’<sup>230</sup> In its 2006 *Report on progress in renewable electricity*, the Commission affirmed that: ‘*Optimisation of the support schemes as defined in COM(2005)627 must occur. The Commission will re-examine, in 2007, the situation concerning Member States’ support systems for renewable energies with a view to assessing their performance and the need to propose harmonised support schemes for renewable[s] in the context of the EU internal electricity market. While national schemes may still be needed for a transitional period until the internal market is fully operational, harmonised support schemes should be the long term objective.*’<sup>231</sup> An identical formulation was to be found in the 2007 Renewable Energy Roadmap.<sup>232</sup> Later, in its 2008 report on the support of RES-E, the Commission wrote that harmonisation of support schemes remained ‘*a long term goal*’, which it justified notably for reasons concerning economic efficiency, the single market and state aid.<sup>233</sup> The European Parliament took an identical position in its 2007 Resolution on the Road Map for Renewable Energy in Europe.<sup>234</sup> As a result, the proposal for a directive on the promotion of the use of energy from renewable sources did not suggest the harmonisation of support schemes.<sup>235</sup> While

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schemes, ‘*present a report*’ by 27 October 2005, and ‘*if necessary... make a proposal for a Community framework with regard to support schemes for electricity produced from renewable energy sources.*’

<sup>228</sup> Article 1, Directive 2001/77/EC.

<sup>229</sup> See also Recital (16) of Directive 2001/77/EC: ‘*That proposal should contribute to the achievement of the national indicative targets, be compatible with the principles of the internal electricity market and take into account the characteristics of the different technologies and geographical differences. It should also promote the use of renewable energy sources in an effective way, and be simple and at the same time as efficient as possible, particularly in terms of cost, and include sufficient transitional periods of at least seven years, maintain investors’ confidence and avoid stranded costs. This framework would enable electricity from renewable energy sources to compete with electricity produced from non-renewable energy sources and limit the cost to the consumer, while, in the medium term, reduce the need for public support.*’

<sup>230</sup> *The support of electricity from renewable energy sources*, Communication from the Commission, COM(2005)627 final, 07.12.2005, para. 4.

<sup>231</sup> *Green Paper follow-up action – Report on progress in renewable electricity*, Communication from the Commission to the Council and the European Parliament, COM(2006)849, 10.01.2007, p. 19.

<sup>232</sup> *Renewable Energy Road Map – Renewable energies in the 21<sup>st</sup> century: building a more sustainable future*, Communication from the Commission to the Council and the European Parliament, COM(2006) 848 final, 10.01.2007, p. 12.

<sup>233</sup> *The support of electricity from renewable energy sources*, Commission Staff Working Document, accompanying document to the proposal for a directive of the European Parliament and of the Council on the promotion of the use of energy from renewable sources, SEC(2008) 57, 23.01.2008, p. 17.

<sup>234</sup> ‘*The European Parliament ... believes that an effective and efficient harmonised support scheme drawing on best practices in the Member States should be the long-term objective in Europe in order to ensure the most efficient use of renewable energy technologies.*’ European Parliament resolution of 25 September 2007 on the Road Map for Renewable Energy in Europe, Doc. P6\_TA(2007)0406, OJ C 219 E, 28.08.2008, p. 82, para. 27.

<sup>235</sup> Proposal for a Directive of the European Parliament and of the Council on the promotion of the use of energy from renewable sources, COM(2008) 19 final, 23.01.2008.

the Commission decided against proposing harmonisation of RES-E support schemes in its legislative proposal, and the legislators did not include any express reference to harmonisation in the directive, the European Parliament expressed the view during the co-decision procedure that harmonisation of support schemes should be carried out *‘as soon as possible.’*<sup>236</sup>

In 2010, the EP Rapporteur on the Commission’s Communication *Towards a new Energy Strategy for Europe 2011-2020* elaborated on the necessity to *‘make support of renewables more cost-effective.’* Notably she wrote that:

*‘Some national financial support schemes are considerably larger than the whole EU effort. One way, however, to give renewable energy more support would be to link these larger national funds in a pan-European scheme. To this end, the new Energy Strategy should consider returning to the Commission’s original proposal for a pan-European system of trade in renewable energy or in guarantees of origin. This would build up economies of scale across Europe, and move investment to where it would produce the best return. In the midterm, Europe could also work towards regional renewables markets on the way to the pan-European renewable market.’*<sup>237</sup>

Where reference was made to harmonisation by the European Commission, by the Parliament or in the final text of the two successive directives, this mainly related to a decision in favour of one single support scheme. It has not been envisaged to harmonise the regulatory design of the different schemes, but on the reverse to foresee one European scheme that could achieve European objectives. For example, the Commission envisaged in its communication the possibility of harmonisation through the adoption of a green certificates scheme. At the opposite extreme, in 1999 certain MEPs requested a ‘European feed-in directive’.<sup>238</sup> Here, the different positions defended by the institutions reflect the differences in the interests the institutions represent: the interests of the EU as a whole (the Commission) or the diverse interests of EU citizens’ (MEPs). Finally, the Council never seems to have pronounced itself in favour of the harmonisation of RES-E support schemes since, instead defending the right of Member States to retain control over their national schemes.

Several arguments have been advanced by the Commission, the Parliament and in the literature to justify harmonisation. Of these the three main arguments relate to positive effects on the internal electricity market, positive effects on the investment environment and the efficiency of the scheme itself.

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<sup>236</sup> Amendment 19, concerning a new Recital 21b, first reading, European Parliament:

*‘(21b) In order to create a level playing field for companies active in the EU, the Commission shall seek to harmonise as soon as possible the existing different national support schemes for the use of renewable energy. This will have to keep pace with the process of full liberalization of the electricity market in the EU.’* Report on the proposal for a European Parliament and Council directive on the promotion of electricity from renewable energy sources in the internal electricity market, from the Committee on Industry, External Trade, Research and Energy, Rapporteur: Mechthild Rothe, A5-0320/2000, 30 October 2000.

<sup>237</sup> *Report on Towards a new Energy Strategy for Europe 2011-2020*, Committee on Industry, Research and Energy, European Parliament, by Rapporteur Lena Kolarska-Bobińska, Doc. A7-0313/2010, 8.11.2010, p. 22. Emphasis added.

<sup>238</sup> Parliamentary question from MEP Breyer to the Commission, 6 October 1999, European Parliament, Strasbourg. See of the same idea of a European feed-in directive article by H. Scheer, ‘EU Feed-in Directive versus Introduction Ratios,’ *ZNER* 2/1998.

First, harmonisation of support schemes may have positive effects on the internal electricity market. As renewable electricity markets develop, divergences in support schemes are likely to distort competition and affect trade between Member States.<sup>239</sup> At a time when both the market for RES technologies and the share of renewable electricity in the gross final consumption of energy are still of relatively low significance, the risk of distortion is fairly limited. However, the growing market for renewable energy, supported by mandatory targets and favourable policies, will rapidly increase the market share of undertakings active in the RES sector and allow them to compete with those using conventional energy sources. Any distortion of competition resulting from divergent national support schemes affect the rest of the internal electricity market. This criterion of distortion of competition is decisive for assessing whether a measure is affecting trade to an ‘appreciable extent’.<sup>240</sup>

Harmonisation may avoid the negative effects of competition between national schemes that provide for different levels of support. For example, national TGCs schemes provide for different certificate prices. The most lucrative support schemes for RES-E technologies may attract most investment, including investments from foreign investors who may be tempted to shop around for the most attractive scheme.<sup>241</sup> Of course, an attractive scheme represents an advantage for a Member State, as long as there is no overcompensation. Such a Member State will see its RES industry develop quickly, accompanied by other economic and social benefits, and may anticipate easier compliance with national and EU mandatory targets. At the opposite extreme, countries offering lower levels of support will attract less investment. Harmonisation has been advanced as a way of avoiding these distortive effects on the internal electricity market ‘*at least for the same technologies.*’ According to Egenhofer and Jansen: ‘*There may be no need to have [a] uniform system across the EU for all technologies. But the same technologies should fall under a support mechanism to be agreed upon by all member states.*’<sup>242</sup> A common support scheme for offshore wind has already been put forward but remains a hypothetical concept. Concrete initiatives on support policies in favour of particular technologies, such as offshore wind or solar energy, have so far focused on the coordination of support schemes rather than harmonisation. Although the harmonisation of support schemes is being envisaged in Europe, this is only at regional level, as exemplified by the announcement of a common TGCs market between Norway and Sweden.

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<sup>239</sup> L. Hancher, ‘Trade-Neutral Policies for the Promotion of Electricity from Renewables,’ in J. Bielecki and M. Geboye Desta (eds.), *Electricity Trade in Europe – Review of the Economic and Regulatory Challenges* (Kluwer Law International, 2004), p. 288. As similar statement can be found in the Commission Staff Working Document ‘The support of electricity from renewable energy sources,’ accompanying document to the proposal for a directive of the European Parliament and of the Council on the promotion of the use of energy from renewable sources, SEC(2008) 57, 23.01.2008, p. 4.

<sup>240</sup> As to the criterion of ‘an appreciable effect on trade,’ see the early decision in Case 5/69 *Völk v Vervæcke* [1969] ECR 295 where the Court took into account the ‘*weak position which the persons concerned have on the market of the product in question.*’

<sup>241</sup> C. Egenhofer and J. C. Jansen, ‘A timetable for harmonisation of support schemes for renewable electricity in the EU,’ *European Review of Energy Markets*, Vol. 1, issue 2, April 2006, p. 21.

<sup>242</sup> C. Egenhofer and J. C. Jansen, ‘A timetable for harmonisation of support schemes for renewable electricity in the EU,’ *European Review of Energy Markets*, Vol. 1, issue 2, April 2006, para. 4.2.

The 2007 Renewable Energy Roadmap explained the failure to reach the indicative target of a 12 per cent share of renewable energy in gross inland consumption in 2010<sup>243</sup> partly through the unequal efforts made by Member States to secure the necessary investments and adopt the necessary policies.<sup>244</sup> For investors assessing an investment environment, the nature, intensity and stability of the support scheme will be decisive.<sup>245</sup> On a European scale, the different regulatory conditions encountered by a RES-E project developer may discourage it from investing in other European countries, and consequently will slow down efforts to secure EU-wide investment in renewables. Harmonising support schemes at European level may thus facilitate cross-border investments and foster the growth and competitiveness of the sector as a whole. From the point of view of the Member States, compliance costs with EU targets may also be notably reduced.<sup>246</sup> From the point of view of undertakings, new investment opportunities may appear. The Commission views all these factors as making a direct contribution towards the establishment of ‘*a flourishing and more competitive renewable electricity industry.*’<sup>247</sup> The Commission itself is insistent on the benefits that harmonisation may have for the investment environment: ‘*The reduction in the number of different support schemes could generate substantial economies of scale, simplify the regulatory environment and increase transparency for investors, and hence allow a more cost-effective achievement of the renewable targets.*’<sup>248</sup> Here, harmonisation in favour of one (European) or some few (regional) support schemes could both have positive effects.

Finally, a harmonised green certificates scheme will be more cost-efficient if it has a broader scope. There is little sense in establishing a green certificates scheme that applies only to a limited market and accordingly lacks liquidity. The size of the TGCs market is here of tremendous importance.<sup>249</sup> Any support instrument will have better results if it is

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<sup>243</sup> *Energy for the Future – Renewable Sources of Energy. White paper for a Community Strategy and Action Plan*, COM(97) 599.

<sup>244</sup> *Renewable Energy Road Map – Renewable energies in the 21<sup>st</sup> century: building a more sustainable future*, COM(2006)848 final, 10.01.2007. The electricity sector performed better in respect of its target of a 21 per cent integration of renewable energy sources in consumption by 2010 than the energy sector as a whole. Nevertheless, work still remains to be done according to the Commission.

<sup>245</sup> In its evaluation of the risks determining the level of investment in RES projects, the OPTRES Report ranks a financial change of the support system as the primary risk factor: ‘*A financial change of the support system is considered the most important risk factor. One explanation is that the level of support is the most important element influencing the expected profit from an investment in renewable energy. A number of markets have undergone financial change in the past and experienced drastic consequences in RES development as a result, e.g. Denmark.*’ (p. 178). See also Figure 91 ‘Ranking of risk categories concerning renewable electricity investments’, p. 177.

<sup>246</sup> The Commission affirms in that sense that ‘*A number of studies suggest that the overall cost of complying with the RES-E target share in 2010 could be substantially lower with harmonisation of green certificate or feed-in systems than with the continuation of the present different national policies.*’ See *The support of electricity from renewable energy sources*, Communication from the Commission, COM(2005)627 final, 07.12.2005, p. 11.

<sup>247</sup> *The support of electricity from renewable energy sources*, Communication from the Commission, COM(2005)627 final, 07.12.2005, p. 11.

<sup>248</sup> *The support of electricity from renewable energy sources*, Commission Staff Working Document, accompanying document to the proposal for a directive of the European Parliament and of the Council on the promotion of the use of energy from renewable sources, SEC(2008) 57, 23.01.2008, p. 15.

<sup>249</sup> On that point, see Chapter 8 on the impacts of the regulation of the electricity market on the size of the TGCs market.

used on a larger scale. This is one of the arguments that motivated the proposal for a common green certificates market between Norway and Sweden (although of course this market will be regional, rather than European). As observed by the Commission itself, '[a] *Europe-wide green certificate scheme is likely to lead to a bigger and thus more liquid certificates market, which would result in more stable green certificate prices compared to smaller (national) markets.*' The Commission immediately countered this argument by referring to the administrative costs of a Europe-wide scheme.<sup>250</sup> While this is true, similar risks did not prevent the EU from adopting a Europe-wide emissions trading scheme that raised similar issues in terms of administrative costs.

In 2005, in the light of the revision of Directive 2001/77/EC, some authors suggested a timeframe for EU harmonisation of support schemes.<sup>251</sup> The proposed timeframe extended through three periods: before 2008, before 2010 and after 2015, at which point the necessary link would have been established with the various regulatory measures (apart from support schemes) aimed at supporting RES-E generation and deployment, namely grid integration and authorisation procedures. While this timeframe has proved somewhat optimistic as regards these last two areas, much legislation has been adopted, including Directive 2009/72/EC and Directive 2009/28/EC, which contain several provisions harmonising the conditions for grid connections and access. Similarly, many initiatives are being conducted at the level of regulators and TSOs. While these measures may not be as easily quantifiable as a green certificate or a feed-in tariff, they do also directly support RES-E generation. As far as support schemes are concerned, the report recommended harmonisation by 2010, following a seven-year transition period with full harmonisation by 2014 at the earliest and 2016 at the latest. European legislative initiatives have not gone so far however, and harmonisation decisions have never been adopted.

### 5.1.2 Never adopted

Despite identifying the positive effects of harmonisation, none of the Commission's assessments concluded in favour of it. As a result, and because of the lack of political consensus, neither Directive 2001/77/EC nor Directive 2009/28/EC provides for the harmonisation of RES-E support schemes.

The various assessments conducted by the Commission services have consistently concluded in favour of maintaining national support schemes and never in favour of harmonisation. In its 2005 report, the European Commission considered that '*a common and harmonised policy framework within the EU [is] premature.*'<sup>252</sup> Similarly, in a 2008

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<sup>250</sup> Namely, '*... the administrative costs of such a system would need to be assessed against the administrative costs of the current situation.*' 'The support of electricity from renewable energy sources,' Communication from the Commission, COM(2005)627 final, 07.12.2005, p. 11.

<sup>251</sup> J. Jansen, K. Gialoglou, C. Egenhofer, *Market Stimulation of Renewable Electricity in the EU – What Degree of Harmonisation of Support Mechanisms is Required?*, Table 6.1 'Timeframe for action' that schedules progressive harmonisation measures 'before 2008', 'before 2011' and 'after 2015', p. 46.

<sup>252</sup> *The support of electricity from renewable energy sources*, Communication from the Commission, COM(2005)627 final, 07.12.2005, p. 16.

Communication, the Commission concluded that harmonisation of support schemes was still ‘*not appropriate in the short-term.*’<sup>253</sup>

The text of the proposed Renewables Directive adopted by the Commission makes it clear that harmonisation is not possible in the short term, but that it remains a long-term objective. The argumentation put forward by the Commission is worth a quoting in full:

*‘With regard to support schemes for RES-E currently operated in Member States the Commission has concluded that insufficient evidence exists to provide, at this stage, for the introduction of a harmonised Community wide support scheme setting the price for RES-E through community-wide competition between RES-E generators, in particular with regard to direct price support being the most important form of support in practice. Nevertheless, the Commission believes that this should remain the objective since its achievement is likely, in the medium term, to reduce prices of RES-E and increase the penetration of RES-E in the internal market. Furthermore, in view of creating a proper level playing field within the internal electricity market, it is necessary for the Commission, without prejudice to its duties under Article 88(1) of the EC Treaty, to evaluate support schemes to all sources of electricity. Therefore, the draft Directive puts an obligation on the Commission to monitor the application of support schemes in favour of generators of electricity from renewable as well as conventional energy sources in Member States and, no later than five years after the entry into force of this Directive, to present a report on the experience gained in this respect. If necessary in the light of the conclusions of this report, the Commission will make a proposal for a Community framework with regard to support schemes for electricity from renewable energy sources based on principles defined already in this Directive.’*<sup>254</sup>

Meanwhile, and as mentioned in the previous section, there are very few signs in favour of a possible harmonisation of RES-E support schemes in the final text of Directive 2009/28/EC, even in a long-term perspective. The directive can thus be interpreted as taking a more protective approach towards the control exercised by Member States over national support schemes. For example, as regards the reporting obligations defined in Article 23.8 concerning the implementation of the directive, even the follow-up proposals for legislative measures made by the Commission ‘*shall neither affect the 20 % target nor Member States’ control over national support schemes and cooperation measures.*’<sup>255</sup> The reference to the possible harmonisation of support schemes, in a long-term perspective, has consequently disappeared from the legislative framework for RES-E when compared to Directive 2001/77/EC. This must be seen as the counterpart of the increased level of

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<sup>253</sup> *The support of electricity from renewable energy sources*, Commission Staff Working Document, accompanying document to the proposal for a directive of the European Parliament and of the Council on the promotion of the use of energy from renewable sources, SEC(2008) 57, 23.01.2008, p. 17.

<sup>254</sup> Proposal for a Directive of the European Parliament and of the Council on the promotion of electricity from renewable energy sources in the internal electricity market, COM(2000) 279 final, Brussels, 10.5.2000, p. 2. Emphasis added.

<sup>255</sup> Article 23.8 of Directive 2009/28/EC provides that the Commission shall present a report by 31 December 2014 in which it must inter alia evaluate ‘*the implementation of this Directive, in particular with regard to cooperation mechanisms, in order to ensure that, together with the possibility for the Member States to continue to use national support schemes referred to in Article 3(3), those mechanisms enable Member States to achieve the national targets defined in Annex I on the best cost-benefit basis, of technological developments, and the conclusions to be drawn to achieve the target of 20 % of energy from renewable sources at Community level.*’ Based on this report, the Commission ‘*shall submit, if appropriate, proposals to the European Parliament and the Council, addressing ... in particular ... appropriate adjustments of the cooperation measures provided for in this Directive in order to improve their effectiveness for achieving the target of 20 %. Such proposals shall neither affect the 20 % target nor Member States’ control over national support schemes and cooperation measures.*’ Emphasis added.



harmonisation of cooperation mechanisms provided for in Directive 2009/28/EC and analysed below in section 5.3.

Several arguments have been advanced against harmonisation, of which the most significant cite: the need for more time to gain experience of operating the schemes; the possible negative effects on the investment environment; the lack of pre-conditions for harmonisation; and the possible shortcomings of a harmonised scheme in terms of national natural resources and scheme design.

First, the Commission considers EU-wide harmonisation to be ‘premature’ because more time is required to gain experience of operating the schemes. During the co-decision procedure for the adoption of Directive 2001/77/EC, both the Commission and the European Parliament<sup>256</sup> came rapidly to the conclusion that more experience was required of the implementation of the different support schemes. Seven years later, in its 2008 Review, the Commission concluded that it was impossible to ‘*pick a winner.*’ Referring more precisely to feed-in tariffs and TGCs, the two most common support schemes in Europe, the Commission noted that ‘*both kinds of instruments have the same economic efficiency and can be designed in conformity with the rules on the internal market for electricity, the free movement of goods and EC state aid rules.*’<sup>257</sup> Ten years after the entry into force of Directive 2001/77/EC, the schemes have evolved and integrated the requirements of EU law. Even so, the European legislator is still unable to decide which scheme is best. Or, more precisely, the EU cannot agree which scheme is best suited to achieve EU objectives. As the EP Rapporteur put it in 2001: ‘*We cannot afford to conduct Europe-wide experiments; rather we must first compare and then decide at leisure which model we want.*’<sup>258</sup> Such hesitation can be interpreted in different ways: as a result of the failure of RES-E support policies, illustrated by the failure to reach indicative national targets; as a consequence of divergent national circumstances and different levels of development of RES-E technologies that require national solutions, and render inadequate an EU-wide scheme; or as reflecting a lack of political will. The true answer is probably a combination of these reasons, in addition to the issue of the competence of the EU to carry out harmonisation. The legality of the harmonisation of RES-E support schemes is examined in the next section. An obvious counter-argument to the approach adopted above is that the longer the EU waits, the more difficult it may be to harmonise. While it may have been too early to harmonise in 2001 and 2009, one day it may be too late. Consequently, cooperation becomes the only affordable solution. National support schemes certainly generate more experience concerning their operation over time, but they

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<sup>256</sup> ‘... all support schemes, be they feed-in models or quota systems, are relatively new. There is still little experience of their efficiency and effectiveness. Before we introduce a harmonised support scheme, competition between different systems should indicate which model will be the best for the whole of Europe.’ Recommendation for second reading on the Council common position for adopting a European Parliament and Council directive on the promotion of electricity produced from renewable energy sources in the internal electricity market, by the Committee on Industry, External Trade, Research and Energy, Rapporteur Mechtild Rothe, Doc. A5-0227/2001 final, 22 June 2001, p. 16.

<sup>257</sup> *The support of electricity from renewable energy sources*, Commission Staff Working Document, accompanying document to the proposal for a directive of the European Parliament and of the Council on the promotion of the use of energy from renewable sources, SEC(2008) 57, 23.01.2008, pp. 14-15.

<sup>258</sup> Recommendation for second reading on the Council common position for adopting a European Parliament and Council directive on the promotion of electricity produced from renewable energy sources in the internal electricity market, by the Committee on Industry, External Trade, Research and Energy, Rapporteur Mechtild Rothe, Doc. A5-0227/2001 final, 22 June 2001, p. 16.

also become more complex. For example, the United Kingdom, like other Member States, is constantly refining the regulation of its RES-E policy. On 1 April 2010 it introduced a feed-in tariff scheme for small-scale projects – generators with a maximum generation capacity of up to 5MW, excluding biomass and CHP – while bigger installations may benefit from the Renewables Obligation Certificates (ROCs) scheme that has been operating since 2002.<sup>259</sup> As cheap RES decrease over time, the schemes' complexity is increasing in the same time that it gains maturity.

Arguments concerning the investment environment are raised both for and against harmonisation. The *status quo* is often said to be the best way of preserving investments. The Commission argued in 2005 that the introduction of an EU-wide scheme would necessarily alter investment conditions and '*might potentially disrupt certain markets and make it more difficult for Member States [to meet] their targets.*'<sup>260</sup> The same argument was repeated in the Commission's 2008 review, which stated that '*[t]he introduction of one harmonised system would create a lot of uncertainty and disruption in the market for renewables, as it would abolish well-established national support schemes.*'<sup>261</sup> The Commission added that '*stability is a critical feature of an effective system, in order to facilitate investment. Consequently, "stop-and-go" regimes that run out of budget, as well as policy and rule changes hamper the development of renewable electricity.*' The OPTRES report, which essentially evaluated the effectiveness of the RES support schemes implemented by Member States, also stressed the negative impacts on investment decisions of changes in national support policies.<sup>262</sup> As regards the well-established character of national support schemes, it must be mentioned that numerous national schemes have been recently amended.<sup>263</sup> Spain serves as a good example here with the amendments adopted in 2010 to its FITs scheme, a reform also adopted in relation to the financial crisis.<sup>264</sup> Germany also amended its FITs scheme in 2010, but for very different reasons.<sup>265</sup> Any change in policy requires at least a period of adjustment. Here at least all authors and the EU legislator are in agreement that if harmonisation occurs, it will require a transition period of at least seven years. They also stress that competition between the different schemes could be ultimately beneficial in making the schemes more efficient and making it possible to 'pick a winner.'

A third line of argument has concerned the lack of some pre-conditions for harmonisation. In particular, the lack of completion of the internal electricity market has often been

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<sup>259</sup> Source: Department of Energy & Climate Change (DECC), United Kingdom, website available at <<http://www.decc.gov.uk/>> The UK has introduced new proposals in 2011 for a broader reform of both its electricity market and its RES support policy, as part of the transposition of Directive 2009/72/EC and Directive 2009/28/EC.

<sup>260</sup> *The support of electricity from renewable energy sources*, Communication from the Commission, COM(2005)627 final, 07.12.2005, p. 11.

<sup>261</sup> *The support of electricity from renewable energy sources*, Commission Staff Working Document, accompanying document to the proposal for a directive of the European Parliament and of the Council on the promotion of the use of energy from renewable sources, SEC(2008) 57, 23.01.2008, pp. 14-15.

<sup>262</sup> OPTRES- Assessments and Optimization of Renewable Energies Support Schemes in the European Electricity Market-Final Report (Intelligent Energy Europe, 2007), p. 21.

<sup>263</sup> See section 2.1 of the Introduction.

<sup>264</sup> 'Spain agrees on cutting tariffs for wind, solar power,' Platts, 5 July 2010.

<sup>265</sup> 'Bundestag adopts modification of solar power feed-in tariffs,' Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, Press release No. 63/10, Berlin, 06.05.2010.

advanced as a reason for keeping support schemes under domestic control. Even in 2009, at the time of the adoption of the third energy liberalisation package, the Commission still affirmed: ‘*The support schemes differ partly because [...] national electricity markets still have very different characteristics and remain nationally segmented.*’<sup>266</sup> This argument has been around since the very start of discussions on the EU’s RES policy. The Commission thinks that harmonisation is currently inappropriate for the following reasons: the internal market has not been functioning properly; greater interconnector capacity is needed; and national support to conventional electricity producers continues to distort competition.<sup>267</sup> These elements that borrow to competition policy, infrastructures development and market regulation are considered to be essential pre-conditions for the harmonisation of support schemes at EU level.<sup>268</sup> Here the Commission establishes a link with the lack of integration of the internal electricity markets, accompanied by ‘*physical, administrative and commercial barriers to cross border trade in electricity, which are only slowly being overcome.*’<sup>269</sup> The current process being conducted between Norway and Sweden concerning the establishment of a common TGCs market seems to confirm this approach. In order to establish a common market between the two countries, many aspects of electricity market regulation must be coordinated, if not harmonised, such as grid tariffs and authorisation procedures, in order to ensure a level playing field on both sides of the border. The high degree of integration of the Nordic electricity markets is undoubtedly an additional advantage.

A strong argument against harmonisation cites the varying nature, potential and level of development of renewable energy sources in the different Member States. As recalled in Recital 15 of Directive 2009/28/EC, ‘*The starting point, the renewable energy potential and the energy mix of each Member State vary.*’ No countries have the same mix of renewable energy sources and not all countries have the same opportunities or challenges regarding the development of a transport infrastructure for RES-E. A national support scheme adapted to local conditions may be better suited to an isolated power grid system than to that of a continental Member State.<sup>270</sup> Support for RES-E generation is also closely linked to other national priorities such as regional development and employment. This is demonstrated by the number of notifications of state aids to RES under the guidelines on national regional aid, the Community Framework for State aid for Research and Development and Innovation (R&D&I), as well as under the Community State Aid Guidelines on Environmental Protection. To illustrate its point, the Commission referred in its 2008 Review to the use of small biomass in Austria and Germany or the promotion of bio-waste energy as part of a national waste strategy. It concluded that ‘*harmonisation*

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<sup>266</sup> Commission Staff Working Document, *The Renewable Energy Progress Report*, SEC(2009) 503 final, 24.04.2009, p. 5.

<sup>267</sup> *The support of electricity from renewable energy sources*, Communication from the Commission, COM(2005)627 final, 07.12.2005.

<sup>268</sup> The close relationship between the liberalisation of the electricity market and the reliance on green certificates as support schemes is explored in details in Chapter 8.

<sup>269</sup> *The support of electricity from renewable energy sources*, Commission Staff Working Document, accompanying document to the proposal for a directive of the European Parliament and of the Council on the promotion of the use of energy from renewable sources, SEC(2008) 57, 23.01.2008, p. 4.

<sup>270</sup> As noted by authors: ‘*Some countries with more isolated power systems, such as Britain or Ireland, may well seek to retain their distinctive systems of support for RES-E*’, in M M. Roggenkamp, C. Redgwell, I. Del Guayo, and A. Rønne (eds.), *Energy Law in Europe*, 2<sup>nd</sup> ed. (Oxford University Press, 2007), para. 5.388.

*might oblige Member States to find other ways to promote regional development,*' and was consequently not desirable for the moment.<sup>271</sup>

A fundamental question here concerns the objectives that might be achieved by an EU-wide TGCs scheme. Such a scheme would certainly not be capable of simultaneously ensuring the development of RES-E generation at EU level in a cost-efficient manner and the protection of the different national interests. This is the fundamental question in relation to any proposal for harmonisation. Defining the objective of an EU-wide TGCs scheme is also important for determining whether the measure is proportionate to the goal it is intended to achieve. It is also necessary to determine whether a TGCs scheme is the instrument best-suited to attain the EU objective of increased RES-E generation. In 2009, Buchan observed that *'the Commission's dilemma is that the system (quota obligations) most apt architecturally for the whole EU appears to be less effective in actually increasing green power than the system (feed-in tariffs) less suited to the EU scale.'*<sup>272</sup> Establishing the truth of this statement requires the application of other disciplines than law and is not within the scope of this thesis.

Once the objective of a common TGCs scheme has been identified, the EU legislators can adopt the necessary regulation. Here, law is instrumental. The details of the regulation of an EU-wide TGCs scheme cannot be fixed before the objective of the scheme has been defined. As the EP Rapporteur correctly put it in 2001, *'We cannot afford to conduct Europe-wide experiments.'* An EU-wide TGCs scheme will require the adoption of detailed rules and the establishment of a sophisticated management coordinated between Member States. As the Commission put it in 2005: *'A harmonised green certificate scheme can work only if it results in the correct certificate prices and penalties across the EU and thus the most efficient build-up of RES installations in the various countries. Significant fluctuations in the green certificate price can lead to increased investor uncertainty and reduced build-up of RES.'*<sup>273</sup> The Commission has argued, *inter alia*, that the establishment of an EU-wide support scheme would be a cumbersome administrative task. It is true that it would require a high level of administrative coordination and generate related management costs. Even so, and as stated before, similar costs did not prevent the EU and the Member States from agreeing on the establishment of the EU ETS. Many scheme design details would also need to be settled. Bearing in mind the question concerning the objectives to be pursued by the EU-wide scheme, it is worth mentioning the opinion expressed by the Commission in its 2005 assessment as regards technological neutrality: *'Harmonisation through a green certificate scheme with no differentiation by technology would negatively influence dynamic efficiency. Since such a scheme would promote cost-efficiency first, only the currently most competitive technologies would expand. While such an outcome would be beneficial in the short run, investment in other promising technologies might not be sufficiently stimulated through the green certificate*

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<sup>271</sup> *The support of electricity from renewable energy sources*, Commission Staff Working Document, accompanying document to the proposal for a directive of the European Parliament and of the Council on the promotion of the use of energy from renewable sources, SEC(2008) 57, 23.01.2008, pp. 14-15.

<sup>272</sup> D. Buchan, *Energy and Climate Change: Europe at the Crossroads*, Oxford University Press (2009), pp. 146-147.

<sup>273</sup> *The support of electricity from renewable energy sources*, Communication from the Commission, COM(2005)627 final, 07.12.2005, p. 11.

*scheme. Other policies would thus need to complement such a scheme.*<sup>274</sup> In its 2008 Review, the Commission reaffirmed in a more subtle way the necessary differentiation of support by technology: *'In a harmonised system, it might be difficult to differentiate between different costs for different technologies in different countries. If this is the case, additional support measures would be needed for technologies which are still relatively far from producing renewable electricity at market price.'*<sup>275</sup>

### **5.1.3 Conclusion on the need to harmonise RES-E support schemes in the form of TGCs**

It should be clarified that the purpose of this thesis is not to argue for or against the harmonisation of RES-E support schemes at EU level. Its purpose is to identify the provisions of EU law that affect the regulation of TGCs schemes, to examine their content and to draw conclusions concerning the discretion left to Member States for the design of their national green certificates schemes. Looking at the issue of harmonisation is a natural and necessary step in this process.

It is difficult to envisage a single EU-wide TGCs scheme without the existence of additional measures at national level in order to adjust to varying local conditions, including difference in access to natural resources and RES-E technologies. In addition, the current multiplicity of support schemes allows for an increased penetration of renewables in power generation, as previously observed by various authors.<sup>276</sup> A mix of RES-E policies is required to encompass the different sources of renewable energy, the different geographical locations, and the different stages of development of the technologies. A mix of RES-E policies contributes to security of energy supply through avoiding reliance on a single energy source either at home or in another Member State. Applying a mixture of policies allows the involvement of more actors, which has direct benefits for regional and economic development. One EU-wide support scheme may not be able to catch all these benefits simultaneously.

A fundamental issue is the rationale of an EU-wide RES-E support scheme, just as it is for a TGCs scheme. This issue is two-fold. On the one hand, it is reasonable to wonder which goals an EU-wide TGCs scheme would be able to attain (*i.e.*, the EU objectives of a competitive renewable electricity market, ensuring security of energy supply for the EU and protection of the environment). This relates to the balance that must be kept between competition and protection, the so-called policy paradox at the very heart of renewable energy promotion in the period of transition towards a low carbon economy.<sup>277</sup> On the other hand, it is reasonable to wonder how to balance national interests and EU interests

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<sup>274</sup> *The support of electricity from renewable energy sources*, Communication from the Commission, COM(2005)627 final, 07.12.2005, p. 12.

<sup>275</sup> *The support of electricity from renewable energy sources*, Commission Staff Working Document, accompanying document to the proposal for a directive of the European Parliament and of the Council on the promotion of the use of energy from renewable sources, SEC(2008) 57, 23.01.2008, pp. 14-15.

<sup>276</sup> *'... national support schemes of varying kinds are considered to be necessary to ensure the increasing penetration of renewables in power generation.'* L. Hancher, 'Trade-Neutral Policies for the Promotion of Electricity from Renewables,' in J. Bielecki and M. Geboye Desta (eds.), *Electricity Trade in Europe – Review of the Economic and Regulatory Challenges* (Kluwer Law International, 2004), p. 288.

<sup>277</sup> See previous comments in section 2.3 of the Introduction.

without putting them in mutual opposition, and to what extent Member States can defend their national interests by developing renewable energy sources to the detriment of EU-wide harmonisation. Cooperation through a flexible approach to compliance is here and for the time being the best solution.

In the absence of consensus for harmonisation, choices regarding support schemes remain within the competence of the Member States. It would nevertheless be wrong to say that secondary EU law, and in particular Directive 2009/28/EC, does not provide for harmonisation at all, and this issue is examined later in the thesis in relation to cooperation mechanisms (section 5.3) and the electricity tracking provisions that form the basis for green certificates schemes (Chapter 6). The co-existence of non-harmonised and harmonised provisions reflects the balance to be struck between Member States' discretion in the choice of support instruments and the minimum level of cooperation necessary to ensure that the internal green electricity market envisioned by the EU becomes a reality. The constitutive elements of this balance lie in the repartition of competences between the EU and its Member States in the area of renewable energy policy, which is the topic of the next section.

## **5.2 On the possibility of harmonising TGCs schemes at EU level**

Harmonisation is not an objective or a requirement of the Treaties, but is a powerful tool for achieving the objectives defined in the Treaties. For example, the co-existence of different support schemes may distort competition in ways that could be avoided by harmonisation. Any adoption of harmonisation must always be justified according to the general principles of EU law.

The present section explores the extent to which the Treaties provide the EU with the competence to adopt harmonisation measures in the field of renewable energy policy (5.2.1). After having established that the EU and its Member States share competence in that area, it looks at the principles applicable to the exercise of such shared competence in the particular context of a harmonised RES-E support scheme (5.2.2). Finally the section identifies the potential legal basis for an EU-wide green certificates scheme (5.2.3).

### **5.2.1 Repartition of competences in renewable energy policy**

Identifying the nature of EU competence in the area of renewable energy is crucial for determining the EU's ability to adopt harmonisation measures. Pursuant to Article 263 TFEU, the Court of Justice of the EU is responsible for reviewing the legality of, *inter alia*, legislative acts. Lack of competence is one ground for declaring any such act void.<sup>278</sup>

The TFEU establishes a clear competence for the EU with respect to energy policy that is shared with the Member States. The EU and its Member States also share competence in areas related to the internal market and the environment that are also relevant to renewable

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<sup>278</sup> In this respect, Article 263 TFEU increases the number of EU institutions and bodies entitled to challenge the legality of the Union's acts.

energy policy (5.2.1.1). As this is a shared area of competence, the limits of EU competence in relation to renewable energy policy must be examined in the light of general principles of EU law (5.2.1.2).

### **5.2.1.1 The Union's shared competence in relation to renewable energy policy: definition**

The entry into force of the Lisbon Treaty resulted *inter alia* in the promulgation of the TFEU, a consolidated and enriched version of the former EC Treaty. The Lisbon Treaty clarified some fundamental issues concerning the constitutive elements of the EU, including the definition of areas of competence as between the Union and the Member States.<sup>279</sup> The TFEU defines three categories of competences: exclusive competences (Article 3); shared competences (Article 4); and auxiliary competences (Article 6). The following paragraphs examine the nature of the competence of the EU in relation to renewable energy policy.

Measures to promote renewable energy must be viewed initially in the context of the sector to which they relate, *i.e.* energy. Pursuant to Article 4.2(i) TFEU, the Union and the Member States share competence in the area of energy. The new provisions in the TEU and the TFEU consolidate the interpretation given by the Court of the former treaties' provisions in this area.<sup>280</sup> In the absence of any clear repartition of competence in the previous Treaties, the Court construed a methodology to identify and characterise such competences. As noted by Delvaux and Guimaraes-Purokoski, the Court has assessed the Union's competence primarily in the context of external relations.<sup>281</sup> Applying its methodological approach, the Court first assesses whether there is an explicit or implicit competence for the EU in the area at stake. An explicit competence is recognised where the Treaties provide a clear legal basis for this. An implicit competence is one for which there is no specific legal basis in the Treaties, but where the EU is acting with the purpose of fulfilling tasks defined in other texts. The authority of the Union to act will 'flow implicitly' from such acts.<sup>282</sup> Initially, the Court derived implicit competence of the EU in the area of energy policy from competences attributed by the previous treaties.<sup>283</sup> With Articles 4 and 194 TFEU, energy becomes an area of explicit competence for the EU.

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<sup>279</sup> On the challenges raised by the repartition of competences, see *e.g.*: V. Michel, 'Le défi de la répartition des compétences,' 1-2 *Cahiers de droit européen* (2003), pp. 21-22 and 27-28.

<sup>280</sup> The Treaty of Lisbon follows the approach of previous amending treaties that have enshrined in primary EU law the principles affirmed by the Court. Previous examples include the principle of conferral of competences, the subsidiarity principle and the proportionality principle (included in the Maastricht Treaty).

<sup>281</sup> See B. Delvaux and A. Guimaraes-Purokoski, 'Vertical Division of Competences between the European Community and its Member States in the Energy Field – Some Remarks on the Evolution of Community Energy law and Policy,' in B. Delvaux, M. Hunt and K. Talus (eds.) *EU Energy Law and Policy Issues*, ELRF Coll. 1<sup>st</sup> ed., (Euroconfidentiel, 2008), p. 16. Author refer in particular to the following opinions of Advocate Generals: Opinion 1/75, [1975] ECR 1975, pp. 1361-1365; Opinion 2/91, [1993] ECR 1993 I-1061, paras.7-9; Opinion 2/00, [2001], I-9713, para. 4.

<sup>282</sup> Joined Cases 3, 4 and 6/76, *Cornelis Kramer and Others* [1976] ECR 1279, paras. 19-20. See also Opinion 1/76, [1977] ECR, p. 741, point 3.

<sup>283</sup> The recognition of energy as a good, subject to the internal market rules, was instrumental to that respect. See Case C-393/92 *Almelo* [1994] ECR I-1477, para. 28; Case C-158/94 *Commisison v Italy* [1997] ECR I-5789, paras. 14-20.

Once the Court has identified the existence of a competence, it proceeds to characterise it either exclusive or shared. The distinction between exclusive and shared competences becomes clearer following the Lisbon Treaty, which ultimately facilitates the recognition and exercise of the EU's competence. In areas of exclusive competence, '*only the Union may legislate and adopt legally binding acts, the Member States being able to do so themselves only if so empowered by the Union or for the implementation of Union acts*' (Article 2.1 TFEU). Energy, and renewable energy in particular, have never come within the category of exclusive competences. It should be noted here that the EU has increasingly exercised its competence in the area of shared competence that is energy, even in the absence of a specific legal basis, including in the area of renewable energy, with an increasing number of legislative acts enacted.<sup>284</sup> Article 4.2(i) TFEU consequently establishes in primary EU law the implicit shared competence of the Union and the Member States in the area of energy. It should be noted that there was a previous attempt to formalise this principle and the limits of its application in EU law, but the proposal was withdrawn.<sup>285</sup>

As the promotion of renewable energy sources contributes to the achievement of other EU objectives, it is necessary to look at the repartition of competences in these fields too. Most of these associated objectives and policy areas are listed in Article 4.2 TFEU. The conclusion is that Member States also share competence as regards the internal market (Article 4.2(a)) and the environment (Article 4.2(e)) both areas that are relevant to renewable energy policy. Economic, social and territorial cohesion (Article 4.2(c)) and consumer protection (Article 4.2 (f)) should also be mentioned. While they are more indirectly related to RES promotion, they may interact with the latter. These are also areas of shared competence.

### **5.2.1.2 The Union's shared competence in relation to renewable energy policy: limits**

Having established renewable energy policy as an area of shared competence, it is now necessary to assess when, and under what conditions, the Union may adopt legislation in that domain. Article 2.2 TFEU provides that, in areas of shared competence, '*the Union and the Member States may legislate and adopt legally binding acts in that area. The Member States shall exercise their competence to the extent that the Union has not exercised its competence. The Member States shall again exercise their competence to the extent that the Union has decided to cease exercising its competence.*' On that point, once again, the Lisbon Treaty has basically enshrined in law the interpretation of the Court. The latter has established that acts of the EU in areas of shared competence are subject to the

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<sup>284</sup> In 2011, a document from the Directorate-General for Energy (DG ENER) noted that more than sixty legal acts (regulation, directives and decisions) were currently in force and applied to the energy sector, excluding those relating to nuclear energy, radiation protection and the Euratom Treaty. *Overview of the secondary EU legislation that falls under the legislative competence of DG ENER and that is currently in force*, European Commission, 16.03.2011.

<sup>285</sup> See Proposal for a Council Decision concerning the organisation of cooperation around agreed Community energy objectives, European Commission, COM (96) 431 final, 04.10.1996. During the legislative procedure in connection with that proposal, the European Parliament called for the inclusion in the former EU Treaty of a chapter devoted to energy. (European Parliament, position in first reading, 16 May 1997, Doc. T4-0257/1997, OJ C167, 02.06.1997 p. 225.) The proposal was withdrawn by the Commission in 2004, on the grounds that it has become obsolete.



respect of two general principles: the principle of conferral of powers; and the principle of pre-emption.

The first ‘limit’ on the definition of the Union’s competence derives from the principle of conferral of powers.<sup>286</sup> The principle is defined in Article 5 TEU. In particular, Article 5.2 TEU provides that: ‘*Under the principle of conferral, the Union shall act only within the limits of the competences conferred upon it by the Member States in the Treaties to attain the objectives set out therein. Competences not conferred upon the Union in the Treaties remain with the Member States.*’ While the provision is self explanatory, the fact that the Union’s action must always be related to one of its pre-defined objectives can be underlined. Then, where no competence has been conferred upon the Union, Member States remain competent. The insistence in the Treaties on the role of the Member States in limiting the Union’s competence attests of the limits placed on Member States’ sovereignty when conferring powers upon the Union, as noted by the Court in its early case law.<sup>287</sup> Respect of the principle of conferral of powers also contributes to ensuring consistency between the Union’s policies and activities as set by Article 7 TFEU.<sup>288</sup>

So how does the principle of conferral of powers apply in areas of shared competence and, in particular, in relation to the expansion of Union competences in the area of renewable energy? The answer to this question will depend on the legal interpretation adopted. As commentators have pointed out, a legalistic approach will entail that the competences of the EU will only derive from a literal interpretation of the Treaties and will evolve after amending the Treaties. Supporters of such an approach will consequently refuse the leave the evolution of competences result from ‘*the caprice [of the] legislator, the Commission not to mention the Court of Justice.*’<sup>289</sup> By contrast, the adoption of a more dynamic approach based on teleological or purposive interpretation allows greater flexibility with regard to the letter of the Treaty and more rapid advancement in the process of integration.<sup>290</sup> The adoption of Article 194 TFEU certainly marked a milestone for supporters of the legalistic approach who seek to rely on it to limit the action of the EU in the domain of energy. The wording of Article 5.2 TEU is stricter than the former Article 2, second subparagraph of the EU Treaty and former Article 5 EC Treaty, and places clearer limits on the possible exercise of shared competences.<sup>291</sup> The new wording states

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<sup>286</sup> The word ‘limit’ is used in the Treaties. See Article 5.1 TEU: ‘*The limits of Union competences are governed by the principle of conferral...*’

<sup>287</sup> Case 22/70, *Commission v Council* (ERTA Case), [1971] ECR, 263. The link between the principle of conferral and the principle of loyalty (former Article 5 EC Treaty) has latter been noticed in Opinion 2/94, *Accession by the Communities to the Convention for the Protection of Human Rights and Fundamental Freedoms*, [1996] ECR 1759, point 23.

<sup>288</sup> Article 7 TFEU: ‘*The Union shall ensure consistency between its policies and activities, taking all of its objectives into account and in accordance with the principle of conferral of powers.*’

<sup>289</sup> B. Delvaux and A. Guimaraes-Purokoski, ‘Vertical Division of Competences between the European Community and its Member States in the Energy Field – Some Remarks on the Evolution of Community Energy law and Policy,’ in B. Delvaux, M. Hunt and K. Talus (eds.) *EU Energy Law and Policy Issues*, ELRF Coll. 1<sup>st</sup> ed., (Euroconfidentiel, 2008), pp. 11-13.

<sup>290</sup> *Ibid.*, pp. 11-13. Referring to J. Bengoetxea, N. McCormick and L. Moral Soriano, ‘Integration and Integrity in the Legal Reasoning of the European Court of Justice’, in G. Búrca and J.H.H. Weiler (eds.), *The European Court of Justice* (Oxford University Press, 2001), p. 58.

<sup>291</sup> *Constitution Européenne – Comparaison avec les traités en vigueur*, Service des Affaires européennes, Sénat (Senate, France), December 2004. See comments under Article I-11.

explicitly what was only implicit before - that competences not attributed to the Union remain with the Member States. The strict wording of Article 5.2 TEU has to be readen at the light of Article 2.2 TFEU, which suggests the Union has priority in the exercise of shared competence.

In the area of energy, the Treaty itself defines some limits on the exercise of shared competence. Member States retain competence over various energy-related matters, in particular the composition of their energy mix and the structure of energy supply.<sup>292</sup> They may agree on common measures to achieve the EU energy policy objectives, using the ordinary legislative procedure.<sup>293</sup> It is worth noting here that the method and extent of any harmonisation of support schemes may alter the discretion left to Member States regarding choice of energy mix and structure of energy supply. This could reach the limits imposed by the principle of conferral when taking a legalistic approach.

The second general principle framing the Union's competences is the principle of pre-emption. The latter is not directly defined in the Treaties, but is reflected in Article 2.2 TFEU in relation to the definition of shared competences: '*The Member States shall exercise their competence to the extent that the Union has not exercised its competence. The Member States shall again exercise their competence to the extent that the Union has decided to cease exercising its competence.*'<sup>294</sup> While the principle of conferral of powers may limit the extension of Union competences,<sup>295</sup> the pre-emption principle may limit the adoption of national legislative measures by Member States in areas already under Union competence. Here the exercise of Union competence restrains Member States from adopting legislation or legally binding acts. The pre-emption principle has been affirmed by the Court in its case law<sup>296</sup> and has been widely commented on.<sup>297</sup> In situations where a national measure conflicts with a Union measure, the Court will have to examine the application of the pre-emption doctrine as well as other principles related to the supremacy of EU law.<sup>298</sup>

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<sup>292</sup> Article 194.2, second sub-paragraph, TFEU.

<sup>293</sup> Article 194.2, first sub-paragraph, TFEU.

<sup>294</sup> The latter situation relates, *e.g.*, to the repeal of an act by the Union.

<sup>295</sup> The inclusion of the principle of conferral of powers in the Maastricht Treaty was a way of limiting the continuing increase in Union competences. See A. Estella, *The EU Principle of Subsidiarity and its Critique* (OuP, 2002), p. 82.

<sup>296</sup> See *e.g.*, Case 106/77, *Simmmenthal SpA* [1978] ECR, paras. 17-18 and 21; Case C-1/96, *The Queen v Minister of Agriculture, Fisheries and Food, ex parte Compassion in World Farming Ltd*, [1998] ECR, p.I-1251, para. 41; Case C-491/01, *The Queen v Secretary of State for Health, ex parte British American Tobacco (BAT)*, [2002] ECR I-11453, para. 77.

<sup>297</sup> A. Goucha Soares, 'Pre-emption, Conflicts of Power and Subsidiarity,' *European Law Review* 23(2) (1998), pp. 132-145; R. Schütze, 'Supremacy without Pre-emption? The Very Slowly Emergent Doctrine of Community Pre-emption' 43 *CML Rev.* (2006), p. 1023 *et seq.*

<sup>298</sup> On the relationship between pre-emption and supremacy, commentators note that: '*Thus pre-emption doctrine and the principle of supremacy are interrelated. If placed in a time segment, the pre-emption doctrine precedes the supremacy principle.*' See B. Delvaux and A. Guimaraes-Purokoski, 'Vertical Division of Competences between the European Community and its Member States in the Energy Field – Some Remarks on the Evolution of Community Energy law and Policy,' in B. Delvaux, M. Hunt and K. Talus (eds.) *EU Energy Law and Policy Issues*, ELRF Coll. 1<sup>st</sup> ed., (Euroconfidentiel, 2008), p. 13.

In the case of renewable energy, all Member States have adopted legislation intended to support RES-E generation (e.g., FITs, premiums, quota obligation, tax exemptions), as has the Union with numerous provisions in regulations and directives that promote renewable energy sources (e.g., priority or guaranteed grid access, authorisation procedures, RES-E GOs). Here it is the content of the measure that will determine the extent to which the Union has exercised its competence. This is further detailed in Protocol no. 25 on the Exercise of Shared Competence to the Treaties, which provides that ‘*when the EU has taken action in a certain area [of shared competence], the scope of this exercise of competence only covers those elements governed by the Union act in question and therefore does not cover the whole area.*’<sup>299</sup> If the Union harmonises RES-E support schemes, Member States will not be able to exercise their competence in exactly the same area. At the same time, this does not allow the Union to harmonise all aspects of RES-E. For the moment, and as pointed out in section 5.3, the Union has regulated the ways in which Member States can cooperate in order to comply with mandatory targets, but not the support schemes themselves.

The competence of the Union may also be extended in the circumstances envisaged in Article 352 TFEU (former Article 308 ECT) known as ‘the flexibility clause’ or the ‘loophole provision.’ Article 352.1 TFEU provides the Council with the necessary powers to adopt, on a proposal from the Commission and after obtaining the consent of the Parliament, measures which aim to pursue one of the objectives of the Treaties but which do not find legal basis elsewhere in the Treaties.<sup>300</sup> This provision is of limited application, however, for the areas - such as energy - explicitly included on the list of competences in the Treaties. With the entry into force of the Lisbon Treaty, the reference to Article 352 TFEU for the adoption of EU measures in the field of energy has become obsolete.

The EU’s competences in the matter of renewable energies were interpreted in Council Decision 2010/385/EU of 24 June 2010 on the conclusion of the Statute of the International Renewable Energy Agency (IRENA) by the European Union.<sup>301</sup> The Council decision offers a more refined picture of the repartition of competences concerning RES policy following the entry into force of the Lisbon Treaty. This clarification (referred to as a ‘declaration’ in the text) of the competences of the EU as regards renewable energy was

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<sup>299</sup> See also explanation given in Council Decision 2010/385/EU of 24 June 2010 on the conclusion of the Statute of the International Renewable Energy Agency (IRENA) by the European Union (JOEU L 178 of 13.07.2010, p. 17): ‘*The extent of the Union competence ensuing from these acts must be assessed by reference to the precise provisions of each measure, and in particular the extent to which these provisions establish common rules...*’

<sup>300</sup> On the recourse to this provision of the Treaty, see: Opinion 2/94 of the Court of Justice of 28 March 1996, *Accession by the Community to the European Convention for the Protection of Human Rights and Fundamental Freedoms*, [1996] ECR, I-1759, where the Court affirmed that Article 308 ECT ‘*cannot serve as a basis for widening the scope of Community powers beyond the general framework created by the provisions of the Treaty as a whole and, in particular, by those that define the tasks and the activities of the Community.*’ See also comments in: *Article 308 of the EC Treaty*, Twenty-ninth Report of Session 2006-07, House of Commons, European Scrutiny Committee, London, 13.07.2007; *Scope of Article 308 of the EC Treaty*, European Council, Opinion of the Legal Service, DOC/07/4, 26.06.2007; M. Kurcz, ‘La répartition des compétences au sein de l’Union européenne,’ 3 *Revue du Droit de l’Union Européenne* (2005), p. 592. See Opinion 2/94 [1996] ECR, I-1759.

<sup>301</sup> Council Decision 2010/385/EU of 24 June 2010 on the conclusion of the Statute of the International Renewable Energy Agency (IRENA) by the European Union (OJ L 178 of 13.07.2010, p. 17).

a requirement under the IRENA Statute.<sup>302</sup> Keeping in mind the distinction between external and internal competences, three situations are distinguished in the Council decision concerning the competence of the EU and its Member States with regard to renewable energy policy. Firstly, the Council decision provides: *‘The Union has exclusive competence where a provision of the IRENA statute or an act implementing that statute is necessary to enable the Union to exercise its internal competence or in so far as the provisions of a Union act establish common rules that may be affected or altered in scope by provisions of the IRENA Statute or an act adopted in implementation thereof.’* Secondly, the Council provides: *‘Insofar as common rules exist but are neither affected nor altered in scope, in particular in cases of Union provisions establishing only minimum standards, the Member States have competence, without prejudice to the competence of the Union, to act in this field.’* The starting point for this sentence is that EU legislation exists on the topic, but that the common rules establish only a minimum level of harmonisation. In this case the Member States can exercise their competence by, for example, the adoption of more stringent measures. Thirdly, the Council provides: *‘Member States remain solely competent for matters under the IRENA statute in respect of which the Union has not adopted common rules.’* This simply refers to the situation reviewed above where the EU has not exercised its competence. The Council decision further lists the EU legislative acts adopted in the area of renewable energies. In these domains, the EU has exercised its competence and consequently pre-empted Member States from adopting conflicting rules. The level of harmonisation of the EU provisions is then determined by an individual analysis of the act. A final remark added to the Council Decision emphasises that the exercise of competences transferred to the EU in the domain of energy is subject to ‘continuous change.’<sup>303</sup>

## **5.2.2 Principles applicable to the exercise of shared competences and the adoption of a harmonised RES-E support scheme**

The ‘use’ of Union competences, in particular competences shared with Member States, is governed by two principles of EU law: subsidiarity and proportionality.<sup>304</sup> The potential application of these principles to a harmonised green certificates scheme is reviewed in the following paragraphs.

### **5.2.2.1 Application of the subsidiarity principle**

As renewable energy is defined by the Treaties as an area of shared competence, the adoption by the Union of measures in that area is subject to the subsidiarity principle. The principle is defined in Article 5.3 TEU as follows:

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<sup>302</sup> Such a requirement applies to any regional intergovernmental economic integration organization adhering to the Statute. Pursuant to Article VI.C of the IRENA Statute, regional intergovernmental economic integration organisations that become members of IRENA must make a declaration as to the extent of their competence with respect to the matters governed by the Statute.

<sup>303</sup> *The exercise of competences which Member States of the European union have transferred to the Union pursuant to the Treaties is, by nature, liable to continuous change.’* Council Decision 2010/385/EU of 24 June 2010 on the conclusion of the Statute of the International Renewable Energy Agency (IRENA) by the European Union (JOEU L 178 of 13.07.2010, p. 17), para. 4.

<sup>304</sup> Article 5.1 TEU.

*‘Under the principle of subsidiarity, in areas which do not fall within its exclusive competence, the Union shall act only if and in so far as the objectives of the proposed action cannot be sufficiently achieved by the Member States, either at central level or at regional and local level, but can rather, by reason of the scale or effects of the proposed action, be better achieved at Union level.*

*The institutions of the Union shall apply the principle of subsidiarity as laid down in the Protocol on the application of the principles of subsidiarity and proportionality. National Parliaments ensure compliance with the principle of subsidiarity in accordance with the procedure set out in that Protocol.’*

The different parts of this definition reflect the conditions of application of the principle, and thereafter applied to RES-E support measures.

Following the conditions set by the first part of Article 5.3 TEU, the adoption of an EU-wide RES-E support schemes will respect the subsidiarity principle if three conditions are met: (i) the Union does not have exclusive competence in the area of renewable energy, which as been established above; (ii) the Member States cannot achieve the proposed objectives by themselves; (iii) the Union can better achieve the objectives itself due to the scope and effects of EU-wide measures. The application of the subsidiarity principle is based on the assessment of, on the one hand, an impossible or insufficient action by the Member States *and*, on the other hand, the necessary action by the Union. This assessment, or ‘test’ as characterised by the court and legal commentators,<sup>305</sup> must be included in the proposals for any draft legislation originating from EU institutions.<sup>306</sup> Consequently, any proposal for harmonisation of RES-E support schemes will have to establish why the objective the proposal pursues cannot be sufficiently achieved by the Member States and accordingly requires EU measures.

In its proposal for a Renewables Directive, the Commission makes it clear that action at Member State level has not sufficed to ensure the development of renewable energies, which in any event is not proceeding at the same pace in all Member States. It argues that the first results in terms of renewable energies were achieved only after the adoption of Directives 2001/77/EC and 2003/30/EC. It supports its argument with the example of the heating and cooling sector where, in the absence of EU measures, the penetration of renewable energies continues to be ‘nearly stagnant’.<sup>307</sup> In the adopted text, the preamble of Directive 2009/28/EC makes it clear that the directive’s general objectives cannot be

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<sup>305</sup> A. Arnall, A. Dashwood, M. Dougan, M. Ross, E. Spaventa and D. Wyatt, *European Union Law*, 5<sup>th</sup> ed. (London, Sweet & Maxwell, 2006), pp. 98-100.

<sup>306</sup> Pursuant to Article 5 of Protocol No.2 to the Treaties on the application of the principles of subsidiarity and proportionality: ‘*Draft legislative acts shall be justified with regard to the principles of subsidiarity and proportionality. Any draft legislative act should contain a detailed statement making it possible to appraise compliance with the principles of subsidiarity and proportionality. ...*’ (Emphasis added.)

<sup>307</sup> ‘*It is clear from the experience with the promotion of renewable energy sources in the European Union that real progress only began to be made when the European Union adopted legislative instruments containing targets to be reached by a given deadline. This is true for Directive 2001/77/EC on the promotion of electricity from renewable energy sources and for Directive 2003/30/EC on the promotion of the use of biofuels. No such legal framework exists to promote the penetration of renewable energy sources in the heating and cooling sector. The development of renewable energy in this sector is nearly stagnant*’. Proposal for a Directive of the European Parliament and of the Council on the promotion of the use of energy from renewable sources, COM(2008) 19 final, 23.01.2008, p. 9.

‘sufficiently achieved’ by the Member States and can be better achieved at EU level ‘by reason of the scale of the action.’<sup>308</sup> An essential question is then whether the support schemes established by the Member States are sufficient to achieve the objectives of EU RES policy, in particular the mandatory target of Directive 2009/28/EC. The answer should be found in, first, the National Renewable Energy Action Plans (NREAP) that have been already submitted to the Commission,<sup>309</sup> and, second, in the periodic reports Member States must submit to the Commission for the first time by 31 December 2011 and every two years thereafter.<sup>310</sup> On its side, the Commission bears a reporting obligation which includes the assessment of the effectiveness of the national support schemes in achieving national targets defined in Annex I on the cost-benefit basis.<sup>311</sup> In that sense, Directive 2009/28/EC establishes the tools for assessing whether Member States are able to achieve the EU objectives themselves.

The second part of Article 5.3 TEU establishes the duty of the Union’s institutions to apply the principle according to the conditions set forth in Protocol No.2 to the Treaties on the application of the principles of subsidiarity and proportionality. In particular, Article 5 of the Protocol provides that ‘[t]he reasons for concluding that a Union objective can be better achieved at Union level shall be substantiated by qualitative and, wherever possible, quantitative indicators.’ Here again the periodic reports submitted by Member States within the framework of Directive 2009/28/EC can provide a qualitative and quantitative indication of the need for EU measures in order to achieve the EU RES objectives. The previous version of the Protocol on the application of the principles of subsidiarity and proportionality, inherited from the Amsterdam Treaty, was more detailed on the application of the principles and compliance with the subsidiarity test. Although the provisions do not appear in Protocol No.2, they can still be referred to for guidance. In particular, the necessity of action at EU level is recognised where: (i) the action has a transnational character which cannot be satisfactorily regulated at Member State level; (ii) the effects of an absence of EU action or measures limited solely to the Member State level will be contrary to the Treaty (e.g., in distorting competition, or restricting trade); and (iii) the EU measure will have ‘clear benefits by reason of its scale or effects’ compared to a national action.<sup>312</sup>

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<sup>308</sup> Recital 96 of Directive 2009/28/EC reads as follows: ‘Since the general objectives of this Directive, namely to achieve a 20 % share of energy from renewable sources in the Community’s gross final consumption of energy and a 10 % share of energy from renewable sources in each Member State’s transport energy consumption by 2020, cannot be sufficiently achieved by the Member States and can therefore, by reason of the scale of the action, be better achieved at Community level, the Community may adopt measures, in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty.’

<sup>309</sup> Article 4, Directive 2009/28/EC. See template for the reports defined in Commission Decision 2009/548/EC of 30 June 2009 establishing a template for National Renewable Energy Action Plans under Directive 2009/28/EC of the European Parliament and of the Council, OJ L182, 15.07.2009, p.33. Article 4.5 requires the Commission to evaluate the adequacy of the national measures described in the NREAPs in relation to the mandatory targets defined in Article 3.2 of the same directive. See also the report prepared for the European Environment Agency (EEA) to assess the NREAPs: *Renewable Energy Projections as Published in the National Renewable Energy Action Plans of the European Member States*, ECN, Doc. ECN-E—10-069, 02.01.2011 (available at <www.ecn.nl/nreap>).

<sup>310</sup> Article 22.1, Directive 2009/28/EC.

<sup>311</sup> Article 23.10(d), Directive 2009/28/EC.

<sup>312</sup> Amsterdam Protocol No.7 annexed to the Treaty of the European Community, Protocol on the application of the principles of subsidiarity and proportionality, provision 5.

The third part of Article 5.3 TEU establishes the role played by national parliaments in the application of both the subsidiarity and proportionality principles. This is one of the additions made by the Lisbon Treaty.<sup>313</sup> Protocol No.5 establishes a new procedure associating national parliaments to the application of the test of subsidiarity.

As the wording of Article 5.3 TEU indicates, the obligation to respect the subsidiarity principle imposes limitations on Union actions, and was originally meant to restrict the Union's '*creeping competences*.'<sup>314</sup> Indeed, environmental protection was an expanding area of EU legislation during the 1970s- and 1980s. However, it is difficult to find examples of proposed legislation that have been rejected because of failure to respect the subsidiarity principle.<sup>315</sup> This almost automatic endorsement of the subsidiarity principle may be explained partly by procedural considerations relating to the application of the principle that ensure a wide consensus.<sup>316</sup> The need for action at EU level to promote renewable energy has been endorsed politically and since then has been followed-up by the adoption of legislation, removing any doubts about the necessity of EU legislative initiatives.<sup>317</sup> In its proposal for the Renewables Directive, the Commission assesses the measures as being in accordance with the subsidiarity principle because: '*Leaving action to the Member States would put the achievement of this share at risk and would not realise an equitable distribution of the efforts needed to arrive at the 20% overall share. In*

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<sup>313</sup> See procedure defined in Article 6 of Protocol No.2 to the Treaties on the application of the principles of subsidiarity and proportionality. A. Dashwood presents that mechanism as being of particular 'constitutional interest' as it would enable national Parliaments to intervene directly, '*independently of their governments.*' A. Dashwood, 'What Can Be Salvaged if the Treaty of Lisbon Is Lost?' in M. Bulterman, L. Hancher, A. McDonnell, H. Sevenster, *Views of European Law from the Mountain* (Wolters Kluwer, 2009), p. 340.

<sup>314</sup> See A. Estella, *The EU Principle of Subsidiarity and its Critique* (Oxford University Press, 2002), p.82. The principle was only included in primary EU law after the entry into force of the 1992 Maastricht Treaty, in 1993. On the historical background to the inclusion of the principle in the Treaties, see: *Report by L. Tindemans to the European Council on European Union (Tindemans Report)*, Supplement 1/76, Bulletin of the European Communities; *The Principle of Subsidiarity*, European Commission, Communication to the Council and the European Parliament, SEC(92) 1990 final, 27.10.1992; 'Overall Approach to the Application by the Council of the Subsidiarity Principle and Article 3b of the Treaty on European Union,' Annex 1 to Part A, *Conclusions of the Presidency*, European Council, Edinburgh, 12.12.1992. The original idea underlying the principle is reflected in the requirement for measures to be taken as close to citizen level as possible. It has its origins in the social doctrine of the Catholic Church, as formulated by Pope Pius XI, in a 1931 Encyclical.

<sup>315</sup> S. Weatherill, 'Supply of and demand for internal market regulation: strategies, preferences and interpretation,' in N.N. Shuibhne (ed.), *Regulating the Internal Market* (2006), pp.29-60. See also, as regards the limited impact of the subsidiarity principle in practice: T. C. Hartley, *The Foundations of European Union Law*, (Oxford University Press, 7<sup>th</sup> edition, 2010), p. 127.

<sup>316</sup> The duty to 'consult widely' – except in cases of exceptional urgency – makes it very unlikely that the Commission would propose EU measures likely to encounter strong opposition from other EU institutions. Article 2, Protocol No.2 on the application of the principles of subsidiarity and proportionality.

<sup>317</sup> See in particular the conclusions of the European Council of March 2007 where Member States reaffirmed: '*the Community's long-term commitment to the EU-wide development of renewable energies beyond 2010.*' The European Council also invited the Commission '*to analyse the potential of cross-border and EU-wide synergies and of interconnections for reaching the overall renewable energy target...*' Presidency Conclusions of the Brussels European Council, 8/9 March 2007, revised version, Council of the European Union, Doc.7224/1/07, 02.05.2007, pp. 21-22.

*addition, leaving action completely to the Member States would also create investor uncertainty as to the objectives to be reached and the pathway toward these objectives.’* The Commission also argues that ‘*As energy policy problems are threatening the Community as a whole, responses should be articulated at the same level.*’<sup>318</sup>

Ultimately, and in accordance with Article 8 of Protocol No. 2, the Court has jurisdiction to rule on possible infringements of the subsidiarity (and proportionality) principles. Several authors have observed a reinforcement of the subsidiarity principle after the entry into force of the Lisbon Treaty.<sup>319</sup> Such a trend, together with the need to respect the principle of proportionality, may impose some limits on the competence of the EU in the area of renewable energy. Particularly in the context of support schemes that relate closely to national interests, any EU proposal for harmonisation measures will have to advance solid arguments as regards not so much the EU competence, but the deficiencies of national schemes and the resulting need to act at EU level. Other authors also agree on this point.<sup>320</sup> However, similar issues have not prevented the EU in the past from adopting harmonisation measures, in particular those intended to eliminate barriers to the completion of the internal market.<sup>321</sup> Here there is a striking difference within the actual text of Directive 2009/28/EC as regards levels of harmonisation, based on the possible effects on trade of divergent national schemes, between the provisions on renewable energy sources (based on Article 175.1 ECT) and the provisions on biofuels and bioliquids (based on Article 95 ECT).<sup>322</sup>

Whether the Member States can achieve the EU objectives by acting alone or whether the Union should act is a question of subsidiarity. Whether the Union should harmonise compliance instruments in the form of, *e.g.*, TGCs is a question of proportionality, at least with respect to the European measure.

### **5.2.2.2 Application of the proportionality principle**

Where the adoption of a measure at EU level is deemed in accordance with the subsidiarity principle, it is required to assess the appropriateness of that measure’s nature and intensity. This assessment is conducted by means of the proportionality test, the

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<sup>318</sup> Proposal for a Directive of the European Parliament and of the Council on the promotion of the use of energy from renewable sources, COM(2008) 19 final, 23.01.2008, p. 9.

<sup>319</sup> T. Wälde, ‘Energy in the Draft EU Constitutional Treaty.’ *OGEL* Vol.1 Issue 5 (December 2003), p. 4.

<sup>320</sup> ‘*Subsidiarity did not as yet play an important role in the jurisprudence of the ECJ (normally, though not always, a rather pro-integration institution of the EU), but the much more definite, explicit and linked reference to the three principles [of subsidiarity, proportionality and necessity] will provide much more legal ammunition to limit an integrationist ‘overshooting’ of EU legislative competences which are not necessary for their legitimate purpose or which are disproportionate to a relatively minor integrationist cause.*’ T. Wälde, ‘Energy in the Draft EU Constitutional Treaty.’ *OGEL* Vol.1 Issue 5 (December 2003), p. 4.

<sup>321</sup> See, *e.g.*, G. Davies, ‘Subsidiarity: The wrong idea, in the wrong place, at the wrong time,’ *CML Rev.* 43 (2006), pp. 63-84.

<sup>322</sup> In its proposal, the Commission argues that ‘*Community action in the field of biofuel sustainability is justified, because it avoids the development of multiple national schemes which might impede trade to and within the Community.*’ Proposal for a Directive of the European Parliament and of the Council on the promotion of the use of energy from renewable sources, COM(2008) 19 final, 23.01.2008, p. 9.



elements of which have been construed primarily from case law.<sup>323</sup> The conditions under which a harmonised TGCs scheme could be deemed to represent a proportionate measure to achieve EU objectives is the topic of the next paragraphs.

To be proportionate, *‘the content and form of Union action shall not exceed what is necessary to achieve the objectives of the Treaties’* (Article 5.4 TEU). This wording is slightly amended compared to that of the EC Treaty, and now refers explicitly to criteria relating to content and form that were previously mentioned in Protocol 7 to the EC Treaty. The definition reiterates the same limitation put on the expansion of EU legislation as the subsidiarity principle.

First, as regards the form of a measure, the provisions of Article 5.4 TEU, Protocol No.2 to the Treaties and the guidance provided by the former Protocol 7 (para. 6) require the use of the simplest instrument that will correspond with the objective to be achieved and the need for effective enforcement. Regulation in the form of directives is preferred, because of the margin of appreciation left to Member States as regards implementation. The extent to which a directive establishing an EU-wide TGCs scheme would be limited to a framework directive, as recommended, would depend on the level of details required to ensure the proper functioning of the scheme. In its proposal for the future Directive 2009/28/EC, the Commission already recognised the need to go further than a framework directive because of the need for precision regarding both the objectives and the measures to be taken.<sup>324</sup> The experience of the EU ETS also demonstrates that quite a high degree of regulation is required to make the scheme function properly.

Second, as regards content, the EU measure must intrude as little as possible on the legal systems of the Member States, leaving as much scope as possible to national decision-making, and possibly providing Member States with alternative means of implementation (former Protocol 7, para.7). The Commission is relatively succinct with regard to proportionality of the measures contained in its proposals, usually simply reiterating the Treaty formulation. The same formulation is also repeated at the end of the Recitals of the adopted text.<sup>325</sup> The financial burden of any proposed EU measure must also be taken into account. Pursuant to Article 5 of Protocol No.2, the statement regarding the proportionality of the EU measure that must accompany the proposal *‘should contain some assessment of the proposal’s financial impact and, in the case of a directive, of its implications for the rule to be put in place by Member States, including, where necessary, the regional legislation.’* In addition, *‘[d]raft legislative acts shall take account of the need for any burden, whether financial or administrative, falling upon the Union, national governments, regional or local authorities, economic operators and citizens, to be minimised and commensurate with the objective to be achieved.’*

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<sup>323</sup> See the first recognition of the principle as a general principle of EU law in Case 11/70, *Internationale Handelsgesellschaft v Einfuhr- und Vorratstelle für Getreide und Futtermittel* [1970] ECR 1125. On the origin of the principle, see J. Schwarze, *European Administrative Law*, (Sweet & Maxwell, 1992), p. 685.

<sup>324</sup> Proposal for a Directive of the European Parliament and of the Council on the promotion of the use of energy from renewable sources, COM(2008) 19 final, 23.01.2008, p. 9.

<sup>325</sup> See Recital 96 of Directive 2009/28/EC: *‘In accordance with the principle of proportionality, as set out in that Article, this Directive does not go beyond what is necessary in order to achieve those objectives.’*

As mentioned before, the proportionality test has been construed from case law. This has resulted in the application of three main criteria, not necessarily concomitantly, which concern: (i) the appropriateness or adequacy of the measure in view of its declared objective; (ii) the necessity of the measure to achieve that objective; (iii) the distortive effects of the measure.<sup>326</sup> In the case of RES-E support schemes, and TGCs schemes in particular:

- The EU legislator will need to establish whether an EU-wide TGCs scheme is a suitable measure to achieve the legitimate objective pursued. The nature of the corresponding EU objective or target may be decisive to that respect. The EU objective could be either the one already defined in Article 3.1 of Directive 2009/28/EC or a new objective reflecting, *e.g.*, the quota obligation. In its proposal for Directive 2009/28/EC, the Commission argued that the proposed measures were proportional because ‘*the level of ambition of the target requires coordinated action which addresses the sectors where most progress can be made.*’<sup>327</sup> In the case of RES-E support schemes, it would probably be necessary to compare the respective benefits of FITs and TGCs schemes.<sup>328</sup> Although this discussion has already taken place at national level, very few studies have assessed effects at EU-wide level.
- Next the EU legislator will need to establish whether the measure is necessary to achieve the chosen objective. In this respect the argumentation could build on the results of the cooperation mechanisms defined in Directive 2009/28/EC to assess if a more stringent approach in terms of EU regulation is required. As these assessments are economic rather than legal in nature, they will not be explored further here. The level of coordination was estimated as being sufficient under Directive 2009/28/EC.
- Finally, the measure must not result in disproportionate disadvantages with regard to the aims pursued. In its review, the EU legislator will need to examine whether the objectives of the proposed measure justify its possible negative economic consequences for certain operators.<sup>329</sup> In this respect it is worth noting that an EU-wide RES-E support may have a positive effect on trade, while the co-existence of different national schemes has usually restrained trade in electricity.

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<sup>326</sup> See the early Case C-331/88 *R v Minister of Agriculture, Fisheries and Food, ex parte Fedesa* [1990] ECR I-4023, paras.12-13. See also the later judgments in Joined Cases C-453/03, C-11/04, C-12/04 and C-194-04 *ABNA and Others* [2005] ECR I-10423, para.68, as well as the cited case law. On the various interpretations of the criteria proposed by commentators, see D. Chalmers, G. Davies and G. Monti, *European Union Law*, (Cambridge University Press, 2<sup>nd</sup> edition, 2010), pp. 367-368.

<sup>327</sup> In the proposal, the Commission assesses the harmonisation of support measures (such as administrative procedures, planning, construction and information and training, as well as grid-system issues for RES-E and an increased role for GOs), as being proportionate in nature and form. They also build on existing provisions. (Proposal for a Directive of the European Parliament and of the Council on the promotion of the use of energy from renewable sources, COM(2008) 19 final, 23.01.2008, p. 9.)

<sup>328</sup> See conclusions drawn by the Commission in on the comparison of instruments, which, at national level, is in clearly in favour of FITs. Nevertheless, some studies point out that FITs also have shortcomings. See *e.g.*: *Harmonisation of support schemes, A European harmonised policy to promote RES-electricity – sharing costs & benefits*, futures-e, European research project, Work package 3, Deliverable D17, December 2008, pp. 120-121.

<sup>329</sup> See Joined Cases C-96/03 and C-97/03, *Tempelman and van Schaijk* [2005] ECR I-1895, para. 48; Case C-86/03, *Greece v Commission* [2005] ECR I-10979, para. 96; Case C-504/04, *Agrarproduktion Stabelow* [2006] ECR I-679, para. 37; C-58/08, *Vodafone and Others* [2010] ECR I-0000, para. 53.

How these criteria are applied depends very much on the nature of the EU target and the detail with which the scheme is regulated at EU level. Here again it is possible to refer to the experience of the EU ETS and of national TGCs schemes. Both have shown that, to function properly, a minimum amount of regulation is required. With regard more specifically to the EU ETS, since it is an EU-wide scheme, the Commission argues that the elements of its proposal are proportional because they are necessary for the proper functioning of the scheme and the achievement of the objectives of the Treaties.<sup>330</sup>

The application of the proportionality principle, like that of subsidiarity, is subject to judicial review, which can be a complex exercise for the Court. The latter is generally less strict in applying the principle to EU institutions than to the Member States.<sup>331</sup> In addition, the Court recognises that the EU legislature, in the exercise of its powers, has ‘*a broad discretion in areas in which its action involves political, economic and social choices,*’ and which require it to undertake ‘*complex assessments and evaluations.*’ In those circumstances, the Court will not try to identify whether the measure was the only or the best measure possible, but merely whether the measure is manifestly appropriate or not ‘*having regards to the objective which the competent institution is seeking to pursue.*’<sup>332</sup>

Finally, it should be noted that national parliaments, just as with the subsidiarity principle, are also involved in the assessment of the proportionality of the proposed EU measure, according to the procedure defined in Protocol No. 2 to the Treaties. National parliaments have now been given wider powers to ensure respect of the proportionality principle. EU institutions may also oppose a proposed EU measure on the grounds of lack of proportionality.<sup>333</sup>

To conclude, an EU measure providing for an EU-wide RES-E support scheme would most probably pass the subsidiarity test. Proportionality might be more difficult to establish. However, and ultimately it would depend on the EU objective to be attained, the extent of regulation of the scheme, and the expected benefits of the measure for the EU as a whole in terms of RES-E generation. The EU legislator may become more wary when adopting binding and ambitious EU targets, as compliance with such targets may require instruments that are likely to be ambitious in both nature and scope.

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<sup>330</sup> Proposal for a directive of the European Parliament and of the Council establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC, COM(2001) 581 final, 23.10.2001, para. 23.

<sup>331</sup> D. Chalmers, G. Davies and G. Monti, *European Union Law*, (Cambridge University Press, 2<sup>nd</sup> edition, 2010), p. 368.

<sup>332</sup> See Case C-380/03, *Germany v Parliament and Council* [2006] ECR I-11573, para. 145; Case C-558/07 *S.P.C.M. and Others* [2009] ECR I-0000, para. 42; C-58/08, *Vodafone and Others* [2010] ECR I-0000, para. 52.

<sup>333</sup> *E.g.*, the Committee on the Environment, Public Health and Food Safety of the European Parliament proposed opposing a draft decision from the Commission on the grounds that it was not proportionate. See draft European Parliament resolution on the draft Commission decision determining transitional Union-wide rules for the harmonised free allocation of emission allowances pursuant to Article 10a of Directive 2003/87/EC, letters S to U, Doc. B7-0000/2011, 10.02.2011.

### 5.2.3 Legal basis in the Treaties for EU measures to promote RES-E generation

The competence of the European Union in the area of renewable energy has been established under the conditions detailed above. Any exercise of this competence must not only respect of the general principles of EU law, but must also find legal basis in the Treaties. The choice of legal basis for the exercise of EU competence is of tremendous importance (5.2.3.1). While Article 194 TFEU now provides a clear legal basis for energy policy that includes the promotion of renewable energy, the choice of the appropriate basis for the adoption of a common support scheme is less obvious than it might appear, in particular because of the intertwined objectives of the EU's renewable energy policy and the effects of the envisaged EU-wide TGCs scheme on the national energy mix (5.2.3.2).

#### 5.2.3.1 On the importance of choosing the correct legal basis

EU measures must have a clear legal basis. The Court has established a clear link between the obligation to indicate the legal basis and the duty to state reasons defined in Article 296 TFEU.<sup>334</sup> The latter duty enables the Court to exercise its power of review, and Member States and concerned third parties to '*learn of the conditions*' under which the European institutions have applied the Treaties.<sup>335</sup> The Court also relates the obligation to state the legal basis to the requirement of legal certainty, which entails that '*the binding nature of any act intended to have legal effects must be derived from a provision of Community law which prescribes the legal form to be taken by that act and which must be expressly indicated therein as its legal basis.*'<sup>336</sup> Situations may occur where the absence of any reference to a legal basis does not constitute an infringement of essential procedural requirements, in particular where the legal basis can be determined by reference to other parts of the measure. However, where the lack of any reference to the legal basis would leave the parties concerned and the Court uncertain as to the precise legal basis, an explicit reference is indispensable.<sup>337</sup>

The choice of legal basis has several consequences. It will influence the choice of legislative procedure, the types of measures that can be adopted, and the distribution of powers between the EU and the Member States. It will also influence the extent of the Union's competence, in accordance with the principle of conferral.<sup>338</sup> In that respect, and pursuant to Article 2.6 TFEU, '*The scope of and arrangements for exercising the Union's competences shall be determined by the provisions of the Treaties relating to each area.*'

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<sup>334</sup> Case 45/86 *Commission v Council*, [1987] 1493, para. 9; Case 203/86 *Spain v Council* [1988] ECR 4563, paras. 36-38.

<sup>335</sup> Case C-41/93 *France v Commission* [1994] ECR I-1829, para. 34.

<sup>336</sup> Case C-370/07, *Commission v Council*, [2009] ECR p.I-08917, para. 39; referring to Case C-325/91, *France v Commission* [1993] ECR I-3283, para. 26. On the indispensable requirement for a reference to a legal basis owing to the uncertainty that may otherwise be entailed for the Court and the parties concerned, see the landmark Case 45/86 *Commission v Council*, [1987] 01493, para. 9.

<sup>337</sup> Case 45/86 *Commission v Council*, [1987] 01493, para. 9.

<sup>338</sup> See R. Barents, 'The Internal Market Unlimited: Some Observations on the Legal Basis of Community Legislation,' *CML Rev.* (1993) 30, p. 92. See Opinion 2/94 [1996] ECR I-1759, para. 24; Opinion 2/00, point 5. See more recently on the burden put by the legal basis on the exercise of conferred powers: Case C-370/07, *Commission v Council*, [2009] ECR I-08917, paras. 48-49.

This means that the scope of the Union's competence may differ in different areas, even where all the areas are of shared competence. This has a direct impact on the choice of legal basis for RES-E support measures, as '*the scope of and arrangements for exercising the Union's competences*' may or may not allow harmonisation or coordination. Similarly, Protocol no. 25 on the Exercise of Shared Competence to the TFEU provides that '*when the EU has taken action in a certain area [of shared competence], the scope of this exercise of competence only covers those elements governed by the Union act in question and therefore does not cover the whole area.*' Because of the limits it imposes on the distribution of powers and the conditions it sets for the adoption and application of the legal act, the choice of legal basis is often the subject of debate and litigation between the different EU institutions.<sup>339</sup> Ultimately, choosing the wrong legal basis can result in the annulment of the legal act, with all the consequences this entails for its beneficiaries.<sup>340</sup>

The aim and the content of the proposed measure are decisive for the choice of legal basis.<sup>341</sup> They are among the objective factors amenable to judicial review on which the choice of the legal basis must be based on.<sup>342</sup> The following paragraphs examine which legal basis in the Treaties could be used as the basis for a measure requiring the establishment of an EU-wide TGCs scheme.

### 5.2.3.2 Possible legal bases in the TFEU for an EU-wide TGCs scheme

The Lisbon Treaty has clarified the Treaty framework for EU energy policy, introducing into primary law the previous legal practice and the contemporary objectives of EU energy policy. This long-awaited adoption of a separate legal basis answers various calls for more coherence in EU energy policy, while it may not clarify all issues.<sup>343</sup> In short, energy is an

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<sup>339</sup> See, H. Cullen and A. Charlesworth, 'Diplomacy by Other Means: The Use of Legal Basis Litigation as a Political Strategy by the European Parliament and Member States, (1999) 36 *Common Market Law Review*, p. 1243.

<sup>340</sup> On the requirement that the error of legal basis is more than purely formal as it could affect the applicable procedure and ultimately the content of the legal act, see: Opinion of Advocate General Kokott delivered on 26 March 2009 in Case C-13/07, *Commission v Council*, point 51. See also case law referred to: Case 165/87 *Commission v Council* [1988] ECR 5545, paras. 18 and 19; Case C-268/94 *Portugal v Commission* [1996] ECR I-6177, para. 79; Case C-491/01 *British American Tobacco (Investments) and Imperial Tobacco* [2002] ECR I-11453, para. 98; and Case C-210/03 *Swedish Match* [2004] ECR I-11893, para. 44.

<sup>341</sup> The choice of the legal basis for the measure must be made after an individual assessment. To that respect, the Court has set that the choice of the legal basis for EU measures '*must not rest on the legal basis used for the adoption of other [EU] measures which might, in certain cases, display similar characteristics.*' See, e.g., Case 131/86 *United Kingdom v Council* [1988] ECR 905, para. 29, and Case C-91/05 *Commission v Council* [2008] ECR I-0000, para. 106.

<sup>342</sup> See, *inter alia*, Case C-300/89 *Commission v Council* ('*Titanium dioxide*') [1991] ECR I-2867, para. 10; Case C-338/01 *Commission v Council* [2004] ECR I-4829, para. 54; and the case law there referred to.

<sup>343</sup> For a discussion on the remaining challenges after the adoption of the energy article in the Treaty, based on the draft Constitution for Europe, see: G. Rashbrooke, 'Clarification or Complication? The New Energy Title in the Draft Constitution for Europe,' *Journal of Energy & Natural Resources Law* (2004) Vol. 22 No 3, pp. 373-387.

As regards successive calls for adoption of a proper legal basis for EU energy policy, see: Report from the Commission to the Council on Civil Protection, Tourism and Energy, 03.04.1996, SEC(1996) 496, p.6, which proposed two alternatives '*to rationalize and bring into line the various components of energy policy so as to ensure their overall coherence,*' namely a consolidation of the treaties or a specific title

area of shared competences, and the objectives of EU energy policy are defined in Article 194 TFEU. The Union has already used Article 194 TFEU as a legal basis for energy legislation.<sup>344</sup> Despite the adoption of Article 194 TFEU, the choice of legal basis for EU-wide measures aiming to support renewable electricity generation is not as obvious as it might first appear. This is partly because of intertwined objectives of EU energy policy and partly because of the limits imposed by both primary and secondary law on the exercise of EU competence in this domain. Clarifying the choice of legal basis for an EU-wide support scheme has important consequences for the limits imposed on EU powers, the legislative procedure, and the overall coherence of EU actions to promote renewable energy.

Based on the case law of the Court referred to in the previous section, the choice of the legal basis for the establishment of an EU-wide TGCs scheme must be based on the predominant aim and content of the measure. Article 194 TFEU, and in particular Article 194.1(c), defines as one of the explicit objectives of EU energy policy the promotion of the development of renewable forms of energy. It reads as follows:

*‘1. In the context of the establishment and functioning of the internal market and with regard for the need to preserve and improve the environment, Union policy on energy shall aim, in a spirit of solidarity between Member States, to:*

- (a) ensure the functioning of the energy market;*
- (b) ensure security of energy supply in the Union;*
- (c) promote energy efficiency and energy saving and the development of new and renewable forms of energy; and*
- (d) promote the interconnection of energy networks.*

*2. Without prejudice to the application of other provisions of the Treaties, the European Parliament and the Council, acting in accordance with the ordinary legislative procedure, shall establish the measures necessary to achieve the objectives in paragraph 1. Such measures shall be adopted after consultation of the Economic and Social Committee and the Committee of the Regions.*

*Such measures shall not affect a Member State’s right to determine the conditions for exploiting its energy resources, its choice between different energy sources and the general structure of its energy supply, without prejudice to Article 192(2)(c).*

*3. By way of derogation from paragraph 2, the Council, acting in accordance with a special legislative procedure, shall unanimously and after consulting the European Parliament, establish the measures referred to therein when they are primarily of a fiscal nature.’<sup>345</sup>*

This wording requires the predominant aim and content of an EU-wide TGCs scheme to be carefully assessed. The promotion of renewable electricity is an excellent example of an area that pursues several EU objectives at the same time. However, the Court has also been reluctant to recognise dual legal bases. In the event of doubt, the Court tries to

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on energy. See also another document from the European Commission containing the same call: *White Paper – An Energy Policy for the European Union*, European Commission, 13.12.1995, COM(1995) 682 final, paras. 130-131.

<sup>344</sup> Council Decision 2010/385/EU of 24 June 2010 on the conclusion of the Statute of the International Renewable Energy Agency (IRENA) by the European Union is based on Article 194.2 and 218.6(a) TFEU (OJ L 178 of 13.07.2010, p.17). The European Commission based its proposal for a regulation on energy market integrity and transparency adopted on 8 December 2010 (COM(2010) 726 final) on Article 194.2 TFEU.

<sup>345</sup> Emphasis added.

identify which aim is predominant, taking into account the principles on which a measure is based and its content rather than its effects.<sup>346</sup>

In the case of a TGCs scheme, the issue for the Court would mostly concern the identification of the correct legal basis rather than the recognition of a dual legal basis. If we look at the aim of a TGCs scheme, Article 194 TFEU would seem to be the correct basis. As stated in the introductory chapter to this thesis, the primary purpose of a TGCs scheme is to support the generation of new RES-E, while offering flexibility in methods of compliance with a quota obligation. Directive 2009/28/EC similarly defines the purpose of a support scheme as being the promotion of *'the use of energy from renewable sources by reducing the cost of that energy, increasing the price at which it can be sold, or increasing, by means of renewable energy obligation or otherwise, the volume of such energy purchased.'*<sup>347</sup> The directive itself makes it clear that the primary purpose of support schemes, including green certificates, should be to promote the use of renewable energy, which is part of the objectives of the EU energy policy defined in Article 194.1(c) TFEU. The latter refers more precisely to the promotion of the 'development' of renewable energy, while the directive attributes to support schemes the objective of promoting the 'use' of renewable energy. Reading the two texts together, one can interpret the increased 'use' of renewable energy as being part of the wider objective of its 'development'. The development of renewable energy can indeed be supported by other means, such as, for example, R&D that promotes the development of new RES technologies but not their use. Consequently, the objective of increased use of RES-E through a TGCs scheme would come within the objective of the development of renewable energy as defined in Article 194.1(c) TFEU.

The fact that an EU-wide TGCs scheme would aim primarily to support RES-E generation would not exclude concomitantly the achievement of other goals. Instruments often have positive effects on several policy objectives at the same time. As underlined by the Commission, *'increasing the share of renewables in the EU electricity has well recognised benefits ... in particular: improved security of energy supply; enhanced competitive edge for the EU in the renewable energies technology industries; mitigation of greenhouse gas emissions by the EU power sector; mitigation of regional and local pollutant emissions; improved economic and social prospects especially for rural and isolated regions.'*<sup>348</sup> Similarly, the European Council concluded in 2007 that a common 20 per cent share of renewable energy in final energy consumption by 2020 and the cost-efficient development of all renewable energy sources contributed to security of energy supply, competitiveness and sustainability.<sup>349</sup> In addition, the Court referred in the *PreussenElektra* judgment to the contribution made to the protection of the environment by the RES-E support scheme

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<sup>346</sup> See Case C-155/91 *Commission v Council* [1993] ECR I-939, paras 19 and 21; Case C-42/97 *Parliament v Council* [1999] ECR I-869, para. 38; Case C-36/98 *Spain v Council* [2001] ECR I-779, para. 59; Case C-336/00 *Huber* [2002] ECR I-7699, para. 31; Case C-211/01 *Commission v Council* [2003] ECR I-8913, para. 39; Case C-338/01 *Commission v Council* [2004] ECR I-4829, para. 55. On the application of the 'predominant purpose rule' by the Court, see D. Chalmers, 'The Single Market: from Prima Donna to Journeyman', in J. Shaw and G. More (eds.), *New Legal Dynamics of the European Union* (Oxford University Press, 1995), 69-71.

<sup>347</sup> Article 2 (k), Directive 2009/28/EC.

<sup>348</sup> *The support of electricity from renewable energy sources*, Communication from the Commission, COM(2005) 627 final, 07.12.2005, p.3.

<sup>349</sup> European Council, Conclusions, 8-9 March 2007, Part IV, point 7.

*‘in so far as it contributes to the reduction in emissions of greenhouse gases which are amongst the main causes of climate change which the European Community and its Member States have pledged to combat.’*<sup>350</sup> Finally, Directive 2009/28/EC refers to the positive impact that the development of the RES market has on regional and local development, exports, social cohesion and employment.<sup>351</sup> These other ‘benefits’ of a RES-E support scheme are covered by other legal bases in the TFEU, in particular environmental policy (Article 192), internal market (Article 114), industrial policy (Article 173), economic, social and territorial cohesion (Article 174).

The need to secure the attainment of the different objectives of EU energy policy resulted in the final wording of Article 194.1 TFEU, which underlines that energy policy is conducted *‘in the context of the establishment and functioning of the internal market and with regard for the need to preserve and improve the environment, ... in a spirit of solidarity between Member States...’* The intertwining of these objectives or *‘guiding principles’*<sup>352</sup> raises some issues with regard to their hierarchy, consistency in the drafting of EU law and the application of Article 194 TFEU. First, as concerns the reference to the internal market, two main interpretations can be advanced following either a literal or a teleological approach. According to a literal interpretation of the first sentence of Article 194.1 TFEU, the EU energy policy could only be conducted within the scope of the internal market. As noticed by several authors, this would considerably limit the action of the EU in energy policy.<sup>353</sup> It is doubtful that the internal market was thought to be the ultimate barrier or objective of EU energy policy. The internal market is a *‘strategic’* but not ultimate objective in itself, as its establishment and completion ensure the attainment of wider objectives to the benefit of EU undertakings and citizens, as embodied in the four freedoms.<sup>354</sup> Second, the reference to the protection of the environment directly in Article 194.1 TFEU is a reiteration of the principle of integration enounced in Article 11 TFEU. Reproducing this requirement in the article on energy itself – which is not done for other policy areas – insists on the importance of environmental protection in the definition and implementation of energy policy. It should also be noticed that the provisions on environmental protection contained in Articles 191-193 TFEU, which have not been particularly amended by the Treaty of Lisbon,<sup>355</sup> refer explicitly to the fight against

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<sup>350</sup> Case C-379/98, *PreussenElektra AG v Schleswag AG*, [2001], I-02099, para. 73.

<sup>351</sup> Recital 4, Directive 2009/28/EC.

<sup>352</sup> Ehrlicke and Hackländer refer to them as ‘guiding principles’ instead of objectives in order to underline their difference in legal nature and significance and to *‘set them apart from the energy policy goals.’* U. Ehrlicke and D. Hackländer, ‘European Energy Policy on the Basis of the New Provisions in the Treaty of Lisbon,’ in A. Bausch and B. Schwenker (eds.) *Handbook Utility Management* (Springer, 2009), p.745.

<sup>353</sup> See S. Andoura, L. Hancher and M. van der Woude, *Towards a European Energy Community: A Policy Proposal*, Notre Europe, Studies & Research No. 76, 2010, p. 98.

<sup>354</sup> On the qualification of the internal market as a strategic objective of the EU, see in particular: M. Monti, *A New Strategy for the Single Market – At the service of Europe’s economy and society*, Report to the President of the European Commission José Manuel Barroso, 9 May 2010, p. 13. On the role of the internal market in the attainment of Union’s objectives, see Preamble and Article 3.3 TEU, as well as Article 26, §§ 1-2 TFEU.

<sup>355</sup> On the relatively limited changes made by the Treaty of Lisbon to the EU environmental policy, see: H. Vedder, ‘The Treaty of Lisbon and European Environmental Law and Policy,’ *Journal of Environmental Law* (2010), pp. 1-15.



climate change as one of the objectives of the Union policy.<sup>356</sup> This could represent an additional area of overlapping between the environment and energy chapters, considering that the adoption of EU RES measures have usually been justified by the necessity to combat climate change.<sup>357</sup> However, as a large number of EU measures applicable to various sectors also contribute to the mitigation of climate change (e.g., transport), the reference remains a guiding principle of integration of environmental objectives. Third, Article 194.1 refers to the principle of *solidarity* between Member States. The TFEU is referring most often to solidarity than the previous treaties, without defining the concept in great details.<sup>358</sup> When applied to the energy sector, it is obvious that solidarity plays an important role in relation to security of supply.<sup>359</sup> By contrast, the extent to which solidarity can be applied to the promotion of RES-E is unclear. A far reaching interpretation could be that Member States have to express solidarity in the development of their renewable energy sources. However, this seems to be a too extensive interpretative based on the limits defined currently in primary and secondary EU law as regards the effects of EU measures on national resources and energy mix.

This allows another comment on the link between Article 194 TFEU and other possible legal basis for RES policy in the Treaty. Previous EU directives containing measures in favour of RES-E promotion have been adopted on different legal bases that, since they continue to exist, may now become concurrents with Article 194 TFEU. Both Article 192 (environmental protection) and Article 114 (internal market) have been used. However, as Article 194 TFEU now explicitly includes the promotion of renewable energy within its scope of application, and as an objective of EU energy policy, it is the position of the present author that this would be the appropriate legal basis for the adoption of EU measures intended to support RES-E generation. However, if a measure applicable to the RES sector has as primary objective the establishment and completion of the internal market, Article 114 TFEU would be the correct legal basis.

The reasoning would be slightly different if the choice of legal basis were based not solely on the aim of the measure, but also on its content and effects. The effects of the measure are explicitly addressed in Article 192.2(c) TFEU (environmental protection), which reads as follows:

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<sup>356</sup> Article 191.1 TFEU.

<sup>357</sup> See e.g., Recital 1, Directive 2009/28/EC:

*‘The control of European energy consumption and the increased use of energy from renewable sources, together with energy savings and increased energy efficiency, constitute important parts of the package of measures needed to reduce greenhouse gas emissions and comply with the Kyoto Protocol to the United Nations Framework Convention on Climate Change, and with further Community and international greenhouse gas emission reduction commitments beyond 2012. Those factors also have an important part to play in promoting the security of energy supply, promoting technological development and innovation and providing opportunities for employment and regional development, especially in rural and isolated areas.’*

<sup>358</sup> See in particular a cross-reference to the principle of solidarity in the domain of energy in Article 122 TFEU, the effects of which remains to be interpreted.

For an early Court case law on the definition of the ‘*duty of solidarity*’ as a EU law principle, see Case 39/72, *Commission v Italy*, [1973] ECR 101, para. 25. See later references in energy cases: C-413/04 *Parliament v Council*, [2006] ECR I-11221, para. 68; and C-414/04, *Parliament v Council*, [2006] ECR I-11279, para. 45.

<sup>359</sup> On the role of the solidarity principle in relation to security of energy supply, see: U. Ehrlicke and D. Hackländer, ‘European Energy Policy on the Basis of the New Provisions in the Treaty of Lisbon,’ in A. Bausch and B. Schwenker (eds.) *Handbook Utility Management* (Springer, 2009), p. 752.

*‘2. By way of derogation from the decision-making procedure provided for in paragraph 1 and without prejudice to Article 114, the Council acting unanimously in accordance with a special legislative procedure and after consulting the European Parliament, the Economic and Social Committee and the Committee of the Regions, shall adopt: [...]*

*(c) measures significantly affecting a Member State’s choice between different energy sources and the general structure of its energy supply.’*

The new structure of the TFEU seems to present the EU legislator with a paradox: how to adopt a measure with a topic that is entirely addressed by Article 194 TFEU, but with intended effects on energy mix that require the application of Article 192.2 TFEU, which comes under environmental protection. Indeed, Member States still have competence to choose between different energy sources and to determine the general structure of their energy supplies. Should the Council decide that, for environmental reasons, the Union’s energy policy should be elaborated in a way that would significantly affect the competence of Member States in this respect, this would require the application of Article 192.2 (c) TFEU. Pursuant to the Treaty’s provisions, such an alteration to Member States’ sovereign powers, is only allowed for reasons of environmental protection, since the legal basis for doing so forms part of the Treaty’s Title XX Environment (Articles 191-193 TFEU). The requirement of an environmental ground for a measure affecting a Member State’s right to determine its energy mix is also confirmed by the reference made in Article 194.2, second paragraph, which refers directly and solely to Article 192.2(c) TFEU: *‘Such measures shall not affect a Member State’s right to determine the conditions for exploiting its energy resources, its choice between different energy sources and the general structure of its energy supply, without prejudice to Article 192(2)(c).’* The adoption of a mandatory EU-wide TGCs scheme would be likely to affect Member States energy mix policy. As demonstrated by the EU ETS, an EU-wide scheme requires a high-level of regulatory detail in order to function properly. For example, the eligibility of certain technologies for EU-wide TGCs will affect directly the types of renewable energy sources developed in each Member State. This contrasts with the so-called ‘flexibility’ in compliance left to Member States in Directive 2009/28/EC. Indeed, such a scheme would affect *‘the conditions for exploiting its energy resources,’* as well as *‘its choice between different energy sources,’* and ultimately *‘the general structure of its energy supply.’*

A central element in the assessment of the effects of the measure could be the interpretation to be given to the term ‘significantly.’ Several provisions of EU secondary law on RES already orient Member States’ choices between different energy sources, but not to a ‘significant’ extent. In the text of the proposal for the directive, the Commission took the view that Article 107.1 ECT was the correct legal basis, rather than 107.2 ECT, because the proposals would *‘not significantly affect Member States’ choice between different energy sources or the general structure of their energy supply.’* Here the Commission argued that *‘in general, renewable energy is a close substitute for conventional energy and is supplied through the same infrastructure and logistic systems. All Member States already use renewable energy and all have already decided to increase renewable energy’s share.’*<sup>360</sup> As argued by Vandenberghe, this could entail that EU measures that affect, but not to a significant extent, Member States’ energy mix and structure of energy supply could still be adopted under the ordinary procedure of Article

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<sup>360</sup> Proposal for a Directive of the European Parliament and of the Council on the promotion of the use of energy from renewable sources, COM(2008) 19 final, 23.01.2008, pp. 8-9.

192.1 TFEU.<sup>361</sup> This seems however to be a far reaching interpretation that would bring an additional element of complexity in the exercise of EU energy competence, and a risk of inconsistency for EU energy law.

The extent to which an EU-wide TGCs scheme would ‘significantly’ affect Member States’ choices between different energy sources ‘and’ the general structure of their energy supplies would depend on the regulation of the scheme. It should be noted here that the two conditions are cumulative. An EU-wide TGCs scheme would not automatically have these two consequences. It would certainly affect Member States’ choices between different energy sources, but not necessarily the general structure of their energy supplies. For example, an EU TGCs scheme that is technology neutral might be better able to pass the test of ‘a significant effect on fuel mix,’ because it would still provide for flexibility. A scheme that provides for technology differentiation might have a more ‘significant’ impact on the choice of fuel-mix and the structure of energy supply.<sup>362</sup> Similarly, an ambitious EU quota obligation accompanied by a highly detailed system of regulation might, assuming it passed the test of proportionality, affect both choices of energy mix and structures of energy supply.

In addition to the material difference between Article 194.2 and 192.2 TFEU, there is an important procedural difference. Measures based on Article 194.2 TFEU are subject to the ordinary legislative procedure, while those based on Article 192.2 TFEU are subject to a special legislative procedure where the Council act unanimously after consulting the Parliament, the Economic and Social Committee (ESC) and the Committee of the Regions (CoR). Meanwhile, the Council can decide, on unanimous decision on a proposal from the Commission and after consulting the Parliament, the ESC and the CoR, to also apply the ordinary legislative procedure to the domains referred to in Article 192.2. This would reduce the procedural difference in the adoption of EU measures between the two articles.

For purpose of exhaustivity, it must finally be mentioned that any EU measure applicable to the energy sector and which is ‘*primarily of a fiscal nature*’ even if it aims to promote RES-E generation, will fall under the scope of Article 194.3 TFEU and be subject to unanimity voting at the Council after consultation of the Parliament. However, TGCs schemes are not expected to include any element of fiscal nature as they remain regulatory instruments.

The above argumentation focuses not only on the content of an EU-wide TGCs scheme, but also on its effects on Member States’ choices between different energy sources. Although the Court has argued that the predominant aim must guide the choice of legal basis, it is difficult not to take into account the effects that an EU-wide TGCs scheme would have on Member States’ fuel-mixes and structures of energy supply, when these effects are explicitly addressed by the Treaties. In such cases, the Court has also recognised that ‘*where the Treaty contains a more specific provision that is capable of constituting the legal basis for the measure in question, the measure must be founded on*

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<sup>361</sup> W. Vandenberghe, ‘EU rules concerning energy and investment after the Lisbon Treaty,’ in M. Roggenkamp and U. Hammer, *European Energy Law Report VIII*, (Intersentia, 2011), forthcoming, p.13.

<sup>362</sup> As the use of certain energy sources, like biomass, may require other infrastructures than the ones already in place.

*that provision.*<sup>363</sup> If an EU-wide TGCs scheme would bring about the specific effects referred to in Article 192.2(c) TFEU, its adoption should be based on the latter article.

In conclusion, Article 194.2 TFEU would indeed be the correct legal basis for any EU legislative measures that aimed to promote the development, including the use, of new and renewable forms of energy, where such measures were justified by reasons of environmental protection, and did not affect a Member State's right to determine the conditions for exploiting its energy resources, its choices between different energy sources and the general structure of its energy supply. However, Article 192.2(c) TFEU would be the correct legal basis for any EU legislative measures that aimed to promote the development of renewable energy sources for environmental purposes and that would significantly alter a Member State's choice of energy mix and the structure of its energy supply. To fulfil the conditions contained in Article 192.2(c) TFEU, the regulation of an EU-wide TGCs scheme would have to be relatively prescriptive and the quota obligation relatively high. Again, these requirements could raise issues more with respect to proportionality than subsidiarity.

### **5.2.3.3 The restrictive effect of Directive 2009/28/EC regarding Member State's control over national support schemes**

Another restriction on the harmonisation of support schemes at EU level is contained in secondary EU law. Directive 2009/28/EC defines a strong limit as to the content of the proposals the Commission can put forward when reporting on the application of the directive. Article 23.8 provides that:

*'On the basis of that report, the Commission shall submit, if appropriate, proposals to the European Parliament and the Council, addressing ... in particular:  
- ... appropriate adjustments of the cooperation measures provided for in this Directive in order to improve their effectiveness for achieving the target of 20%. Such proposals shall neither affect the 20% target nor Member States' control over national support schemes and cooperation measures.'*

The last part of this provision clearly prevents the Commission from putting forward proposals that would affect Member States' control over national support schemes. Retaining control over such schemes has always been non-negotiable as far as the Member States are concerned. As a consequence, Directive 2009/28/EC prohibits any harmonisation of support schemes at EU level that would affect Member States' ability to control their existing national schemes. Accordingly Article 23.8 would need to be amended for any such harmonisation (which would also, of course, be subject to the requirements of the subsidiarity and proportionality principles) to occur.

## **5.3 Harmonising cooperation modalities for compliance purposes: effects of Directive 2009/28/EC on coordinated TGCs schemes**

Since harmonisation in favour of one EU-wide support scheme is the subject of persistent political opposition and also faces some legal limits in secondary legislation, the European

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<sup>363</sup> Case C-338/01 *Commission v Council* [2004] ECR I-4829, para. 60; repeated in Case C-533/03 *Commission v Council* [2006] ECR I-1025, para. 45.

Commission has instead argued that there is a need for ‘cooperation’ between and ‘optimisation’ of support schemes. In that respect, Directive 2009/28/EC is intended to complement national support schemes without altering them and to facilitate cross-border financing of renewable energy for compliance purposes. This need for cooperation has resulted in different initiatives, including the coordination of support schemes. The highest level of coordination would be found in a joint support scheme, discussed below (5.3.1). The directive’s requirements applying to the coordination of TGCs schemes between two or more Member States are examined thereafter (5.3.2).

### **5.3.1 From cooperation and optimisation to coordination of support schemes for target compliance**

Although harmonisation was the initial proposal, cooperation has long been seen as the second-best option. As early as 1986, European institutions agreed on the following: the necessity to ‘*ensure cooperation at Community level with a view to the coherence, if necessary, of national legislative, financial and information measures*’; the need to ‘optimise’ the exploitation of renewable energy sources within the Community; and that ‘*Member States should engage in a tighter exchange of information on the development of the exploitation of new and renewable energy sources through concerted action and, if necessary, ensure coordination at Community level.*’<sup>364</sup> Later, in 1996, the Commission emphasised the necessity of ‘*strengthening cooperation between the Member States*’ in the area of renewable energy, following that statement with a proposal for a Council Decision concerning the organisation of cooperation around agreed Community energy objectives.<sup>365</sup> Although the consensus was established, how to proceed was still not settled in 2005. At that time, the Commission was convinced that the ‘*time for coordination*’ of support schemes had arrived, based on a two-pillar approach: ‘cooperation’ between Member States; and ‘optimisation’ of the impact of national schemes. This was thought likely to lead to a ‘convergence’ of the systems.<sup>366</sup> The distinction between coordination and cooperation is not always consistent in the different documents or resolutions. In the 2005 version of the debate, coordination is to be understood as the broader objective, with cooperation and optimisation being ways of achieving it. In the 2008 accompanying document to the proposal for the future Directive 2009/28/EC, the Commission recalls the importance of cooperation and optimisation, but the definition of cooperation remains vague. There is almost a sense of confusion when cooperation is defined both as the exchange of experiences between countries operating identical schemes, such as, for example, the International Feed-in Cooperation,<sup>367</sup> and also as the coordination of support schemes with the aim of a possible merger, such as that envisaged between Norway and

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<sup>364</sup> Council Resolution of 26 November 1986 on a Community orientation to develop new and renewable energy sources, OJ C 316, 09.12.1986, p. 1.

<sup>365</sup> *Energy for the Future: Renewable Sources of Energy. Green Paper for a Community Strategy*, COM(1996) 576, 20.11.1996, pp. 32-33; Proposal for a Council Decision concerning the organisation of cooperation around agreed Community energy objectives, COM (96) 431 final, 4 October 1996. The Commission viewed that particular decision as ‘*an appropriate framework for facilitating an effective cooperation between Member States in the field of renewables.*’ The proposal was however withdrawn.

<sup>366</sup> *The support of electricity from renewable energy sources*, Communication from the Commission, COM(2005)627 final, 07.12.2005, p. 16.

<sup>367</sup> The International Feed-in Cooperation, established by Germany, Spain and Slovenia, was first initiated in June 2004 at the Bonn summit and was formalised in October 2005 by the signature of a Joint Declaration. See the Cooperation’s website at: <<http://www.feed-in-cooperation.org>>.

Sweden. Exchanges of information and experiences regarding the operation of schemes would more resemble optimisation, which concerns the improvement of the support schemes focusing on their ‘*economic mechanisms and cost-effectiveness*’.<sup>368</sup> It is from this perspective that a ‘convergence’ of support schemes is foreseen, by exchanging best practices and also by putting schemes in competition.<sup>369</sup> Here the convergence takes place between schemes of the same nature, but also between different types of schemes that borrow elements from others.<sup>370</sup> The Commission also has a tendency to include within the concept of ‘optimisation’ the streamlining of the regulation of administrative and access to network rules.<sup>371</sup> Even if both the latter regimes support RES-E generation, they are based on two distinctive regulatory approaches, with the streamlining of administrative and grid barriers mainly operated by EU harmonisation measures in secondary EU law.

Although there is still no harmonisation of provisions on support schemes at EU level, Directive 2009/28/EC does provide rules on how Member States may collaborate in order to meet their binding RES-E targets. Consequently it would be false to suggest that no harmonisation exists at all. Directive 2009/28/EC harmonises for the first time the forms and effects of cooperation undertaken between Member States in order to comply with their mandatory targets, including the coordination of support schemes. In that respect, the directive must be regarded as a milestone for cooperation between Member States in the development of renewable energies, although there is certainly some way to go. In the context of the directive, ‘cooperation’ taking place in the context of compliance is limited to the optional mechanisms that facilitate the cross-border support of RES: statistical transfers; joint projects between Member States / joint projects between Member States and third countries; and joint support schemes. Cooperation for purposes other than compliance is also possible but is not harmonised.<sup>372</sup>

One of the core innovative and intensively negotiated elements in the directive is its harmonisation of the manner in which Member States can voluntarily support renewable energy production in another Member State, where the involved Member States agree on the extent of the support and on the extent to which the resulting energy will count towards

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<sup>368</sup> As defined in: *The support of electricity from renewable energy sources*, Communication from the Commission, COM(2005)627 final, 07.12.2005, p.16; *The support of electricity from renewable energy sources*, Commission Staff Working Document, accompanying document to the proposal for a directive of the European Parliament and of the Council on the promotion of the use of energy from renewable sources, SEC(2008) 57, 23.01.2008, p. 13.

<sup>369</sup> During the co-decision procedure for the adoption of Directive 2001/77/EC, both the European Commission and the European Parliament stressed that competition between the different schemes could be beneficial. This view was defended by the MEP and Rapporteur Mechthild Rothe: ‘*Before we introduce a harmonised support scheme, competition between different systems should indicate which model will be the best for the whole of Europe.*’ Recommendation for second reading on the Council common position for adopting a European Parliament and Council directive on the promotion of electricity produced from renewable energy sources in the internal electricity market, by the Committee on Industry, External Trade, Research and Energy, Doc. A5-0227/2001 final, 22 June 2001, p. 16.

<sup>370</sup> E.g., TGCs scheme integrating elements of price security by the definition of a minimum purchase price, or elements of technology differentiation.

<sup>371</sup> *The support of electricity from renewable energy sources*, Communication from the Commission, COM(2005)627 final, 07.12.2005, p.16.

<sup>372</sup> This is mentioned in Recital 35 of Directive 2009/28/EC that provides as examples the exchange of information and best practices.

the targets of the participating states.<sup>373</sup> Because the directive introduces a new framework for the support of renewable energy, in particular RES-E, the need for cooperation between Member States must be further appraised against the background of Directive 2009/28/EC. This need for cooperation is emphasised in the provisions of Directive 2009/28/EC for two reasons. First, Directive 2009/28/EC sets mandatory targets for each Member State, which will be obliged to comply either by increasing national production of RES-E or by using cooperation mechanisms. Second, as national renewable energy policies are no longer in their infancy, the cheapest renewable energy sources have already been exploited and *‘the “low hanging fruit” have been plucked.’*<sup>374</sup> Cooperating and trading in order to achieve compliance between countries with different RES potentials and exploitation costs represents a series of advantages that Directive 2009/28/EC intends to catch.

The logic behind the establishment of the cooperation mechanisms can be compared to that behind the flexibility mechanisms defined under the Kyoto Protocol to the UNFCCC.<sup>375</sup> The intention is to allow Member States to reach their targets cost-effectively by supporting RES production in countries with higher and cheaper potential, thus reducing compliance costs. Although the logic may be similar, the European legislator has been careful not to use the same terms in Directive 2009/28/EC (*i.e.*, ‘cooperation’ and not ‘flexibility’ mechanisms). The form of this informal market, which is based on supply and demand for the transfer of amounts of energy to be counted for compliance, has not been set, and will probably take some years to emerge. Besides the Transparency Platform, a more structured meeting place of a confidential nature has been established between national authorities. CA-RES (2010-2013) is an EU-financed project that aims to assist and coordinate Member States’ actions in the transposition and implementation of the directive, and ultimately in complying with national targets. The project is also expected to enable potential cooperation, by identifying possible common interests between Member States.<sup>376</sup>

On the basis of the forecast documents submitted by Member States to the Commission in December 2009 in accordance with Article 4.3 of Directive 2009/28/EC, the Commission found that at least ten Member States expected to have a surplus of renewable energy in their final energy consumption in 2010. Meanwhile five Member States expected to be in deficit, while twelve Member States were not expecting either to produce a surplus or to

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<sup>373</sup> The objective is underlined in Recital 25, Directive 2009/28/EC.

<sup>374</sup> T. Howes, ‘“Trading” renewable energy and types of national support schemes,’ in P. Hodson, C. Jones and H. Van Steen, *EU Energy Law – Renewable Energy Law and Policy in the European Union*, EU Energy Law Coll. Vol. III Book One (Claeys & Casteels, 2010), p. 105.

<sup>375</sup> For a comparison of the two regimes and mechanisms, see *RE-Shaping – Shaping an effective and efficient European renewable energy market*, D4 Report, ‘Design options for cooperation mechanisms between Member States under the new European Renewable Energy Directive,’ 2010, pp. 5-6.

<sup>376</sup> Concerted Action on the Renewable Energy Sources Directive (CA-RES) is a project financed through the Intelligent Energy Europe (IEE) Programme. It started in July 2010 and will continue until July 2013. It is composed of representatives from the 27 EU Member States, plus Croatia and Norway. It is structured in nine working groups focusing on the following topics: (1) cooperation mechanisms and NREAPs (Articles 3, 4, 6-11); (2) calculation methodology (Article 5); (3) authorisation of plants and infrastructure (Article 13); (4) RES and district heating, RES in buildings (Article 13, 16); (5) training and information + guarantees of origin (Article 15); (6) electricity networks (Article 16); (7) biogas networks (Article 16); (8) RES in transport and biofuels (Articles 17-19); (9) biomass mobilisation and sustainability (Articles 4, 17.9). The CA-RES website is at <<http://www.ca-res.eu>>.

require a transfer to meet their targets.<sup>377</sup> The Commission concluded that the five Member States that expected a deficit would need to use the cooperation mechanisms,<sup>378</sup> but this would only represent a relatively small quantity of energy (approximately 2 MTOE, less than 1 per cent of the total renewable energy needed in 2020). It concluded that this reflected, on the one hand, Member States' expectations that they would develop RES themselves in a cost-effective manner and, on the other hand, '*their desire to reap the economic social and environmental benefits of developing renewable energy sources nationally.*' Another evaluation based on the NREAPs submitted to the Commission six months later in June 2010, in accordance with Article 4.2 of Directive 2009/28/EC, found that eleven Member States expected to have a surplus, while sixteen Member States expected to reach their target although without any surplus.<sup>379</sup> No Member States anticipated being in deficit, since they would use the cooperation mechanisms to make good the anticipated deficits identified in the forecast documents. Italy and Luxembourg noted their dependence on cooperation mechanisms to fulfil their target obligations.<sup>380</sup> Italy intended to develop joint projects with third countries (Switzerland, Albania, Montenegro and Tunisia), while Luxembourg had pre-identified and started negotiations with Member States that anticipated surpluses and with which it envisaged cooperation.<sup>381</sup>

Recourse to cooperation mechanisms is voluntary and the extent of the cooperation is also left to the discretion of the participating Member States. Taking the example of support schemes, the level of coordination may vary widely, from partial coordination to a joint scheme. This is underlined by the directive itself, which envisages the situation where '*two or more Member States [...] decide, on a voluntary basis, to join or partly coordinate their national support schemes.*' There is no precedent for this at EU level, and the forthcoming Norwegian-Swedish initiative will be the first full-scale experiment in Europe. The two countries envisage linking their schemes and create a common TGCs market where parties on the two sides of the border can trade freely TGCs for compliance. The national schemes remain separated but are highly coordinated. It will consequently not be a joint scheme, but a joint market with two highly coordinated schemes. At national level, decentralised or federal states provide some useful examples of possible levels of coordination between TGCs schemes, such as those like in the UK and in Belgium. The experience of the UK

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<sup>377</sup> *Summary of the Member State Forecast Documents*, European Commission, Directorate-General for Energy, Transparency Platform, 2010, available at <[http://ec.europa.eu/energy/renewables/transparency\\_platform/transparency\\_platform\\_en.htm](http://ec.europa.eu/energy/renewables/transparency_platform/transparency_platform_en.htm)>.

<sup>378</sup> According to the same summary of the forecast documents, eleven Member States envisaged opting for joint projects in the situation they needed to use cooperation mechanisms, and seven expressed an interest in proceeding by means of statistical transfers. (*Ibid.*, p. 3.)

<sup>379</sup> L.W.M. Beurskens and M. Hekkenberg, *Renewable Energy Projections as Published in the National Renewable Energy Actions Plans of the European Member States*, ECN Policy Studies, Doc. ECN-E-10-069, February 2011.

<sup>380</sup> Belgium and Denmark, which both predicted deficits in their forecast documents, noted in their NREAPs to meet their targets using domestic resources and, as a last resort, joint projects or statistical transfers. Malta also predicted a deficit, but was as yet unable to state how it would use the cooperation mechanisms.

<sup>381</sup> The relatively high target set for Luxembourg (from 0.9 per cent share of RES in gross final consumption of energy in 2005 to 11 per cent in 2020) is also explained by the country's high GDP, which is one of the starting points for calculating the target. Although the target may be high, it remains close to the average compared to other Member States. The difference is that Luxembourg has limited access to renewable energy sources, and is consequently obliged to find alternative solutions to national resources.



exemplifies how schemes and trading can be coordinated. The case of Belgium and its four separate TGCs regimes exemplifies the barriers that exist to the coordination of TGCs schemes. A truly joint TGCs scheme, operating under a single legislative framework, would require a high degree of integration, that would entail the sharing of sovereignty on certain issues (*e.g.*, permitting installations to issue TGCs or collection of compliance fees).

This bottom-up approach to cooperation based on voluntary cooperation under harmonised rules has been reiterated in the Energy 2020 Strategy.<sup>382</sup> The Commission has been defending, both in the Strategy and in its 2011 report on progress towards the 2020 renewable energy target,<sup>383</sup> a more pro-active stance as to the use of cooperation mechanisms. Cooperation and convergence are the two main drivers identified by the Commission. Cooperation should enable reduction in the costs of developing renewable energy by benefiting from cost efficiency. If this philosophy is applied to the full, wind turbines will be installed in windy places and solar panels in sunny ones in order to ‘*work together and produce renewable energy where it costs less.*’ The Commission estimates that such a strategy could save up to EUR 10 billion annually. Convergence of national support schemes should facilitate trade and enable ‘*a more pan-European approach to development of renewable energy sources.*’ The Commission will assess in its 2014 review provided for by Directive 2009/28/EC how the cooperation mechanisms have been utilised by the Member States.

### **5.3.2 Coordinated TGCs schemes for compliance with Directive 2009/28/EC**

How Member States may comply with their targets by coordinating their national support schemes is harmonised in Article 11 of Directive 2009/28/EC (‘Joint support schemes’). As the provisions apply equally to partially and totally coordinated schemes, hereinafter the term ‘coordinated scheme’ is deemed to cover both and will be used hereinafter. Another preliminary point concerns the scope of application of Article 11, which encompasses the use of both electricity and heating and cooling from RES. As the scope of this thesis is limited to TGCs schemes for RES-E generation support, schemes related to heating and cooling are not covered in the following.

First it is important to note that coordination of the schemes should not jeopardise the Member States’ ability to fulfil their obligations under Article 3 (*i.e.*, mandatory targets).<sup>384</sup> In principle, this should not happen, since Member States will establish

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<sup>382</sup> *Energy 2020: A strategy for competitive, sustainable and secure energy*, Communication from the Commission, COM(2010) 639 final, 10.11.2010; Council Conclusions on *Energy 2020: A Strategy for competitive, sustainable and secure energy*, 3072th Transport, Telecommunications and Energy Council meeting, Brussels, 28 February 2011, point I.5.c. The Council has expressed itself in more general and less pro-active terms than the Commission regarding the use of cooperation mechanisms and the convergence of support schemes.

<sup>383</sup> *Renewable Energy: Progressing towards the 2020 target*, Communication from the Commission to the European Parliament and the Council, COM(2011) 31 final, 31.01.2011.

<sup>384</sup> Article 11.1, Directive 2009/28/EC. The text of the original Commission’s proposal was even stricter, as it foresaw that only those Member States whose share of energy from renewable sources equalled or exceeded the indicative trajectory in Part B of Annex I in the immediately preceding two-year period may transfer guarantees of origin (proposed Article 9.1), COM(2008)19 final.

common schemes to facilitate compliance. Nevertheless, to avoid one Member State being put in a situation of non-compliance because of its commitments to another Member State for the redistribution of RES amounts, for example, the directive defines preventive safeguards. Consequently it is unlikely that the Commission would accept obligations imposed on a Member State by a coordinated scheme as a valid reason for non-compliance.

### 5.3.2.1 Statistical transfer or distribution rule

Article 11 harmonises how Member States must proceed when, having coordinated their support schemes, they wish to count the resulting RES-E amounts for compliance purposes. The RES-E amounts will be totalled, and thereafter distributed between the Member States according to one of two alternatives defined in the directive: statistical transfer; or a pre-defined distribution rule. Under the first alternative, the Member States ‘*make a statistical transfer of specified amounts of energy from renewable sources from one Member State to another Member State in accordance with Article 6*’ (Article 11.1(a)). The Article 6 mechanisms for a statistical transfer will therefore apply. These presuppose that Member States: have agreed on the terms and conditions of the transfer, including the amount and price; have notified the Commission no later than three months after the end of each year of production falling under the arrangement; have notified the Commission of the quantity and price of the related amounts of energy.<sup>385</sup> The respective addition and deduction of amounts of energy in the statistics of each Member State will become effective only after notification to the Commission.<sup>386</sup> Under the second alternative, the Member States ‘*set up a distribution rule agreed by participating Member States that allocates amounts of energy from renewable sources between the participating Member States. Such a rule shall be notified to the Commission no later than three months after the end of the first year in which it takes effect*’ (Article 11.1(b)). There is no particular requirement as to the format of the letter of notification, but the distribution rule must be notified in writing by each government of the participating Member States. If the distribution rule applies for several years to the coordinated scheme, there is no need for re-notification after the first year in which it took effect. The Commission re-allocates the amounts of RES-E between the Member States that are party to the scheme by applying the distribution rule as notified.<sup>387</sup> The relevant information will be published by the Commission on the Transparency Platform.<sup>388</sup>

### 5.3.2.2 Implementation issues

The directive leaves the Member States free to decide how to design and implement a cooperation mechanism, only establishing the few general rules defined above regarding transfer of amounts of energy for the purposes of compliance. The two accounting alternatives are procedurally fairly similar, differing mainly in relation to the level and length of coordination between the Member States’ TGCs schemes as underlined below.

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<sup>385</sup> Article 6.2, Directive 2009/28/EC.

<sup>386</sup> Article 6.3, Directive 2009/28/EC.

<sup>387</sup> Article 11.3, Directive 2009/28/EC.

<sup>388</sup> Article 11.2, Directive 2009/28/EC. The Transparency platform website is at: <[http://ec.europa.eu/energy/renewables/transparency\\_platform/transparency\\_platform\\_en.htm](http://ec.europa.eu/energy/renewables/transparency_platform/transparency_platform_en.htm)>.

Both alternatives require the conclusion of an international agreement between the participating Member States. They also both require preliminary agreement on, and practical arrangements for, the redistribution of the amounts of energy produced, as well as the costs, which is probably the most challenging issue.

The distribution rule alternative differs from statistical transfers partially in that it reflects a more systematic approach to cooperation from the very beginning, assuming a long-term perspective, with a progressive evolution and repartition of the price of compliance between the participating Member States. It is also reasonable to assume that Member States when establishing a coordinated support scheme will do so for a relatively long period of time, at least until 2020, assuming the scheme delivers the expected benefits. The advantage of this type of cooperation is that it enables a Member State to define a long-term compliance strategy – such as with a national support scheme – and at the same time to be better able to estimate the costs and benefits of the cooperation and avoid paying a high compliance price in 2020 in the event of a deficit. There is indeed a risk that Member States will mostly use statistical transfers to meet their targets in 2020 through short-term arrangements, instead of using them to stick to the indicative trajectory. If the purpose is to proceed gradually, by following the indicative trajectory and cooperating with other Member States, coordinated schemes – and joint projects – might be more appropriate. The coordination of TGCs schemes for compliance purposes does not exclude the use of the statistical transfers, which can be agreed to have lifetimes of one or several years. Using statistical transfers would reflect either a lower degree of coordination, or a wish to negotiate on a more regular basis the repartition of costs and benefits.

Member States that coordinate their TGCs scheme, letting the market decide in which country the additional RES-E generation capacity will be built, must necessarily agree in advance on the redistribution of the amounts of energy counted for compliance. Under a common TGCs market, such as that envisaged between Norway and Sweden, the choice of the physical location of the additional RES-E generation is left to the market. While this suggests considerable solidarity and trust between the participating countries, the latter must define in advance precisely how they will redistribute the amounts of energy. This is particularly important if most of the RES-E generation will take place in only one Member State. In the case of Norway and Sweden, the two countries agreed to equally (50-50) redistribute the amount of energy for the purpose of compliance.<sup>389</sup>

Next the price of the transfer of the energy amounts may be difficult to evaluate because of the existence of direct and indirect costs in the purchasing country, and of direct and indirect benefits in the selling country.<sup>390</sup> The redistribution must take into account the evolution of costs over time, as there will be progressive return on investments. The repartition of the costs of developing RES-E generation also depends on the choice and design of the support scheme. The situation is complicated where the scheme design is more complex such as one involving differentiation by technology type. Whether

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<sup>389</sup> Norway and Sweden agreed on a common target of 26.4 TWh of new RES-E generation from the TGCs market by 2020. At the end of the period, each country will have cancelled a number of certificates equivalent to 13.2 TWh. See Article 2, *Avtale mellom Kongeriket Norges Regjering og Kongeriket Sveriges Regjering om et felles marked for elsertifikater*, 29.06.2011.

<sup>390</sup> For a discussion on the nature of direct and indirect costs and benefits of RES deployment of the Member States participating to a cooperation mechanism: *RE-Shaping – Shaping an effective and efficient European renewable energy market*, D4 Report, ‘Design options for cooperation mechanisms between Member States under the new European Renewable Energy Directive,’ 2010, pp. 7-9.

statistical transfers or a distribution rule are employed, the fact that the new RES-E generation has been supported by final customers in each participating Member State must be taken into account. This particular issue caused the initial collapse of plans for a common TGCs market between Norway and Sweden. As the Norwegian Ministry of Petroleum and Energy put it at the time, the system '*would [have] become too expensive for the Norwegian consumers and the industry.*'<sup>391</sup>

The directive does not cover the issue of redistribution at national level of revenue from the transfer. Non-sector specific EU legislation would apply here, as the state's will redistribution of the revenues may fall within the definition of state aids.

As regards the management of the risk of non-compliance, the quota obligation, either in terms of TGCs or units of RES-E, represents an initial safety net. Thereafter the compliance fee under the TGCs scheme aims to secure financing for the state(s) of other projects that may contribute to achievement of the targets. However, with regard to solidarity between Member States under a coordinated scheme, such as the one envisaged between Norway and Sweden, it should be noted that the schemes, and accordingly the compliance regimes, remain national in nature. Each state will remain individually responsible for any deficit. The solidarity between the states participating in the scheme is consequently limited to the benefits.

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<sup>391</sup> Ministry of Petroleum and Energy, 'Mutual green certificate market will not be established – too expensive for Norwegian customers,' press release No. 26/06E, 27.02.2006.

## **6 Impact of harmonised EU law provisions concerning electricity tracking on national TGCs schemes**

As set in Introduction (section 1.2.2), under a mandatory TGCs scheme, the green certificate works as a tracking instrument for the purposes of compliance with the quota obligation. TGCs are not the only certificate-based tracking instruments accepted under EU law. Guarantees of origin are also accepted tracking instruments, but only for the purpose of disclosure. While there is an important difference of use between a certificate relating to disclosure (like a GO) and a certificate relating to support (a TGC), in practice they often complete each other. GOs and TGCs can be issued for the very same unit of RES-E. They also enable by their sale covering the difference of RES-E generation costs and providing a green power offer to customers. But they can also compete with each other in the use of generation attributes. Directive 2009/28/EC, Directive 2009/72/EC, and Directive 2004/8/EC all contain important provisions that regulate the use of electricity tracking instruments, primarily GOs, in relation to disclosure, target compliance and national support schemes. These provisions also leave an appreciable margin of discretion to the Member States regarding implementation strategies and interaction with support schemes.

European provisions on electricity tracking and, in particular, guarantees of origin have been refined over time. European legislation has progressively provided for greater harmonisation of tracking instruments. Since both tracking instruments (GOs and TGCs) can be used in TGCs schemes, there is a need to assess the effects of harmonised provisions of EU law on electricity tracking and national legislation on TGCs. This is the purpose of this section.

The following paragraphs analyse the provisions of secondary EU law concerning electricity tracking (section 6.1) and the relationship of these provisions to green certificates schemes used for the purposes of support (section 6.2).

### **6.1 Electricity tracking requirements in secondary EU law**

Three pieces of EU legislation contain requirements affecting electricity tracking. These are: Directive 2009/72/EC concerning common rules for the internal market in electricity (6.1.1); Directive 2009/28/EC on the promotion of the use of energy from renewable sources (6.1.2); and Directive 2004/8/EC on the promotion of cogeneration based on a useful heat demand in the internal energy market (6.1.3).

## 6.1.1 Directive 2009/72/EC - provisions affecting electricity tracking

While the main obligation of Directive 2009/72/EC remains electricity disclosure (6.1.1.1), the directive contains several implementation requirements that affect the nature and form of electricity tracking instruments in general (6.1.1.2).

### 6.1.1.1 Disclosure as the main obligation of Directive 2009/72/EC

Electricity disclosure has a precise meaning in the context of EU law, which is now defined in Directive 2009/72/EC. Taking the directives in chronological order, the preceding Electricity Directive (2003/54/EC) was only the second legal act to contain provisions on electricity disclosure and tracking, the first one being Directive 2001/77/EC. This means that disclosure was not integrated into the first stage of liberalisation at EU level, but instead was integrated in relation to renewable electricity as part of the ongoing process of liberalisation. Meanwhile, the Electricity Directive, now Directive 2009/72/EC, must be understood as the central piece of legislation defining and requiring electricity disclosure. When referring to the disclosure obligation, Directives 2009/28/EC and Directive 2004/8/EC refer directly to the corresponding provision in the Electricity Directive. Directive 2009/72/EC reproduces most of the provisions of Directive 2003/54/EC on disclosure, with a few additions. The EU definition of electricity disclosure has consequently remained the same since 2003, and the main developments since then have concerned the ways in which the concept is implemented.

The disclosure obligation must be seen in the context of the overall objective of the Electricity Directive. The latter has as its purpose to improve and integrate competitive electricity markets in the EU.<sup>392</sup> To do so, it provides harmonised rules for ‘*the generation, transmission, distribution and supply of electricity, together with consumer protection provisions.*’<sup>393</sup> The provisions of the directive represent what has been described by the Commission itself as a mix of ‘quantitative’ and ‘qualitative’ elements that aim to complete the internal electricity market.<sup>394</sup> The full opening of the electricity market counts as one of the quantitative objectives brought about by the Electricity Directive. Consumer protection rights count among the qualitative objectives. The disclosure obligation is defined in Article 3 on ‘Public service obligations and customer protection’, a heading that indicates the objectives pursued by the legislator. It is in relation to consumer protection that Directive 2009/72/EC defines the role of electricity disclosure.<sup>395</sup> The relationship between customer protection and disclosure was already

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<sup>392</sup> Article 1, Directive 2009/72/EC.

<sup>393</sup> *Ibid.*

<sup>394</sup> Communication from the Commission to the Council and the European Parliament, *Completing the internal energy market*, COM(2001) 125 final, 13.3.2001, p. 2. This manner to classify the directive's provisions has also been used by legal authors. See, e.g., M. Roggenkamp, C. Redgwell, I. del Guayo, A. Rønne (eds.), *Energy Law in Europe*, 2<sup>nd</sup> edition (Oxford, 2007), p. 344.

<sup>395</sup> Disclosure requirements related to customer protection are to be found under Article 3 of Directive 2003/54/EC. The latter directive has even been termed the ‘Disclosure Directive’ by some commentators (for an example see the E-TRACK project’s report *The state of implementation of electricity disclosure and Guarantees of Origin across Europe*, prepared as part of the EIE project ‘A European Tracking System for Electricity – Phase II (E-TRACK II)’, June 2009, p. 34).

enshrined in Directive 2003/54/EC, but Directive 2009/72/EC emphasises the protection of consumer rights as an objective of EU policy for the internal electricity market by including this objective in Article 1. This emphasis also accords with the most recent policy announcements from the Commission in favour of energy customer rights.<sup>396</sup> In addition, the disclosure obligation places emphasis on environmental attributes. Since 1 July 2007, all customers within the EU have been given the right freely to choose their suppliers. The information provided to customers through disclosure may influence the choice of supplier, on the basis in particular of the environmental generation attributes of electricity, in addition to price or quality of supply. By picking a green supplier, the customer will voluntarily support RES-E generation. This is where the requirement of electricity disclosure coincides with the objective of voluntary support.

Provisions on electricity disclosure, which is termed ‘energy labelling’ in the directive,<sup>397</sup> are contained in Article 3.9 and Article 47.1 (h) of Directive 2009/72/EC. Annex I to the directive also refers to Article 3, but relates purely to consumer protection issues.<sup>398</sup> No particular reference is made to disclosure in the Recitals of Directive 2009/72/EC, and this underlines the fact that there have not been major changes to the disclosure requirement since Directive 2003/54/EC. By contrast, and because it introduced the fuel-mix disclosure obligation, Directive 2003/54/EC contained two references to disclosure in its Recitals. Recital 2 of Directive 2003/54/EC included in its list of the shortcomings of, and possible improvements to, the First Electricity Directive, the need to ensure the disclosure of information concerning the energy sources used for electricity generation, as well as of the environmental impacts of these sources.<sup>399</sup> Recital 25 gave the first interpretation of the objective pursued by the Commission when proposing electricity disclosure and how it intended to follow up implementation of the obligation. The Commission intended to act on the scope of application of energy labelling provisions and the practical implementation of disclosure by Member States, in particular regarding the environmental impact of CO<sub>2</sub> emissions and radioactive waste resulting from electricity generation. The Commission also announced its intention to act on tracking instruments when it referred to the

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<sup>396</sup> See *An Energy Policy for Consumers*, Commission Staff Working Paper, SEC(2010) 1407 final, 11.11.2010.

<sup>397</sup> Indeed, Article 47.1 (h) of the directive describes the requirements under Article 3.9 as ‘*energy labelling*’ requirements. The directive does not use the term disclosure although it has the same meaning *here*. As energy labelling can have diverse understandings, the term disclosure will be preferred in this thesis.

<sup>398</sup> None of the information required for labelling in Annex A to Directive 2009/72/EC concerns electricity disclosure. Indeed, Annex A is solely concerned with customer protection issues. This underlines the need clearly to distinguish energy labelling from electricity disclosure. Annex A includes a list of information that customers are entitled to receive when contracting with an electricity service provider. This includes: the identity and address of the supplier, contractual conditions, service quality, types and prices of maintenance services, tariffs, renewal and termination conditions, dispute resolution, payment methods, right of withdrawal/rights regarding universal service. This information focuses on the contractual relationship and service quality issues between customers and electricity service providers/suppliers and not generation attributes *stricto sensu*. Compared to Directive 2003/54/EC, Directive 2009/72/EC adds a second paragraph in Annex A with new provisions on Member States’ duties regarding the implementation of intelligent metering systems allowing for active participation of electricity consumers, the implementation of which is subject to economic assessment. While the assessment is being completed, Member States or their responsible competent authorities have until 2020 to implement the system and ensure that ‘*at least 80% of consumers shall be equipped with intelligent metering systems by 2020.*’

<sup>399</sup> Recital (2), Directive 2003/54/EC: ‘*information on energy sources for electricity generation is disclosed, as well as reference to sources, where available, giving information on their environmental impact.*’

streamlining of ‘*the manner in which the measures taken in the Member States to control the accuracy of the information provided by suppliers.*’<sup>400</sup>

The core provision on fuel-mix disclosure is to be found in Article 3.9 of Directive 2009/72/EC. Article 3.9 imposes a mandatory obligation on Member States to adopt national measures for electricity disclosure. These will take the form of an obligation for ‘*electricity suppliers*’ to indicate ‘*in or with the bills*’ sent to ‘*final customers*’, as well as in promotional materials, two sets of information regarding the preceding year. These are: (i) the fuel mix, *i.e.*, the share of each energy source in the supplier’s overall fuel mix; and (ii) the environmental impacts of the fuel mix (this information must refer ‘*at least*’ to information sources such as web pages on the environmental impact of the electricity generation sources ‘*at least*’ as regards CO<sub>2</sub> emissions and radioactive waste). There are several comments to make regarding this provision. First, the information to be provided is targeted towards final customers, who are defined in Article 2.9 as customers purchasing electricity for their own use. The information disclosed in the bill or in promotional materials will consequently inform the final customer when choosing between suppliers. Once again this underlines the role of disclosure in the context of liberalisation and the final customer’s free choice of supplier. Second, the directive defines a minimum requirement. Suppliers must disclose the required information, but may also provide additional information, either voluntarily or in application of a more prescriptive national legislation. Third, the information concerns both the fuel-mix of the supplier and environmental impact of that fuel-mix. The environmental impact concerns, once again ‘*at least*’, CO<sub>2</sub> emissions and nuclear waste. Finally, the information is to be provided *ex post*, based on data for the previous year. In practice, disclosure can be operated both *ex ante* (forthcoming generation) and *ex post*, but the directive requires *ex post* disclosure, which will usually be based on the previous year’s data. The directive also addresses imported electricity. Pursuant to the same Article 3.9, where electricity is obtained from a power pool (‘*electronic exchange*’) or imported from outside the EU, aggregate figures provided by the exchange or by the undertaking located outside the Union can be provided as reference.

When implementing this obligation, Member States must also adopt the necessary instruments to ensure the *reliability* of the information provided by suppliers to customers. This is precisely the purpose of a tracking system. However, the directive does not contain further provisions on implementing measures for electricity tracking, which are consequently left to the discretion of the Member States.

A final issue at the point of intersection between the objectives of consumer protection and voluntary support for renewable electricity concerns the risk of misleading environmental claims. Directive 2009/72/EC harmonises the minimum level of information to be disclosed to customers, but does not specify how the information should be used.

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<sup>400</sup> Recital (25), Directive 2003/54/EC:

‘*The Commission has indicated its intention to take initiatives especially as regards the scope of the labelling provision and notably on the manner in which the information on the environmental impact in terms of at least emissions of CO<sub>2</sub> and the radioactive waste resulting from electricity production from different energy sources, could be made available in a transparent, easily accessible and comparable manner throughout the European Union and on the manner in which the measures taken in the Member States to control the accuracy of the information provided by suppliers could be streamlined.*’



Misleading environmental claims as to generation attributes will fall within the scope of application of Directive 2005/29/EC on unfair commercial practices.<sup>401</sup>

### 6.1.1.2 Electricity tracking in the context of the disclosure obligation

Directive 2003/54/EC introduced the electricity disclosure obligation into EU law, but left the compliance strategy, and accordingly the choice of tracking system to the discretion of the Member States. National governments were required to establish a reliable tracking system by 1 July 2004, whatever it was.<sup>402</sup> The implementation of the ‘energy labelling’ requirements was subject to a reporting requirement. Pursuant to Article 28.1 (h) of Directive 2003/54/EC, the European Commission was obliged to submit a report to the European Parliament and the Council on the implementation by Member States of: (i) the energy labelling requirements; and (ii) the manner in which any Commission Recommendations had been respected. This report could also include recommendations regarding the scope and modalities of energy labelling.<sup>403</sup> As of 2011, no such report appears to exist. However, several projects financed by the Commission have reported on the state of implementation of the disclosure requirement and on the tracking instruments used by the Member States, and have also made strong recommendations.<sup>404</sup> One of these projects concluded that, as of 2009, ‘a significant number of [Member States] failed to properly implement the regulations on electricity disclosure’ based on the provisions of Directive 2003/54/EC.<sup>405</sup>

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<sup>401</sup> Directive 2005/29/EC of the European Parliament and of the Council of 11 May 2005 concerning unfair business-to-consumer commercial practices in the internal market, OJ L 149, 11.06.2005, p. 22.

See Guidance on the application of Directive 2005/29/EC on unfair commercial practices, Commission Staff Working Document, SEC(2009) 1666, 03.12.2009, pp. 37-46.

<sup>402</sup> Article 30.1, Directive 2003/54/EC.

<sup>403</sup> Article 28.1 (Reporting), Directive 2003/54/EC:

*‘Where appropriate, this report may include recommendations especially as regards the scope and modalities of labelling provisions including e.g. the way in which reference is made to existing reference sources and the content of these sources, and notably on the manner in which the information on the environmental impact in terms of at least emissions of CO<sub>2</sub> and the radioactive waste resulting from the electricity production from different energy sources could be made available in a transparent, easily accessible and comparable manner throughout the European Union and on the manner in which the measures taken by the Member States to control the accuracy of the information provided by suppliers could be streamlined, and measures to counteract negative effects of market dominance and market concentration.’ (Emphasis added.)*

<sup>404</sup> These projects are: the 4C Electricity project on ‘Consumer choice and carbon consciousness for electricity’ (2003); the E-TRACK I project (2006); the E-TRACK II projects (2009); and the RE-DISS project (2010-2012).

<sup>405</sup> This was reported by the E-TRACK II project. Source: M. Draeck, C. Timpe, J. Jansen, K. Schoots, D. Lescot, ‘The state of implementation of electricity disclosure and Guarantees of Origin across Europe,’ Article for the 6<sup>th</sup> International Conference on the European Energy Market (EEM09), ID:1343, 2009, pp. 6-7. The same project reported in detail that:

*‘from the 29 European countries (EU+NO and CH), 12 plus Flanders and Wallonia have fully operational or even advanced disclosure systems in place when compared to the requirements of the disclosure Directive. Furthermore, the analysis shows that the systems in 16 countries plus Brussels-Capital region are not yet fully in place. ... within this group the remaining weaknesses vary significantly.(...) The countries which do not have a fully operational disclosure system in place yet either did not pass legislation on disclosure yet (EU-12: BG, EE, LV, LT), or the disclosure system is not fully or properly implemented (EU-15: Brussels-Capital region, FR, GR, LU, IT; EU-12: CY, CZ, HU, MT, RO) or have a fully operational disclosure system in place but fail on key criteria, such as the disclosure of the CO<sub>2</sub> emissions and the nuclear waste related to the energy production (CH, PL, SK).’ Source: *Ibid.*, p. 3.*

Parallel to the European Commission's obligation to report, the Member States are subject to diverse obligations to report to the Commission too.<sup>406</sup> 'Energy labelling' is one of them. The 2009 reports submitted by Member States were based on the implementation of Directive 2003/54/EC. As Directive 2009/72/EC reproduces the same provisions, a study of these reports serves as a good starting point for evaluating the implementation of the disclosure requirement throughout the EU.<sup>407</sup> Where Member States have transposed the disclosure requirement into national legislation, this has usually been done using very similar wording to that used in the directive. The information communicated by the Member States suggests conformity in the transposition of the disclosure obligation itself, but reflects varying degrees of detail applied to actual implementation, including with respect to tracking instruments. Some national legislations are more specific than others on the nature of the actors subject to the electricity disclosure obligation. In Finland, the obligation extends to '*producers, importers and suppliers of electricity*' that '*shall provide purchasers, on request, with the information on the electricity being purchased, which they need to meet the mentioned notification requirement.*'<sup>408</sup> Other Member States refer directly to the use of a mandatory power labelling scheme. In the Netherlands, the implementation of '*obligatory power labelling*' since 2005 has resulted in the delivery of a so-called 'power label' linked to consumers' energy bills, that details the source of the electricity supplied.<sup>409</sup> Some countries have transposed the disclosure requirements as an integral part of their electricity licence conditions. In the United Kingdom, the publication of fuel mix information and fuel mix environmental impacts is a mandatory requirement under Standard Licence Condition 21 (so-called '*fuel mix disclosure arrangements*'). This requirement was included in the electricity supply licences by the Electricity (Fuel Mix Disclosure) Regulations 2005 (Si No. 391) of March 2005.<sup>410</sup> To conclude, there has been great divergence in the transposition of the electricity disclosure obligation defined in Directive 2003/54/EC and repeated in Directive 2009/72/EC. Member States that have adopted advanced schemes have often found it necessary to regulate the functioning of the tracking systems that enable compliance with the disclosure obligation.

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For a detailed assessment of the national implementation of electricity tracking schemes, see *The state of implementation of electricity disclosure and Guarantees of Origin across Europe*, A report prepared as part of the EIE project 'A European Tracking System for Electricity – Phase II (E-TRACK II),' June 2009.

<sup>406</sup> The annual reports submitted to the European Commission by the EU Member States since 2005 are available on the website of the European Energy Regulator - Council of European Energy Regulators (CEER) and European Regulators' Group for Electricity and Gas (ERGEG), available at: <<http://www.energy-regulators.eu/>>. Publication section: <[http://www.energy-regulators.eu/portal/page/portal/EER\\_HOME/EER\\_PUBLICATIONS](http://www.energy-regulators.eu/portal/page/portal/EER_HOME/EER_PUBLICATIONS)>.

<sup>407</sup> In the next paragraphs, the countries supplying the most exhaustive comments on the disclosure requirements have been taken as examples.

<sup>408</sup> Annual Report 2009 – Energy Market Authority, Finland, p.69. In Finland, the '*labelling for primary energy source*' requirement has been transposed into national law by a separate Act concerning certification and notification of the origin of electricity (1129/2003). A Governmental Decree on notification of the origin of electricity provides additional details.

<sup>409</sup> 2009 National Report Office of Energy Regulation (the *Energiekamer*) to the European Commission (ERGEG), Section 6.5 – Power Labelling, p. 38.

<sup>410</sup> 2009 Great Britain and Northern Ireland National Reports to the European Commission in relation to Directives 2003/54/EC (Electricity) and 2003/55/EC (Gas), submitted by Ofgem & the NIAUR 2009 on 31 July 2009. Section on the 'Implementation of labelling of primary energy source (electricity)', §§ 314-315.

The main additional requirement of Directive 2009/72/EC compared to Directive 2003/54/EC is the obligation contained in Article 3.9 to disclose information ‘*in a comprehensible and, at national level, clearly comparable manner.*’<sup>411</sup> This constitutes an additional requirement concerning the manner in which information is to be disclosed. It is intended to protect consumers by providing them with ‘*comprehensible*’ information that will enable them to exercise their right freely to choose a supplier (‘*clearly comparable manner*’). However, there is no added requirement establishing how the information should be obtained, *i.e.*, tracking. Even so, it is worth commenting on this requirement for two reasons. First, the wording of this provision was heavily debated during the co-decision procedure, revealing a strong reluctance to harmonise the presentation of disclosure information at EU level. This is revealed by the expression ‘*at national level.*’ The debate started with the introduction of an amendment by the Committee on Industry, Research and Energy (ITRE) of the European Parliament that required the harmonisation of the disclosure information ‘*within member states.*’<sup>412</sup> The same formulation appeared in a parliamentary resolution of 18 June 2008.<sup>413</sup> The European Commission expressed concern as to the extent of the harmonisation suggested. In its Common Position,<sup>414</sup> the Council rejected these amendments and did not propose any changes to the previous provisions of Directive 2003/54/EC on electricity disclosure, refusing any harmonisation of disclosure schemes.<sup>415</sup> At the stage of the second reading, the ITRE Committee of the European Parliament re-inserted Amendments 42 and 45 from the first reading in favour of a ‘*harmonised and comprehensible*’ disclosure of information ‘*within Member States.*’<sup>416</sup> In the same committee’s recommendation for the second reading, the wording

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<sup>411</sup> Article 3.9 (a) of Directive 2009/72/EC and repeated in the last paragraph, last sentence of the same article.

<sup>412</sup> Amendment 42 introduced by the European Parliament during the first reading, providing that the information should be given ‘*in a harmonised and comprehensible manner within member states so as to allow for easy comparison.*’ The justification of the Parliament for adding this provision was that ‘[p]roviding clear and easy to understand information is essential for customers to be able to make like for like comparisons of suppliers.’ Draft European Parliament Legislative Resolution, Report of 19.05.2008 by Rapporteur Eluned Morgan. The same amendment appeared for the first time in the report made by the Rapporteur in charge to the ITRE Committee of the European Parliament (Amendments 19 and 21), Draft Report on the proposal for a directive of the European Parliament and of the Council amending Directive 2003/54/EC concerning common rules for the internal market in electricity, ITRE Committee, 12.2.2008.

<sup>413</sup> European Parliament legislative resolution of 18 June 2008 on the proposal for a directive of the European Parliament and of the Council amending Directive 2003/54/EC concerning common rules for the internal market in electricity.

<sup>414</sup> Common Position adopted by the Council with a view to the adoption of a Directive of the European Parliament and of the Council concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC, 14539/08, 15.12.2008.

<sup>415</sup> For details of the Council Common Position, see Draft Statement of the Council’s reasons, Doc. 14539/08, ADD1, 16.12.2008.

<sup>416</sup> Draft amendments 44 and 46 of the draft Recommendation for the Second Reading on the Council common position for adopting a directive of the European Parliament and of the Council amending Directive 2003/54/EC concerning common rules for the internal market in electricity, ITRE Committee, 11.03.2009.

See also the position defended by the Committee on the internal market and consumer protection (IMCO) in its proposed Amendments 15 and 17 (9.4.2008, Draftman Alexander Lambsdorff), which were rejected. In particular Amendment 17 reads as follows: ‘*The rules concerning the presentation of information*

was changed to the wording used in the adopted directive, *i.e.*, that Member States shall ensure that suppliers indicate to final consumers ‘*the contribution of each energy source to the overall fuel mix of the supplier over the preceding year*’ ‘*in a comprehensible and, on a national level, clearly comparable manner.*’<sup>417</sup> It is reasonable to conclude that, in order to avoid any misunderstanding regarding both the level of harmonisation and also the scope of the information subject to harmonisation, a simple formulation (‘*at national level*’) and a simple requirement (‘*in a clearly compatible manner*’) were chosen. Member States are free to determine the type of tracking system to be implemented at national level, as long as the information provided by the different suppliers is reliable and comparable. This means that the provisions of Directive 2009/72/EC on electricity disclosure allow for wide divergences as to the manner in which disclosure information is presented. Second, the requirement to disclose information ‘*in a comprehensible and, at national level, clearly comparable manner,*’ has only a limited effect on the harmonisation of tracking systems at EU level. But the obligation to make the information clearly comparable at ‘*national level*’ may induce Member States to choose one tracking system over another. While this scenario remains hypothetical, this lack of EU harmonisation will favour the co-existence of different tracking instruments for disclosure that ultimately may result in an uneven playing field for suppliers at retail level – including in relation to green power offers – and a risk of double-counting of generation attributes.

Article 3.9, third subparagraph, Directive 2009/72/EC reproduces the requirement of Directive 2003/54/EC concerning reliability, which falls this time precisely under the competence of either the national regulatory authority or another competent national authority.<sup>418</sup> The way in which reliability is to be ensured, *i.e.*, tracking, is again not addressed by the directive. But this provision represents the most directly applicable requirement as to national tracking systems. As the concept of ‘reliability’ is not defined further in the directive and has not been interpreted by the Court, the only document of relevance is an interpretative note published in 2004 by the Commission, the ‘Interpretative Note on Electricity Labelling.’<sup>419</sup> The Note provides information that is useful both for the interpretation of the directive itself and for the implementation of the disclosure requirement. For the first time, the Commission addressed directly the ‘*tracking of the generation attributes*’ under a list of ‘implementation suggestions.’<sup>420</sup> It mentioned

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*shall be harmonised across the Member States and the markets concerned. Their application shall be monitored by the Agency.’* Emphasis added.

<sup>417</sup> Recommendation for Second Reading on the Council common position for adopting a directive of the European Parliament and of the Council concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC, ITRE Committee, 02.04.2009 at proposed Article 3.6.

<sup>418</sup> Article 3.6 of Directive 2003/54/EC only gave a general mandate to Member States. Article 3.9 of Directive 2009/72/EC is in that respect more specific, and in general can be seen as a corollary to the augmented tasks allocated to the energy regulatory authority in the directive. Article 3.9 of Directive 2009/72/EC reads as follows: ‘*The regulatory authority or another competent national authority shall take the necessary steps to ensure that the information provided by suppliers to their customers pursuant to this Article is reliable and is provided, at a national level, in a clearly comparable manner.*’

<sup>419</sup> *Labelling provision in Directive 2003/54/EC*, Note of DG Energy & Transport on Directives 2003/54/EC and 2003/55/EC on the internal market in electricity and natural gas, 2004., available at <[http://ec.europa.eu/energy/gas\\_electricity/interpretative\\_notes/interpretative\\_note\\_en.htm](http://ec.europa.eu/energy/gas_electricity/interpretative_notes/interpretative_note_en.htm)>.

<sup>420</sup> ‘*The provision to specify the fuel mix and its related environmental impact obliges Member States to achieve a certain result and leaves to them the choice of form and methods. While a wide variety of options to implement this provision are open to Member States, it may be desirable to take into account*

GOs as a favoured tracking system, as defined under Directive 2001/77/EC. The use of information based on estimates or statistics was not recommended. Some simple rules on the ownership of ‘certificates’ were also proposed, *e.g.*, limiting use of the certificates for disclosure to the suppliers owning them. The Note understood the certificates to represent the ‘market value’ of the green attributes of electricity. The views expressed by the Note are very much in line with current practices on the mandatory and voluntary markets for GOs and TGCs. This shows that practices have grown up quickly around the provisions of Directive 2003/54/EC, and that many expectations have been created.

A final set of provisions on disclosure, insofar as it affects tracking, relates to the role of the European Commission in assessing implementation. Article 47.1 (h) of Directive 2009/72/EC repeats the provisions of Directive 2003/54/EC regarding the monitoring and reviewing role of the Commission concerning the implementation of the directive, as well as the content of the progress report to be submitted by the Commission to the European Parliament and the Council.<sup>421</sup> The article envisages the possibility that the Commission may include recommendations in the progress report as to the practical implementation of the disclosure obligation. Recommendations can be adopted on the tracking modalities<sup>422</sup> for making information related to generation attributes, in particular environmental attributes, available in a ‘*transparent, easily accessible and comparable manner throughout the Community.*’ Here there is a noteworthy difference in wording compared to Article 3.9, which requires Member States to ensure that suppliers provide their customers with reliable and clearly comparable information ‘*at a national level.*’ Pursuant to Article 47.1 (h), however, the Commission can make recommendations on the ‘*streamlining*’ - not yet the harmonisation - of tracking tools in order to make information about generation attributes available in ‘*a transparent, easily accessible and comparable manner throughout the Community.*’ This is consistent with the repartition of competences between the Member States and the Commission, whereby the Member States focus on national measures – although these may pursue European objectives - , and the Commission focuses on actions at European level. The directive gives a mandate to the Commission to advance recommendations for the further coordination of practices with respect to tracking used for the purpose of disclosure. The directive adds in Recital 65 that ‘*the Commission should be empowered to adopt the Guidelines necessary for providing*

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*the following suggestions, which are designed to help achieve the objective of transparency for consumers and to make comparisons between various suppliers possible.*’ Labelling provision in Directive 2003/54/EC, Note of DG Energy & Transport on Directives 2003/54/EC and 2003/55/EC on the internal market in electricity and natural gas, 2004, p. 2. The Commission suggestions notably cover: reference period and frequency, portfolio and product, fuel source information, fuel mix display, location of fuel mix information, environmental indicators, information at Member State level, promotional materials, tracking information, verification, evolution.

<sup>421</sup> Article 47.1 (h) reads as follows:

‘(h) *the manner in which Member States have implemented in practice the requirements regarding energy labelling contained in Article 3(9), and the manner in which any Commission recommendations on that issue have been taken into account.*

*Where appropriate, the progress report may include recommendations as regards, in particular, the scope and modalities of labelling provisions, including the way in which reference is made to existing reference sources and the content of those sources, and, notably, how information relating to environmental impact, as regards at least CO<sub>2</sub> emissions, and radioactive waste, resulting from electricity generation from different energy sources could be made available in a transparent, easily accessible and comparable manner throughout the Community, how the measures taken by the Member States to control the accuracy of the information provided by suppliers could be streamlined, and which measures could counteract the negative effects of market dominance and market concentration.*’ (Emphasis added.)

<sup>422</sup> The ‘*measures taken by the Member States to control the accuracy of the information provided by suppliers*’ must be interpreted as referring to tracking instruments.

*the minimum degree of harmonisation required to achieve the aim of this Directive.*' As such measures would be *'of general scope and designed to amend non-essential elements of this Directive, by supplementing it with new non-essential elements,'* the regulatory procedure with scrutiny of the former comitology procedure defined in Article 5a of Decision 1999/468/EC would apply.<sup>423</sup>

The 'streamlining' recommendations of the Commission may be supported by the Agency for the Cooperation of Energy Regulators (ACER), which has in Regulation (EC) No.713/2009 the necessary legal basis to adopt opinions or recommendations on electricity disclosure, if this is deemed necessary to the coordination of national regulatory authorities's actions and contributes to good-practices sharing.<sup>424</sup> ACER can also recommend the adoption of binding rules and decisions when it considers this to be necessary.<sup>425</sup>

As of 2011, and apart from the legally non-binding 2004 Note on Electricity Labelling, no guideline, opinion or recommendation on electricity tracking has been adopted by the Commission or ACER for the implementation of the disclosure obligation. Similarly, no specific initiatives have been undertaken by CEER, ENTSO-E or the former ERGEG. However, regulators and TSOs – many of which are members of the aforementioned organisations - are actively participating in work to standardise their tracking strategies and instruments, taking a bottom-up approach.<sup>426</sup>

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<sup>423</sup> Decision 1999/468/EC of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission (OJ L 184, 17.1.1999, p. 23) has been repealed by Regulation (EU) No. 182/2011 of the European Parliament and of the Council of 16 February 2011 laying down the rules and general principles concerning mechanisms for control by Member States of the Commission's exercise of implementing powers (OJ L55 of 28.02.2011, p. 13). The new regulation entered into force on 1 March 2011 and replaces the former comitology procedure. However, the effects of Article 5a of Decision 1999/468/EC are maintained for the 'existing basic acts' referring to it (Article 12, Regulation (EU) No. 182/2011).

<sup>424</sup> See Article 1.2, 4, 5, and 7.2, Regulation (EC) No.713/2009 of the European Parliament and of the Council of 13 July 2009 establishing an Agency for the Cooperation of Energy Regulators, OJ L 211, 14.08.2009, p. 1.

<sup>425</sup> Article 7.3, Regulation (EC) No.713/2009 of the European Parliament and of the Council of 13 July 2009 establishing an Agency for the Cooperation of Energy Regulators, OJ L 211, 14.08.2009, p. 1.

<sup>426</sup> See the previously mentioned projects financed by the European Commission: E-TRACK I; E-TRACK II; RE-DISS.

The E-TRACK project aimed to *'monitor tracking systems across Europe with a view to formulate tailored recommendations on a improved (and wherever possible harmonised) implementation of tracking policies across Europe.'* Phase I of the E-TRACK project (2005-2007) consisted of *'defining a tracking standard for electricity in order to ensure the coherence of national systems and to facilitate the trading of electricity and guarantee the quality and reliability of the information supplied to end consumers.'* Phase II of the E-TRACK project (E-TRACK II) aimed to *'continue the monitoring of tracking systems across Europe, including the Guarantees of Origin for High-Efficient Cogeneration (HE-CHP-GO), with a view to formulate tailored recommendations on an improved (and wherever possible harmonised) implementation of tracking policies across Europe.'* See E-Track project (phase 1 and 2) at <<http://www.e-track-project.org>>.

The 'Reliable Disclosure Systems for Europe' project (RE-DISS) builds on the result of the E-Track projects, focusing on reliability and accuracy in information disclosure. See RE-DISS website at <<http://www.reliable-disclosure.org/>>.

In conclusion, Directive 2003/54/EC represented a major step in the introduction of electricity disclosure requirements into EU law. Directive 2009/72/EC reiterates its predecessor's provisions and, like it, leaves to the discretion of the Member States most aspects of the implementation of the disclosure of the environmental attributes of electricity. This approach finds justification in the need to respect the principles of subsidiarity and proportionality, and the insertion into other legislation of detailed requirements concerning tracking systems (*i.e.*, Directive 2009/28/EC and Directive 2004/8/EC). While Directive 2009/72/EC may not define the tracking instruments to be implemented, it does contain some precise requirements as to the criteria such instruments must fulfil, in particular reliability. However, private initiatives, initiatives at the level of national regulatory authorities, and the provisions in Directive 2009/72/EC all underline the increasing necessity of at least 'streamlining' and at most harmonising electricity tracking practices to ensure the required level of reliability and a level playing field between suppliers. In its Interpretative Note on Electricity Labelling, the Commission favoured a certificate-based system of tracking in the form of GOs, as the most able mechanism to answer reliability requirements. The Commission's position, associated with the same requirements of reliability in disclosure, create indirectly a positive environment for the duplication of certificate-based tracking systems in the area of support and the establishment of a TGCs scheme.

The most binding provisions on electricity tracking are to be found in two directives concerning environmental protection (the promotion of the use of renewable energy sources and the promotion of cogeneration), which will be now analysed.

## **6.1.2 Provisions of Directive 2009/28/EC on electricity tracking**

### **6.1.2.1 Tracking requirement in the context of Directive 2009/28/EC**

Directive 2009/28/EC addresses electricity tracking by reference to the disclosure of renewable electricity generation attributes.<sup>427</sup> The directive contains several references to the fuel-mix disclosure obligation defined in Directive 2009/72/EC. It does not, however, repeat the obligation, as this would constitute an overlap.<sup>428</sup> It refers to the disclosure obligation as the proof provided '*to final customers [of] the share or quantity of energy from renewable sources in an energy supplier's energy mix*' (Article 15.1). Here, the directive makes obvious the link between electricity disclosure and the voluntary promotion of renewable electricity through the free choice of supplier. Neither Directive 2001/77/EC nor Directive 2009/28/EC designate a single tracking instrument as the only means of complying with the disclosure obligation. This is clear from Article 15.7 of Directive 2009/28/EC, which provides: '*Where an electricity supplier is required to prove the share or quantity of energy from renewable sources in its energy mix for the purposes of Article 3(6) of Directive 2003/54/EC, it may do so by using its guarantees of origin.*'<sup>429</sup> The choice of tracking instrument remains within the competence of the Member States. When defining the obligation imposed on Member States to guarantee the origin of the

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<sup>427</sup> The production of heating and cooling from renewable energy sources is also referred to in Article 15 of Directive 2009/28/EC, and the applicable provisions will be discussed in detail below.

<sup>428</sup> See Recitals 53 to 55, Article 2(j), Article 15, Directive 2009/28/EC.

<sup>429</sup> Emphasis added.

renewable electricity produced, the directive defines GOs as a necessary but not compulsory tracking tool.<sup>430</sup> In other words, the use of GOs as a tracking instrument for disclosure is not mandatory. What is mandatory for the Member States is to ensure that RES-E generators are able to obtain GOs on demand. In practice, a requirement that generators' demands for GOs must be met is equivalent to requiring the establishment of a GO system. This is why Directive 2009/28/EC is often interpreted as requiring the establishment of a GO system. For example, no GOs had been issued in Luxembourg until 2011 because of a lack of interest in GOs among RES-E generators on the voluntary market. There was indeed no demand.<sup>431</sup> However, Luxembourg did transpose (and thereby comply with) the provisions of Directive 2001/77/EC concerning GOs, making itself ready to issue them on demand.<sup>432</sup>

A final comment should be made regarding the structural articulation of the provisions on tracking as between Directive 2009/28/EC and Directive 2009/72/EC. It may seem surprising that provisions on GOs are enshrined in Directive 2009/28/EC, rather than in Directive 2009/72/EC, when the purpose of the GOs is strictly limited to disclosure.<sup>433</sup> In fact this is rather more than surprising, it represents a highly unfortunate missed opportunity to harmonise the use of GOs for other sources of energy under the disclosure obligation of Directive 2009/72/EC. The explanation is historical in origin. Electricity disclosure was not a requirement under the First Electricity Directive. The first definition of the disclosure obligation came in Directive 2003/54/EC, as recalled before. The latter directive was adopted after Directive 2001/77/EC, which was the first to define GOs and limited the harmonisation of the concept to the context of RES-E generation.<sup>434</sup> Ultimately, private initiatives will continue to bring out the development of GOs for other energy sources than renewable energy.

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<sup>430</sup> See the interpretation of the European Commission on the use of GO for disclosure in its Communication, *The support of electricity from renewable energy sources*, COM(2005) 627 final, 07.12.2005, p.15 as follows: 'In accordance with Article 3(6) of Directive 2003/54/EC, Member States are required to implement a scheme for the disclosure of the fuel mix. The Commission regards this provision as an important measure in meeting the objective of consumer transparency, as it covers the whole electricity sector and not only electricity from renewable energy sources. The guarantee of origin could be used as a basis for this information.' Emphasis added.

<sup>431</sup> *Réponse à la question parlementaire No.0199 du 21 octobre 2009, Ministère de l'Economie et du Commerce extérieur*, Luxembourg Government, 20.11.2009.

<sup>432</sup> Was originally transposed in the Law on the organisation of the electricity market of 24 July 2000 (*Loi relative à l'organisation du marché de l'électricité*), now repealed by the Law on the organization of the electricity market of 1 August 2007 (*Loi du 1er août 2007 relative à l'organisation du marché de l'électricité*), as amended (Mémorial A No. 152 of 21.08.2007, p. 2763) (Article 49). The system of GOs has since been adapted to the needs of RES-E generators in Luxembourg, and a detailed regulatory framework has been adopted: *Règlement E10/23/ILR de l'Institut Luxembourgeois de Régulation du 21 septembre 2010 concernant la détermination de la composition et de l'impact environnemental de l'électricité fournie*, Mémorial A No. 179 of 06.10.2010, p. 3000; taken in application of *Règlement grand-ducal du 21 juin 2010 relatif au système d'étiquetage de l'électricité*, Mémorial A No. 98 of 30.06.2010, p. 1802. These adaptations let public authorities envisage the first issuance of GOs will take place in 2011. The issuing body is there the *Institut Luxembourgeois de Régulation*.

<sup>433</sup> The restriction of use of GOs to disclosure by Directive 2009/28/EC is further detailed below.

<sup>434</sup> Differences in focus between the two directives are reflected by the choice of legal basis. Directive 2003/54/EC was based on Article 95 EC; Directives 2001/77/EC and 2004/8/EC were based on Article 175 EC.



### 6.1.2.2 The directive's provisions on guarantees of origin: issuing obligation

Member States have a legal obligation to issue a GO in response to a request from a RES-E producer (Article 15.2). Member States can also issue GOs for heating and cooling, but this is not mandatory.<sup>435</sup> Compared to Directive 2001/77/EC, this represents an extension of the scope of application of the provisions on GOs as concerns renewable energy uses to heating and cooling.<sup>436</sup> Heating and cooling from renewable energy sources are now included in the energy uses for which GOs may be issued when so requested by producers, so long as the Member State has decided to permit the issuance of such GOs. Member States 'may' in that case limit the issuance of GOs to installations that exceed a minimum generation capacity.<sup>437</sup> These new provisions allow for voluntary support to renewable heating and cooling systems and the development of green power offers at retail level that specifically target heating and cooling.<sup>438</sup>

At the same time as Article 15.2 imposes a legal obligation on the Member State, it also confers a right to obtain GOs upon the RES-E producer. A RES-E producer that introduces a request for the issuance of GOs for its green electricity production, fulfils the criteria applying to the GOs issuance procedure and cannot receive one because of the lack of transposition of the directive's requirement could argue the vertical direct effect of Article 15.2.<sup>439</sup> This requires first that there has been a failure to transpose the provision within the deadline established in the directive, which in the case of Directive 2009/28/EC was 5 December 2010.<sup>440</sup> Secondly, the entitlement granted by the provision to private parties

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<sup>435</sup> Pursuant to Article 15.2, second sentence of Directive 2009/28/EC: '*Member States may arrange for guarantees of origin to be issued in response to a request from producers of heating and cooling from renewable energy sources. Such arrangement may be made subject to a minimum capacity limit.*' (Emphasis added.)

<sup>436</sup> Originally the Commission discussed a separate directive on heating and cooling, but in the end it decided to propose one single 'renewables' directive with a wider scope of application.

<sup>437</sup> In its proposal for a directive, the European Commission justified the adoption of a threshold (proposed to be at least 5 MW<sub>th</sub>) by the need to avoid '*the unnecessarily high administrative burdens that would be imposed if smaller installations, including those in households, were to be included*' (Recital 20, proposal for a directive of the European Parliament and of the Council on the promotion of the use of energy from renewable sources, European Commission, COM(2008) 19 final, 23.01.2008).

<sup>438</sup> See on that point, T. Howes, '“Trading” renewable energy and types of national support schemes,' in P. Hodson, C. Jones and H. Van Steen, *EU Energy Law – Renewable Energy Law and Policy in the European Union*, EU Energy Law Coll. Vol. III Book One (Claeys & Casteels, 2010), p. 110.

Examples of heating and cooling electricity generation based on renewable energy sources include solar heating and cooling, and geothermal heat pump. In practice there are however very few GOs for heating and cooling. The heating sector represents a major part of final energy consumption in the EU (48 percent in 2007 according to the European Commission), mostly based on fossil fuels. Renewable heat and cooling should consequently play an important part in achieving the EU's target of at least a 20 per cent share of renewable energy sources in EU gross final consumption in 2020.

<sup>439</sup> See the landmark case on the direct effect of directives: Case 41/74, *Van Duyn v Home Office* [1974] ECR 1337.

<sup>440</sup> See the landmark case 148/78, *Ministero Pubblico v Ratti* [1979] ECR 1629. Where a provision of a directive has been correctly transposed, the individual rights conferred on private parties no longer derive from the directive, but from the national legislation. This does not prevent national law from being interpreted in accordance with EU law. See on that last point recent case law and the discussion concerning the application of the doctrine of indirect effect in: D. Chalmers, G. Davies and G. Monti, *European Union Law*, 2<sup>nd</sup> Edition (Cambridge University Press, 2010), pp. 294-300.

would have to be unconditional and sufficiently precise.<sup>441</sup> In the present case, Article 15.2 can be deemed to be unconditional and sufficiently precise because of the non-equivocal right it confers upon RES-E producers and its clear identification of the authorities responsible for issuing the GOs.<sup>442</sup> In a situation where the relevant provision had not been transposed, the RES-E producer would also be able to hold the state liable for loss of potential profits from the sale of GOs. The state could be held liable because of: (i) the explicit right Article 15.2 confers upon RES-E producers; (ii) the fact that non-transposition of the article would constitute a serious breach of EU law;<sup>443</sup> and (iii) the causal link between the state's failure to transpose and the losses suffered by RES-E producers.<sup>444</sup> Even if the Court were to conclude that Article 15.2 of Directive 2009/28/EC had direct effect, this would not exempt Member States from the obligation to transpose it.<sup>445</sup>

### 6.1.2.3 The directive's provisions on guarantees of origin: harmonised definition

Directive 2001/77/EC already provided for the creation of GOs as the preferred tracking scheme, by establishing a small initial set of common elements.<sup>446</sup> Many aspects of the implementation of the system were left to the discretion of national authorities, subject to respect of the criteria of accuracy and reliability.<sup>447</sup> The margin of appreciation left to Member States has resulted in widely divergent implementations of electricity tracking, which the voluntary initiatives of the private sector have attempted to alleviate.<sup>448</sup>

The divergences in the transposition of the provisions on GOs based on Directive 2001/77/EC resulted in calls for a higher level of harmonisation in Directive 2009/28/EC.<sup>449</sup> As a result, Directive 2009/28/EC harmonises the provisions on the

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<sup>441</sup> Case 148/78, *Ministero Pubblico v Ratti* [1979] ECR 1629; *Francovich et Bonifaci*, C 6 and 9/90, R. p.I.5357; improved in Case 8/81, *Becker v Finanzamt Münster-Innenstadt* [1982] ECR 53; Joined Cases C-397/01 and C-403/01, *Pfeiffer and Others v Deutsches Rotes Kreuz* [2004] ECR I-8835; Joined Cases C-152/07 and C-154/07, *Arcor v Bundesrepublik Deutschland* [2008] ECR I-5959.

<sup>442</sup> Joined Cases C-6/90 and C-9/90, *Francovich v Italy* and *Bonifaci v Italy* [1991] ECR I-5357, para.11. In these joined cases the directive's provision was not deemed to be unconditional, because the directive's provisions did not identify the person liable to provide the guarantee in question, even though the directive was sufficiently precise and unconditional as regards the determination of the persons entitled to the guarantee and as regards the content of that guarantee (para. 26).

<sup>443</sup> Joined Cases C-6/90 and C-9/90, *Francovich and Bonifaci v Italy* [1991] ECR I-5357.

<sup>444</sup> See the criteria established in joined cases C-46/93 and C-48/93, *Brasserie du Pêcheur v Germany and R v Secretary of State for Transport, ex parte Factortame III*, [1996] ECR I-1029, para. 51.

See also the discussion of the interpretation to be given to the new Article 19.1 TEU introduced by the Lisbon Treaty in D. Chalmers, G. Davies and G. Monti, *European Union Law*, (Cambridge University Press, 2<sup>nd</sup> Edition, 2010), p. 312.

<sup>445</sup> Case 102/79, *Commission v Belgium*, [1980] ECR 1473.

<sup>446</sup> Article 5, Directive 2001/77/EC.

<sup>447</sup> Article 5.5, Directive 2001/77/EC.

<sup>448</sup> See also an early research project financed by the European Commission, the 'REGO project', in the context of GOs under Directive 2001/77/EC.

<sup>449</sup> In its proposal for a directive, the Commission argued that: 'a forthcoming study undertaken for the Commission raises concerns that whilst legislation might be in place, current differences in national schemes and a lack of standardisation, mutual recognition and verification meant that the use of

definition, content and use of GOs. As set forth in its Article 1, the purpose of Directive 2009/28/EC is to harmonise provisions on GOs.<sup>450</sup> Pursuant to Article 15.6, a GO shall specify ‘*at least*’ the following information:

- *the energy source from which the energy was produced and the start and end dates of production;*
- *whether it relates to (i) electricity; or (ii) heating or cooling;*
- *the identity, location, type and capacity of the installation where the energy was produced;*
- *whether and to what extent the installation has benefited from investment support, whether and to what extent the unit of energy has benefited in any way from a national support scheme, and the type of support scheme;*
- *the date on which the installation became operational; and*
- *the date and country of issue and a unique identification number.’*

All this information must be contained in the GO, which is electronic in form (Article 2(j)). Any operations in connection with the GO (issuance, transfer and cancellation) must also take place electronically.

The GO must be used within the twelve months of the generation of the corresponding unit of renewable electricity.<sup>451</sup> Utilisation is demonstrated by redemption in the account of the GO-owner. This provision aims firstly to ensure liquidity on the market by avoiding banking. It is also intended to avoid the national energy mix being based on old data when GOs are taken into account, as this would misinform final customers as to the real volume of renewable electricity produced.<sup>452</sup> The GO has a standardised size of 1 MWh and corresponds strictly to one unit of energy.<sup>453</sup> In order to avoid double counting, a GO shall be taken into account only once for the same green MWh.<sup>454</sup> Accordingly, in the context of fuel disclosure, the supplier must correct the renewable part of its energy mix *pro rata* with the RE-GOs transferred to a third party.<sup>455</sup>

As emphasised by the words ‘*at least*’, the directive provides for a minimum harmonisation and Member States can require that GOs include additional information. The directive envisages itself in Article 15.12 that Member States can require suppliers to disclose in addition whether the supplied electricity corresponds in part or in total to new renewable energy generation that became operational after 25 June 2009. Similarly, Article 15.11 of the directive provides that ‘*A Member State may introduce, in conformity with community law, objective, transparent and non-discriminatory criteria for the use of guarantees of origin in complying with the obligations laid down in Article 3.6 of*

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*guarantees of origin is not always reliable, and their role as a standard proof of renewable electricity is at times constrained or unrecognised [see E-Track project]. This is another matter which is being addressed in the new Directive on renewable energy.’* SEC(2009) 503 final, pp. 10-11.

<sup>450</sup> *‘It lays down rules relating to ... guarantees of origin...’*

<sup>451</sup> Article 15.3 of Directive 2009/28/EC.

<sup>452</sup> T. Howes, ‘“Trading” renewable energy and types of national support schemes,’ in P. Hodson, C. Jones and H. Van Steen, *EU Energy Law – Renewable Energy Law and Policy in the European Union*, EU Energy Law Coll. Vol. III Book One (Claeys & Casteels, 2010), p. 111.

<sup>453</sup> Article 15.2, first sub-paragraph last sentence, Directive 2009/28/EC.

<sup>454</sup> Article 15.2, second sub-paragraph, Directive 2009/28/EC. This requirement is also contained in Recital 52 of Directive 2009/28/EC: ‘*Energy from renewable sources in relation to which the accompanying guarantee of origin has been sold separately by the producer should not be disclosed or sold to the final customer as energy from renewable sources.’*

<sup>455</sup> Article 15.8, Directive 2009/28/EC.

*Directive 2003/54/EC.*<sup>456</sup> An illustration of such criteria that can adopt a Member State as part of the disclosure requirement is given in Recital 53, in relation to the inclusion of a minimum percentage of GOs from recently constructed RES-E generation plants.

Responsibility for guaranteeing the origin of renewable electricity according to *objective, transparent and non-discriminatory criteria*<sup>457</sup> remains with the Member States. The directive contains some criteria as regards the GOs' issuing body and envisages an assessment role for the European Commission. First, the Member States, or the designated competent bodies, must supervise the issuance, transfer and cancellation of the GOs. Second, the definitions of the respective bodies' competences must not overlap geographically. The bodies must also be independent of activities in electricity production, trading and supply.<sup>458</sup> It should be noted that the directive uses the term 'bodies', as the tasks may be conferred on a private organisation or undertaking.

As regards the mechanisms behind the tracking performed by GOs, the directive confers on Member States or the designated competent bodies a duty to ensure that the GOs are accurate, reliable and fraud-resistant.<sup>457</sup> Member States must make regular reports to the Commission on the functioning of the system in general, and on measures taken to ensure reliability and fraud-resistance in particular.<sup>458</sup> The directive does not mention the evaluation of the manner in which the Member States have implemented these requirements as one of the issues the European Commission 'shall' report on, but this does not preclude the Commission from taking up issues concerning the implementation of GO systems in its report to the European Parliament and the Council pursuant to Article 23.3 of the directive.

A failure by a Member State to respect any one of these obligations would constitute a breach of the directive's provisions and require the application of the standard infringement procedure defined in Article 258 TFEU. The implementation of the provisions on GOs is not addressed in the template for National Renewable Energy Action Plans adopted by the Commission, since this focuses on target compliance.<sup>459</sup>

#### **6.1.2.4 Guarantees of origin - utilisations and trading terms in Directive 2009/28/EC**

Directive 2009/28/EC makes it clear that GOs may only be used for the purposes of fuel-mix disclosure. Pursuant to Article 2(j) of the directive, GOs are defined as being electronic documents that have *'the sole function of providing proof to a final customer that a given share or quantity of energy was produced from renewable sources as required by Article 3(6) of Directive 2003/54/EC.'* Article 15.1 reproduces this limitation regarding GOs' use. Article 15.9 provides similarly that Member States shall recognise other states' GOs only for the purpose of disclosure as defined in Article 15.1, including the

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<sup>456</sup> Article 15.4, Directive 2009/28/EC.

<sup>457</sup> Article 15.5, Directive 2009/28/EC.

<sup>458</sup> Article 22.1 (d), Directive 2009/28/EC. Each Member State must submit its report to the Commission for the first time by 31 December 2011, and every two years thereafter. The final report must be submitted by 31 December 2021.

<sup>459</sup> Commission Decision No. 2009/548/EC of 30 June 2009 establishing a template for National Renewable Energy Action Plans under Directive 2009/28/EC of the European Parliament and of the Council, OJ L182, 15.07.2009, p. 33.

information detailed in Article 15.6 (a) to (f). This limitation is emphasised again in Recital 52, which provides: ‘*Guarantees of origin issued for the purpose of this Directive have the sole function of proving to a final customer that a given share or quantity of energy was produced from renewable sources.*’ The clear limitations placed on the use of GOs are intended both to answer the shortcomings resulting from the divergent national implementations of Directive 2001/77/EC and also to prevent GOs being used for target compliance.

In the past, the Commission has argued several times in favour of the harmonisation of GOs in order to facilitate trade in renewable electricity.<sup>460</sup> In its original proposal for a renewable energy directive, the Commission defended the use of GOs for target compliance and for compliance with support schemes.<sup>461</sup>

The final text of Directive 2009/28/EC is far more restrictive as to the utilisation of GOs. As a result of the position defended by the Council,<sup>462</sup> Article 3 of the directive prevents GOs from being used for target compliance. Similarly, trade in GOs must not affect the choices made by Member States concerning the use of the cooperation mechanisms defined in the directive, *i.e.*, statistical transfers, joint projects or the joining of support schemes for target compliance. Pursuant to Article 5, GOs may not be taken into account to calculate the gross final consumption of energy from renewable sources (Article 15.2, fourth sub-paragraph). The main reason for these limitations is the desire of Member States to retain control over their national support schemes, which could be hampered by the acceptance of a tradable instrument such as the GO.<sup>463</sup> Directive 2009/28/EC makes a clear distinction between the GO as a tracking instrument for electricity disclosure and the RES-E support schemes. As stated in Recital (56) of Directive 2009/28/EC, ‘*Guarantees of origin do not by themselves confer a right to benefit from national support schemes.*’<sup>464</sup> The extent to which GOs and support schemes, and, in particular, TGCs, may indirectly interact with each, as well as the provisions of Directive 2009/28/EC where applicable, is analysed in section 6.2.

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<sup>460</sup> See e.g.: *The share of renewable energy in the EU*, Communication from the European Commission to the European Council and the European Parliament, COM(2004) 366; Annex to the Impact Assessment, Document accompanying the Package of Implementation measures for the EU’s objectives on climate change and renewable energy for 2020, Commission staff working document, SEC(2008) 85, Vol. II, 27.02.2008, pp. 26-27.

<sup>461</sup> See the intended role given to GOs by the Commission in its proposal for a directive: recital 18, Article 5.9 (application of the system of GO to imported electricity that can count towards Member States’ targets); recital 19, Article 8.1, Article 10 (RES from other Member States can count towards national targets based on GOs) proposal for a directive of the European Parliament and of the Council on the promotion of the use of energy from renewable sources, European Commission, COM(2008) 19 final, 23.01.2008. See also M. Schöpe, ‘The new EU Directive on renewable energies from the perspective of a Member State,’ in C. Jones, *EU Energy Law – The European Renewable Energy Yearbook*, Vol.III – Book Three (Claeys & Casteels, 2010), pp. 177-198.

<sup>462</sup> See, in particular, the contribution made by three Member States which served as basis for the compromise: *Joint proposal by Germany, Poland and the United Kingdom on an alternative renewable flexibility mechanism*, Non-Paper, distributed to the other Member States in the European Council, June 2008.

<sup>463</sup> See on that point: T. Howes, ‘“Trading” renewable energy and types of national support schemes,’ in P. Hodson, C. Jones and H. Van Steen, *EU Energy Law – Renewable Energy Law and Policy in the European Union*, EU Energy Law Coll. Vol. III Book One (Claeys & Casteels, 2010), pp. 110-111.

<sup>464</sup> A similar distinction appears in Directive 2001/77/EC.

While limiting the use of GOs to disclosure, Directive 2009/28/EC recognises the fact that GOs are the object of intensive trading both together with and separately from electricity.<sup>465</sup> Trade in GOs, as with TGCs, brings an element of flexibility into compliance with the disclosure obligation. It also contributes to the overall objective of facilitating trade in renewable electricity. For these reasons, Directive 2009/28/EC facilitates cross-border trade in GOs and defines a principle of mutual recognition of GOs. Member States have a legal obligation mutually to recognise GOs.<sup>466</sup> A Member State may refuse to recognise a GO issued by another Member State, but such a refusal will only be legal where the Member State has ‘*well-founded doubts*’ about ‘*the accuracy, reliability or veracity*’ of the GO.<sup>467</sup> In the event of a refusal, the Member State is legally obliged to notify the European Commission of its decision and the reasons for it. If the Commission does not agree with the Member State’s assessment and considers the refusal to be unjustified, it can adopt a decision forcing the Member States to recognise the GO in question (Article 15.10). The same obligation of mutual recognition existed in Article 5.4 of Directive 2001/77/EC, in slightly different terms. The European Commission has applied these provisions only once, for a breach of Article 5.4 of Directive 2001/77/EC. In this case the Commission launched court proceeding against Italy for its refusal to recognise GOs from other Member States. The Commission did not find the refused GOs necessarily less reliable.<sup>468</sup> The case was closed following Italy’s recognition of the GOs in question.

### 6.1.3 Directive 2004/8/EC provisions on electricity tracking

The last piece of legislation containing provisions on electricity tracking is Directive 2004/8/EC on the promotion of cogeneration based on a useful heat demand in the internal energy market.<sup>469</sup> The purpose of Directive 2004/8/EC, as defined in its Article 1, is twofold: first to increase energy efficiency; and second to improve security of energy supply. As the Commission remarked in its proposal, ‘*cogeneration is not a target in itself*’, but a means to reduce energy consumption and carbon dioxide emissions.<sup>470</sup> The environmental protection objective is reflected in the choice of legal basis for the directive.<sup>471</sup> The objective of security of energy supply is to be secured by means of an optimised energy supply, more decentralised energy generation, and gains in competitiveness.<sup>472</sup> To achieve these goals, the directive establishes a framework for the

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<sup>465</sup> Recital 52 and Article 15.2, Directive 2009/28/EC.

<sup>466</sup> Article 15.9, first sentence, Directive 2009/28/EC.

<sup>467</sup> Article 15.9, second sentence, Directive 2009/28/EC.

<sup>468</sup> *Green electricity: Commission refers Italy to the Court of Justice*, press release, European Commission, IP/09/1799, 20.11.2009.

<sup>469</sup> Directive 2004/8/EC of 11 February 2004 on the promotion of cogeneration based on a useful heat demand in the internal energy market and amending Directive 92/42/EEC, OJ L52, 21.2.2004, p. 50, as amended.

<sup>470</sup> Proposal for a Directive of the European Parliament and of the Council on the promotion of cogeneration based on a useful heat demand in the internal energy market, COM(2002) 415 final, 22.7.2002, p. 2.

<sup>471</sup> Like Directive 2009/28/EC, Directive 2004/8/EC is based on Article 175(1) EC, environmental protection (now Article 192.1 TFEU).

<sup>472</sup> Recital 1, Directive 2004/8/EC. This interpretation of the purpose of the directive has also been repeated by commentators. See, in particular, Chapter 4 – Directive on the promotion of cogeneration, in L.

promotion of cogeneration in general, and for the development of high efficiency cogeneration (HE-CHP) in particular. Cogeneration is defined in the directive as the ‘*simultaneous generation in one process of thermal energy and electrical and/or mechanical energy.*’<sup>473</sup> High efficiency cogeneration is cogeneration that meets the criteria set in Annex III to Directive 2004/8/EC.<sup>474</sup> Cogeneration plants are mostly fired by fossil fuels (e.g., natural gas, coal, heating oil), but may also use renewable energy sources (e.g., biomass, biogas, bioethanol). This is why certain TGCs schemes include HE-CHP in their scope of application. In such a case, the provisions of Directive 2004/8/EC must be taken into account for the regulatory design of the TGCs scheme. The provisions of Directive 2004/8/EC are very similar to those of Directive 2001/77/EC, which had been adopted a few years previously. This was intentional on the part of the European legislator who intended to reproduce the same mechanisms, although without linking them ‘*at this stage.*’<sup>475</sup>

The main obligation in relation to electricity tracking is contained in Article 5 of the directive, which mandates Member States to establish a system that enables them to guarantee the origin of electricity produced from high-efficiency cogeneration (HE-CHP-E). The origin of the HE-CHP-E must be guaranteed according to ‘*objective, transparent and non-discriminatory criteria*’ laid down by each Member State.<sup>476</sup> Directive 2004/8/EC refers directly and solely to GOs as the means for electricity ‘*producers*’<sup>477</sup> to demonstrate that their electricity originates from HE-CHP plants. Article 5 refers to the GO in the

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Werring (ed.), *EU Energy Law – Volume III, EU Environmental Law, Energy Efficiency and Renewable Energy Sources*, (Claeys & Casteels, 2006), pp. 93-94.)

<sup>473</sup> Article 3 (a), Directive 2004/8/EC.

<sup>474</sup> Annex III to Directive 2004/8/EC relates to the methodology for determining the efficiency of the cogeneration process.

<sup>475</sup> Proposal for a directive of the European Parliament and of the Council on the promotion of cogeneration based on a useful heat demand in the internal energy market, COM(2002) 415 final, 22.07.2002, para. 5.2.

<sup>476</sup> Article 5.1, Directive 2004/8/EC.

<sup>477</sup> The directive refers only to electricity ‘producers’ that ‘sell’ their electricity. This may raise the question whether the directive should be interpreted to cover both producers and providers, as providers are mainly responsible for sales activities in relation to final customers (in the context of a post-liberalised power sector). The wording of the Third Electricity Directive (like its two predecessors) is much more precise on this point, defining an electricity ‘producer’ as a natural or legal person ‘generating electricity’ (Article 2.2 Directive 2009/72/EC) and distinguishing the producer from the supplier, in that ‘supply’ means ‘the sale, including resale, of electricity to customers’ (Article 2.19, Directive 2009/72/EC). Similar distinctions between producers, suppliers and any other types of electricity undertakings are made throughout the text of Directive 2009/72/EC. Accordingly the wording of Directive 2004/8/EC must be interpreted as meaning that only electricity producers are entitled to GOs. The producer’s sales activities mentioned in Article 5.1 of Directive 2004/8/EC would thereby refer to the generator’s act of selling power to an electricity undertaking, in particular, to an electricity provider or to the wholesale market or directly to the load. This interpretation is consistent with the rest of the wording of the directive, and in particular with the last part of the last sentence of Article 5.1. This makes it clear that the GO will only be issued on the request of the HE-CHP-E producer.

This interpretation is also confirmed by the literature. One commentator writes: ‘*The [CHP] Directive states that the right to claim a guarantee of origin is limited to the producer of the cogenerated electricity. This is a limitation compared to the RES-E Directive, in which this right is not established.*’ Source: Chapter 4, in L. Werring (ed.), *EU Energy Law – Volume III, EU Environmental Law, Energy Efficiency and Renewable Energy Sources*, (Claeys & Casteels, 2006), pp. 93-94.)

definite and demonstrative form (*'this', 'the'*),<sup>478</sup> which creates confusion between the general obligation to guarantee the origin of the electricity and the tracking instrument that is the GO. Article 5.1 in particular provides that Member States shall ensure that *'this' GO 'enable[s] producers to demonstrate that the electricity they sell is produced from high efficiency cogeneration.'* It follows from the Recitals and from paragraphs 2 to 6 of Article 5 that GOs must be available at national level. Other provisions of the directive also refer to the GO as a separate instrument.<sup>479</sup> The directive must consequently be interpreted as requiring the establishment by Member States of national systems for HE-CHP-GOs as mandatory tracking instruments. The obligation to establish a tracking mechanism supporting the GO scheme is confirmed in Article 5.3, which requires Member States or the competent bodies to *'put in place appropriate mechanisms to ensure that the guarantee of origin is both accurate and reliable.'*

The directive requires three basic pieces of information to be contained in the HE-CHP-GO. These are:

- *'the lower calorific value of the fuel sources from which the electricity was produced,' 'the use of the heat generated together with the electricity,' and 'the dates and places of production;'*
- *'the quantity of electricity from high efficiency cogeneration in accordance with Annex II that the guarantee represents';*
- *'the primary energy savings calculated in accordance with Annex III based on harmonised efficiency reference values established by the Commission.'*<sup>480</sup>

These items of information represent a minimum requirement that Member States can exceed by adding requirements for supplementary generation information.<sup>481</sup> However, the GO is subject to a principle of mutual recognition between Member States.<sup>482</sup> Even if a

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<sup>478</sup> Article 5, §§1-2, Directive 2004/8/EC, emphasis added:

*'1. On the basis of the harmonised efficiency reference values referred to in Article 4(1), Member States shall, not later than six months after adoption of these values, ensure that the origin of electricity produced from high-efficiency cogeneration can be guaranteed according to objective, transparent and non-discriminatory criteria laid down by each Member State. They shall ensure that this guarantee of origin of the electricity enables producers to demonstrate that the electricity they sell is produced from high efficiency cogeneration and is issued to this effect in response to a request from the producer.*

*2. Member States may designate one or more competent bodies, independent of generation and distribution activities, to supervise the issue of the guarantee of origin referred to in paragraph 1.'*

<sup>479</sup> Recitals 13 and 19, Articles 12.2 and 12.3, Directive 2004/8/EC.

<sup>480</sup> Article 5.5, Directive 2004/8/EC.

<sup>481</sup> Article 5.5, Directive 2004/8/EC.

<sup>482</sup> Although the directive requires that GOs 'should' be mutually recognised, the provision on mutual recognition of GOs is followed by a reference to the assessment procedure to be adopted by the European Commission in the case of any refusal. This procedure may lead the Commission to adopt a decision compelling the refusing state to recognise the CHP-GO. In practice this means there is a quasi-obligation to recognise GOs generated by other Member States, except where serious doubts exist as to their quality and, in particular, where fraud is suspected.

The use of the subjunctive 'should' has been commented on as follows: *'As in the similar Article in Directive 2001/77/EC, the word "should" is here again used in a normative text, indicating the hesitation amongst Member States to be subject of imported co-generated electricity that may claim support. The point is that a Member State most likely cannot reject the validity of a Guarantee of Origin issued by another Member State. Therefore, if a Member State has established a support scheme for electricity solely based on the presence of a valid guarantee of origin then this Member State will also face difficulties in rejecting a request for support based on a foreign Guarantee of Origin.'*



national GO contains more information than an imported GO, Member States cannot restrict trade in the imported GOs on this basis. They must be considered like products as regards internal market trade.

As concerns the utilisation of the HE-CHP-GOs, the provisions of Directive 2004/8/EC are less clear than those of Directive 2009/28/EC. The directive distinguishes the HE-CHP-GO system from support schemes in several places, but it does not, for example, explicitly limit its utilisation to disclosure. What it makes clear is that GO schemes do not in themselves give rise to a right to benefit from national support mechanisms,<sup>483</sup> and that GOs must be '*clearly*' distinguished from '*exchangeable certificates*'.<sup>484</sup> This prevents the use of HE-CHP-GOs as a substitute to TGCs. Member States can decide to operate a certificate-based support scheme for CHP, but this provision makes it clear firstly that the directive does not require Member States to establish such a scheme (no harmonisation of support schemes) and secondly that the HE-CHP-GO is not a certificate for support-related purposes. This also means that a Member State that allows GOs to count under its support scheme can refuse to allow foreign electricity accompanied by a GO to benefit from its scheme. In that sense, Member States retain control over their national support schemes for cogeneration. For the same reason, GOs are mutually recognised 'exclusively' as proof regarding the three categories of information referred to above.<sup>485</sup>

Directive 2004/8/EC addresses the issue of support schemes separately in Article 7, without dealing with the possible relationship between GOs and support. Unlike the situation under Directive 2009/28/EC, there is no requirement to mention on the GO whether the plant has already received support. The intended utilisation of HE-CHP-GOs was clarified both in the proposal from the European Commission and the Position of the European Parliament in the first reading, which limited the use of the GOs to disclosure.<sup>486</sup> Even if Directive 2004/8/EC did not limit the use of GOs to disclosure, it does however suggest this, as GOs contribute to increasing '*transparency for the consumer's choice between electricity from cogeneration and electricity produced on the basis of other techniques*,'<sup>487</sup> and to enabling producers to '*demonstrate that the electricity they sell is produced from high efficiency cogeneration*.'<sup>488</sup> By providing thus, the directive intends to create the conditions for the development of a market for CHP-E, just as Directive

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*However, according to paragraph 4 of Article 5, it seems legitimate to limit the support to domestic production.*' (Source: Chapter 4, in L. Werring (ed.), *EU Energy Law – Volume III, EU Environmental Law, Energy Efficiency and Renewable Energy Sources*, (Claeys & Casteels, 2006), p. 113)

<sup>483</sup> Article 5.4, Directive 2004/8/EC: '*Schemes for the guarantee of origin do not by themselves imply a right to benefit from national support mechanisms.*' Similar comment is also made in Recital 21.

<sup>484</sup> Recital 22, Directive 2004/8/EC.

<sup>485</sup> Article 5.6, Directive 2004/8/EC: '*Such guarantees of origin, issued according to paragraph 1, should be mutually recognised by the Member States, exclusively as proof of the elements referred to in paragraph 5. [...].*'

<sup>486</sup> Proposal for a directive of the European Parliament and of the Council on the promotion of cogeneration based on a useful heat demand in the internal energy market, COM(2002) 415 final, 22.07.2002, para. 5.2. See also Position of the European Parliament adopted in first reading on 13 May 2003 on the proposal for a directive of the European Parliament and of the Council on the promotion of cogeneration based on a useful heat demand in the internal energy market, Doc. P5\_TA(2003)0202, Recital 17.

<sup>487</sup> Recital 21, Directive 2004/8/EC.

<sup>488</sup> Article 5.1, Directive 2004/8/EC.

2009/28/EC intends to develop a market for RES-E.<sup>489</sup> As for Directive 2001/77/EC, the lack of detail in certain provisions of the directive and the lack of limitations placed on the use of GOs resulted in divergent implementations at Member State level. The GOs have been used for different purposes, including in relation to support schemes, and this fact has hindered trade in CHP-GOs.<sup>490</sup>

Directive 2004/8/EC has remained in force despite the adoption of the climate and energy legislation package. Directive 2009/28/EC addresses the issue of the GOs issued under Directive 2004/8/EC in Recital 55. Being part of the Recitals, the provision is not legally binding, but nonetheless has practical significance for producers. Pursuant to Recital 55 of Directive 2009/28/EC, an HE-CHP-GO issued in accordance with Directive 2004/8/EC ‘cannot be used when disclosing the use of energy from renewable sources in accordance with Article 3(6) of Directive 2003/54/EC as this might result in double counting and double disclosure.’ This means that only an RE-GO issued under Directive 2009/28/EC (not an HE-CHP-GO) can be used to comply with the disclosure requirement of Directive 2009/72/EC in cases where cogeneration is based on renewable energy sources. For example, a biomass-fired cogeneration plant cannot use both an RE-GO and an HE-CHP-GO for disclosure regarding the same unit of energy, as this would amount to double counting. The lack of clarification and coordination between the directives as regards the use and issuance of the two types of GOs raises concerns about reliability and allows for divergences in implementation.<sup>491</sup>

While it defines the minimum content of the GO, Directive 2004/8/EC does not further define the details of tracking mechanisms. These fall under the competence of the Member States or their competent bodies, whether these are public or private, regional, national or common to several Member States.<sup>492</sup> Procedures for ensuring the accuracy and reliability of the information on which the GO is based are also left to the Member States. The directive requires the issuing bodies designated by the state to be independent of generation and distribution activities (Article 5.2). But once again, Directive 2004/8/EC leaves the Member States to decide whether to designate one or several issuing bodies. In that respect, the wording of Directive 2009/28/EC on RE-GOs is more detailed and provides for a greater level of harmonisation of the content of the GO. Concerning the designation of issuing bodies, Directive 2009/28/EC requires that even if several issuing bodies co-exist within the same Member State, their areas of responsibility must not overlap geographically (Article 15.4). In practice, as the same authorities will generally be in charge of issuing HE-CHP-GOs and RE-GOs, the two issuing processes may be very

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<sup>489</sup> See Chapter 4, in L. Werring (ed.), *EU Energy Law – Volume III, EU Environmental Law, Energy Efficiency and Renewable Energy Sources*, (Claeys & Casteels, 2006), p. 109.

<sup>490</sup> C. Timpe and H. Sprongl, *Long-Term Developments and Integration of Energy-Related Certification Schemes*, WP6 report of the E-TRACK II project, report prepared as part of the IEE project *A European Tracking System for Electricity – Phase II (E-TRACK II)*, 30 November 2009, p. 28.

<sup>491</sup> See possible concerns as to implementation in ‘Best Practice for the Tracking of Electricity,’ Recommendations from the E-TRACK II project, Deliverable 10, Intelligent Energy Europe, November 2009, pp. 45-46.

<sup>492</sup> Article 5.3 of Directive 2004/8/EC provides that ‘Member States or the competent bodies *shall* put in place appropriate mechanisms to ensure that the guarantee of origin [is] both accurate and reliable ...’ (emphasis added).

similar and the requirements applied to RE-GOs may be expected to be reproduced for HE-CHP-GOs *de facto* and probably also *de jure*.<sup>493</sup>

The CHP Directive entered into force on 21 February 2004 and was required to be transposed into national legislation by 21 February 2006. However, the extreme delay experienced by the Committee in publishing the final calculation guidelines for the definition of HE-CHP has caused delays in implementation at Member State level. Pursuant to Articles 5.3 and 10.1 of Directive 2004/8/EC, Member States had to report by the same date on their implementation of these provisions and, in particular, on measures they had adopted to ensure the reliability of the GO system. A review of the national reports reflects extremely divergent, and sometimes poor, levels of implementation.<sup>494</sup>

## **6.2 EU electricity tracking requirements and national green certificates schemes**

### **6.2.1 Indirect effects of EU electricity tracking requirements on national TGCs schemes**

All RES-E support measures, in order to be accurate and reliable, as well as to avoid double counting and over-compensation, require underlying mechanisms for the tracking of generation attributes. The shortcomings consequent on the lack of electricity tracking under support schemes were addressed in two cases before the ECJ. The interaction between electricity tracking and green certificates support schemes has similarly been noted in the United States, where the California Public Utility Commission (CPUC) did not want to allow trading in RECs until a reliable tracking system was in place. This has been settled by the establishment of WREGIS.<sup>495</sup> It is fair to say that a fully tradable green certificates scheme requires reliable tracking mechanisms.

As demonstrated in section 6.1, the choice of tracking instrument for electricity disclosure, target or support in favour of RES-E generation remains within the competence of the Member States. Meanwhile, EU law contains several provisions on electricity tracking that address both qualitative requirements (in particular reliability) and tools (such as the certificate-based system offered by the GO). It can be concluded from the interpretation of

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<sup>493</sup> Commentators have here expressed the view that: ‘*Although [the provision of Directive 2009/28/EC on the use of RE-GO] has no legal impact on the GO for HE-CHP-E, one could expect that many European governments will use the time frame until December 2010, until when the new GO for RES-E has to be implemented, to revise the definition of the CHP-GO accordingly in order to achieve a consistent system of Guarantees of Origin.*’ C. Timpe and H. Sprongl, *Long-Term Developments and Integration of Energy-Related Certification Schemes*, WP6 report of the E-TRACK II project, report prepared as part of the IEE project *A European Tracking System for Electricity – Phase II (E-TRACK II)*, 30 November 2009, p. 28.

<sup>494</sup> The reports published by the Member States are available on the website of the European Commission, Directorate General Energy and Transport, Energy Efficiency/Cogeneration webpage, at <[http://ec.europa.eu/energy/efficiency/cogeneration/member\\_states\\_reports\\_en.htm](http://ec.europa.eu/energy/efficiency/cogeneration/member_states_reports_en.htm)>.

<sup>495</sup> See CPUC Division of Strategic Planning, *Renewable Energy Certificates and the California Renewables Portfolio Standard Program 77-78*, 20 April 2006, stating that the migration to a fully tradable REC regime absolutely will require an electronic tracking system. See also CPUC Code §399.16(a)(1) West Supp.2007.

those provisions, the practice and the position taken by the European Commission that the EU legislation has progressively created a favourable environment for an extension of the use of certificate-based mechanisms in other areas than disclosure and in particular in the perspective of the establishment of TGCs schemes. Both GOs and TGCs require the same level of reliability and fraud resistance. The reliability of TGCs as a tracking instrument can be ensured on the basis of the same infrastructures and standards as those employed for GOs. For example, many TGCs schemes are based on the EECS, which is also used for GOs. There is consequently an indirect but real effect of the EU provisions on electricity tracking on TGCs schemes.

Directive 2009/28/EC is certainly the piece of EU legislation that contains the more detailed provisions as regards the relationship between GOs and TGCs schemes. The following two sections analyse how far these EU provisions affect the design of national schemes.

### **6.2.2 Requirements of Directive 2009/28/EC as to the legal separation of TGCs and GOs**

EU law requires a clear distinction to be drawn between the utilisations of GOs and TGCs. However, the extent to which Directive 2009/28/EC requires them to be distinguished legally as separate legal objects has been subject to debate.

As early as Directive 2001/77/EC, Recital 11 stated that *'it is important to distinguish guarantees of origin clearly from exchangeable green certificates.'* As in the case of cogeneration, the primary objective of this provision was to avoid the directive from being interpreted as requiring the adoption of a tradable certificates scheme. The new provisions contained in Directive 2009/28/EC require a much clearer distinction to be drawn between GOs and TGCs. The directive defines the GO as an electronic document used solely for disclosure.<sup>496</sup> While the GO and the TGC may be issued and traded together, or 'bundled', the directive requires the GO to remain a separate electronic document. It is therefore reasonable to conclude that the directive requires the GO to remain a separate legal object, also with regard to TGCs. It is correct to say, however, that the directive does not require – as is often argued – the legal separation of the two documents. In practice, it would be impossible to do otherwise, given the mandatory difference in their uses, the fact that they are registered in two separate registries and their trading modalities. Although GOs and TGCs can be sold together, as in Flanders in Belgium, they remain two separate certificates. Assigning the function of a GO to a TGC would be in breach of the directive. The recitals of the directive contain two additional references to the distinction. Recital 56 of Directive 2009/28/EC stresses the distinction with regard to the use of GOs, in particular in the context of a support scheme: *'guarantees of origin do not by themselves confer a right to benefit from national support schemes.'* Here the reasoning is the same as in the cogeneration directive, to ensure that Member States keep control over their national schemes. Recital 52 reiterates the statement contained in Directive 2001/77/EC with some precision as to the use of TGCs solely for support-related purposes: *'It is important to distinguish between green certificates used for support schemes and guarantees of origin.'* The distinction between GOs and support schemes is also emphasised in the drafting of

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<sup>496</sup> Article 2 (j) Directive 2009/28/EC. See on that point previous comments in section 6.1.2.4.

Directive 2009/28/EC, in that the provisions on GOs are contained in Article 15, while the provisions on flexible compliance instruments are contained in Articles 6 to 12.

Article 15.2, second sub-paragraph, requires that *‘No more than one guarantee of origin shall be issued in respect of each unit of energy produced.’* This does not preclude the issuance simultaneously of a GO and a TGC for the same unit of renewable electricity, provided the Member State permits this. The purposes of the GO and the TGC are indeed different. In the same vein, and more generally to avoid the double counting of generation attributes, Article 15.2 requires that *‘the same unit of energy from renewable sources is taken into account only once’*.

For the national competent authorities, this entails the issuance of two legally separate objects. Meanwhile, it is highly likely that GOs and green certificates will have the same issuing procedures and share the same infrastructure (registry, domain protocols and issuing body) even though ultimately they constitute two different commodities. GOs and TGCs are administered by the same bodies in several Member States. Once the GO system has been implemented in accordance with the rules laid down in Directive 2009/28/EC, it becomes easier for the State to use the same infrastructure to issue other types of energy certificates, including certificates for other purposes and for other energy sources. In that sense, the duplication of the mechanism produces some benefits in savings of administrative costs and the reliability of the information. This may result in a purely practical interaction between RES-E support and GO schemes and an incentive to use the same types of instruments.

The fact that the same MWh of green electricity can give rise to a GO for disclosure and a green certificate for support was the origin of a proposal from the Association of Issuing Bodies (AIB) regarding the issuance of a single certificate with multiple uses. Along the same lines, a proposal put forward in 2004 by REGO concerned the definition of a ‘triple certificate model.’<sup>497</sup> Some authors have proposed handling the different functions of disclosure, target compliance and quota obligation compliance through the use of a multi-certificate model, arguing that:

*‘only a fraction of the power produced is normally eligible in all three applications. In many member states some of these applications may not be relevant at all. The multi-certificate model however, allows the user (member state) to choose if one, two or three certificates should be issued, and it allows the state to decide if any two or three of the certificates should be bundled into one in cases where the transfer of the attributes should be inextricably linked. The concept furthermore allows for sequential retirement of each attribute of bundled certificates or simultaneous retirement of all attributes if that is required... Multi-certificates accommodate the fact that multiple regulatory requirements relating to the same MWh are usually placed on different actors and need to be fulfilled at different dates.’<sup>498</sup>*

Even if multiple certificates could have existed under Directive 2001/77/EC, this is no longer possible. Due to the reasons detailed above and the new provisions of Directive 2009/28/EC, the E-TRACK II project advises against such practices and recommends that

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<sup>497</sup> *Energy source disclosure, renewable energy targets and guarantees of origin. A multi-certificate response to multiple regulatory requirements*, K. O. Kristiansen, R. Jørgensen, J. Lauritzen, Statnett SF 2004, p. 1.

<sup>498</sup> *Energy source disclosure, renewable energy targets and guarantees of origin. A multi-certificate response to multiple regulatory requirements*, K. O. Kristiansen, R. Jørgensen, J. Lauritzen, Statnett SF 2004, p. 1.

the use of one single certificate with multiple utilisations should be avoided. The project recommends that TGCs and GOs should represent two legally distinct commodities.<sup>499</sup> Any bundling of TGCs and GOs for transferring and trading purposes should be regulated to avoid confusion and, ultimately, over-compensation.

### **6.2.3 Provisions of Directive 2009/28/EC on the combination of TGCs and GOs**

Directive 2009/28/EC gives Member States discretion whether to allow the concomitant issuance of TGCs and GOs for the same unit of electricity. Article 15.2, third subparagraph, provides that *'Member States may provide that no support be granted to a producer when that producer receives a guarantee of origin for the same production of energy from renewable sources.'* The issuance of GOs is an EU obligation and the RES-E producer is legally entitled to receive GOs on demand. Whether the RES-E producer will receive a TGC in addition to a GO for the same green MWh will depend on national legislation. This is consistent with the principle that Member States retain control over their national support schemes, as reviewed in Chapter 5. Directive 2009/28/EC consequently allows for divergences in implementation with some countries allowing solely for the issuance of GOs and others allowing for a combination of GOs and TGCs. National implementing legislation already varies widely with regard to the possible combination of GOs and RES-E support schemes. In the case of TGCs schemes, two general situations can be identified.

In the first situation, the Member State forbids the issuance of TGCs at the time the RES-E producer receives GOs. The RES-E producer will obtain revenues from the sale of electricity and from the GOs, but not from the support scheme. The main reason for forbidding the combination of TGCs and GOs is the avoidance of over-compensation. Indeed, support schemes are usually designed in order to compensate differences in generation costs (between renewable and conventional energy), but to avoid over-compensation. As a practical consequence, the RES-E producer must decide in advance whether to request the GO or benefit from the support. This is, for example, the case under the FITs scheme in Germany, where producers communicate their decisions on a month-by-month basis. Not requesting the GO means that the electricity cannot be marketed as renewable on the retail market, but does not preclude the supplier from meeting, *e.g.*, its quota obligation. There is consequently a risk when the different utilisations of electricity generation attributes are not coordinated to put the different objectives and the different instruments (GOs and GCs in particular) in competition.

In the second situation, the Member State allows the issuance of both a GO and a TGC for the same unit of renewable electricity. The RES-E producer receives revenues from the sales of electricity, GOs and TGCs. To avoid over-compensation, it will be important to calculate the value of the TGC so that it does not exceed the difference in production costs. Member States have implemented different strategies to deal with the latter issue. The main differences between these strategies lie in the link at retail level between support and disclosure. Where the combined issuance of GOs and TGCs is permitted, the relationship between them is usually regulated in detail in national legislation.

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<sup>499</sup> *Best Practice for the Tracking of Electricity*, Recommendations from the E-TRACK II project, Deliverable 10, Intelligent Energy Europe, November 2009, pp. 71-72.

One strategy allows the GO and the TGC to be issued and traded together, *i.e.*, ‘bundled’. Here the final customer buys green electricity (attested by the GO used for disclosure) and also supports its generation (paying the costs related to the TGC). Until now this has been the case in Flanders, Belgium, where TGCs and GOs must be issued concomitantly, are bundled and cannot be separated when traded at wholesale level. However, the two certificates are used separately and can be unbundled in order to fulfil a quota obligation or a fuel-mix disclosure obligation at retail level. The Flemish system has been described as ‘a multi-certificate system.’<sup>500</sup> The GO is the sole tracking instrument accepted for disclosure. Electricity cannot be sold as renewable if it is not accompanied by the redemption of the corresponding GOs. Once the GO has been redeemed, the TGC can still be used for quota compliance. However, if the TGC is redeemed first, the GO is automatically cancelled. One explanation for this system is that Flanders had already established its green certificates scheme in 2002, prior to the implementation of the GO system required by Directive 2001/77/EC. Flanders then added the GOs’ disclosure function to the green certificates, using the same infrastructure. As the GOs cover HE-CHP-E production based on renewable energy, HE-CHP-GOs for renewable energy are issued via the same process and can be linked to the TGCs scheme. The Flemish scheme can consequently be seen as combining disclosure and support for renewable energy (and HE-CHP) by linking support and final consumption. The bundling of GOs and TGCs does not infringe the principle of mutual recognition of GOs, but allows Flanders to retain control over its support scheme. GOs can be imported into and exported from Flanders, but the support element must be cancelled at the moment of export.<sup>501</sup> In implementing this system, the Flemish authorities were also following an interpretation given by the Commission after State aid Case N 550/2000.<sup>502</sup> The unbundling of GOs and TGCs is currently under review in Flanders for two reasons: first, in order to fully comply with the requirement for distinct utilisations contained in Directive 2009/28/EC; and second, to increase transparency and liquidity in the market for generation attributes.<sup>503</sup>

Another strategy adopted by Member States permits the issuance of GOs and TGCs for the same units of electricity, but these are not bundled and can be traded separately. This is the case in Wallonia, Belgium, where GOs and TGCs are issued concomitantly for the same units of green or CHP electricity, but the certificates remain unbundled. This means that the redemption of the GO does not involve the redemption of the TGC and *vice versa*. The same applies in Sweden, where both a GO and a TGC can be issued for the same unit of RES-E. Combining GOs and TGCs has a practical disadvantage, as their lifetimes may not coincide. Directive 2009/28/EC limits the lifetime of a GO to 12 months from the time of production of the corresponding RES-E,<sup>504</sup> while TGCs are usually issued for much longer periods.

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<sup>500</sup> ‘The state of implementation of electricity disclosure and Guarantees of Origin across Europe,’ D1 of WP2 from the E-TRACK II project, Annex I – Country monitoring Reports, 2009, p. 19.

<sup>501</sup> This explains the limited exports of GOs from Flanders. During 2006-2009, a total of 638,439 RE-GOs were exported from Flanders (all RES included). Meanwhile, 73,035,771 were imported, 7,636,519 were issued and 43,616,058 were cancelled. Source: *EECS RES-GO statistics*, 2011, VREG.

<sup>502</sup> State aid N 550/2000 – Belgium/Flanders – Green certificates in the electricity sector, SG (2001) D/290545, JO C 330 of 24.11.2001, p. 3.

<sup>503</sup> The new rules should be adopted by end of 2011 and enter into force in 2012.

<sup>504</sup> Article 15.3, Directive 2009/28/EC.

Based on Article 15.2 of Directive 2009/28/EC, both these strategies are permissible as long as the GOs are solely used for disclosure and excluded from target and support.

Based on Article 15.2 of Directive 2009/28/EC, all these alternatives are allowed as long as GOs are solely used for support and excluded from target and support. It should also be noted that the regulation of the possible combination between TGCs and GOs will be an important pre-condition in the establishment of common TGCs market between two or more Member States.

According to the alternative chosen, the link between support and disclosure varies. Here, it must be recalled that the compliance with the quota obligation does not allow suppliers to claim their electricity to be renewable at the retail level. Compliance does not prove the greenness of the electricity supplied. To commercialise their electricity as green, suppliers must own sufficient GOs, covering a part or the totality of their supply.

According to the alternative chosen, the link between consumption and support varies. The bundling between the TGC and the GO implies that the supported electricity is physically delivered to the green consumer. This issue was raised in The Netherlands.



# **Part III – EU law provisions conditioning TGCs schemes regulatory design**



## 7 Green certificates schemes under EU state aid rules

This section examines the circumstances under which the EU state aid regime affects the design of green certificates schemes. The impact of the EU state aid rules on the design of RES-E support schemes was observed by the European Commission itself in its 2005 Communication on RES-E support schemes.<sup>505</sup> After a brief reminder of the definition of state aid, this chapter assesses to what extent and under what circumstances the EU state aid regime applies to TGCs schemes (7.1). If such schemes definitively constitute incentives and aids, this raises the question whether TGCs schemes are state aids in the sense of Article 107.1 TFEU. The assessment required in order to establish this will also reveal how the design of a TGCs scheme may cause it to qualify as state aid. It will also demonstrate how this outcome can be avoided (7.2). In the situation where the TGCs scheme involves elements of state aids, the extent to which exemptions are applicable are reviewed (7.3). Because a TGCs scheme will not always be caught by Article 107.1 TFEU, and because RES-E generation projects will need and can qualify for additional support, the question of accumulation of aids must also be examined. The chapter ends with an analysis of the content of the EU rules that aim to avoid overcompensation of RES-E projects through accumulation of aids. The possibility of accumulating TGCs with other support measures, including guarantees of origin, is also examined (7.4).

### 7.1 Definition and control of state aids: The starting point

There are at least two perspectives from which an aid measure may be studied: the scope of its rules, and the justification for its adoption.<sup>506</sup> An examination of green certificates schemes from the former perspective will establish whether they constitute state aids, while an examination from the latter perspective will concern the legal arguments justifying their existence. This section addresses the definition of state aid. The justifications for granting support to RES-E generation have already been analysed in the Introduction. The analysis in this section is limited to EU law and accordingly the rules on subsidies of the World Trade Organisation are not discussed. The law-and-economics analysis of state aid, as referred to in Chapter 3 (Methodology), is also outside the scope of this thesis.

Analysing government intervention in market-based regulation may sound contradictory, since the purpose of a market-based approach is precisely to avoid the interference of the state and to ensure the completion of a free and competitive market. As argued throughout this thesis, however, public authorities play an active role in regulating the scheme and structuring the market for green certificates. In particular, governments can skew the design of green certificates schemes to benefit certain renewable energy sources that are

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<sup>505</sup> *The support of electricity from renewable energy sources*, Communication from the Commission, COM(2005)627 final, 07.12.2005, p. 9: ‘State aid rules can influence the design of the support scheme.’

<sup>506</sup> C.-D. Ehlermann, Foreword, in L. Rubini, *The Definition of Subsidy and State Aid – WTO and EC Law in Comparative Perspective*, (Oxford University Press, 2009) p. ix.

less competitive than others. Governments can also regulate trading in certificates to ensure the most flexible utilisation of their value and to provide the greatest level of support possible to RES-E generation. For these reasons it is necessary to assess the level of involvement of the state and, in particular, how this involvement is caught by EU law.

### **7.1.1 Preliminary definition of green certificates schemes as aids covering operating costs**

Non-legal authors use the words ‘subsidies’ and ‘aids’ interchangeably when referring to TGCs. Some even argue that TGCs schemes provide subsidies to renewable energy generation plants. For example, a report drafted by NERA Economic Consulting in 2005 used the word ‘subsidy’ extensively to refer to green - and white - certificates.<sup>507</sup> The same can be said of other public reports from international organisations.<sup>508</sup> In that respect, the debate, which has revived over the last few years,<sup>509</sup> about the control of energy subsidies can be misleading as it blurs the distinction between the different types of support schemes.

While all subsidies are state aids, not all state aids involve subsidies. Accordingly, and as demonstrated below, not all support measures that benefit renewable energy represent both subsidies and state aids. Confusion between the two concepts could cause TGCs schemes to be wrongly classified under EU state aid rules. Accordingly it is necessary briefly to distinguish between them.

The term ‘subsidies’ is not defined as such in primary EU law, although it is mentioned twice in the English version of the TFEU: first in Article 171.1, line 3, which refers to the type of support (‘interest-rate subsidies’) that the EU can provide to projects of common interest in relation to trans-European networks (*i.e.*, transport, telecommunication and energy infrastructures); and second in Article 207 (formerly Article 133 EC Treaty), in relation to the common commercial policy. The latter is to be based on uniform principles when addressing, *inter alia*, the issue of dumping and ‘subsidies’ as measures providing protection against free trade. Comparing the different linguistic versions of the TFEU, a slight but obvious lack of consistency appears in the use of the terms subsidies and aids,

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<sup>507</sup> NERA Economic Consulting, *Interactions of the EU ETS with Green And White Certificate Schemes*, report for the European Commission Directorate-General Environment, 17 November 2005.

<sup>508</sup> The OECD also classified green certificates as subsidies when referring to the Danish scheme: ‘*The level of subsidy is uncertain in such a system. The government has set upper and lower limits on the price, of 0.27 DKr and 0.10 DKr per kWh respectively. The upper limit caps the subsidy (at the current level) even if not enough “green electricity” is generated – distributors will pay a “fine” of 0.27 DKr per kWh of the difference between the quota and the number of green certificates they have purchased on the market; the lower limit guarantees a subsidy to wind turbine operators even if capacity installed exceeds the quota.*’ OECD Economic Surveys: Denmark, 2000, p. 126. Emphasis added.

<sup>509</sup> See, in particular, the G8/G20 Leaders’ Statement at the Pittsburgh Summit, United States, 24-25 September 2009, where the Leaders call on ‘*To phase out and rationalize over the medium term inefficient fossil fuel subsidies while providing targeted support for the poorest. Inefficient fossil fuel subsidies encourage wasteful consumption, reduce our energy security, impede investment in clean energy sources and undermine efforts to deal with the threat of climate change*’ (para. 24), available at <<http://www.pittsburghsummit.gov>>. See also paras. 29 and 30 of the same Statement, as well as publications from the International Energy Agency at <<http://www.iea.org/g8/index.asp>>.

although the meaning is often the same.<sup>510</sup> On the basis of this rapid review of primary law provisions in the TFEU, it is difficult to identify any constitutive elements differentiating a subsidy from an aid. Member States can grant either aids or subsidies, as can the EU.

Secondary EU law provides additional information as well as a more precise definition of the term ‘subsidies’. In relation to the terminology used by the WTO, secondary EU law has mainly defined ‘subsidies’ in the context of international trade.<sup>511</sup> Meanwhile, the term ‘state aid’ is primarily used in relation to the control of aid measures granted by a Member State.

The case law of the ECJ has interpreted the meaning of the term ‘subsidy’ and has clarified how it should be distinguished from the concept of state aid. The ECJ has consistently interpreted the concept of state aid more broadly than that of subsidy. As the Court recalled in Case C-169/08, *‘the notion of aid can encompass not only positive benefits<sup>512</sup> such as subsidies, loans or direct investment in the capital of enterprises, but also interventions which, in various forms, mitigate the charges which are normally included in the budget of an undertaking and which therefore, without being subsidies in the strict sense of the word, are of the same character and have the same effect.’*<sup>513</sup> This formulation summarises a well established case law,<sup>514</sup> and has also often been preceded by the affirmation that *‘the concept of aid is wider than that of a subsidy [...]’*<sup>515</sup>

An analysis of the legal framework applicable to the two concepts reveals that, at EU level, ‘aid’ and, in particular, ‘state aid’ are the relevant concepts to consider when addressing the issue of the compatibility with competition law of support granted by a Member State in favour of renewable energy production within the EU. At EU level, the concept of state aid will remain broader than that of subsidies.<sup>516</sup>

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<sup>510</sup> For example, the French version of Article 40.2 of the TFEU states explicitly that ‘*subventions*’ (‘subsidies’ in English) for production may be used for the completion of the common organisation of agricultural markets along with other measures, while the English version of the Treaty refers to ‘aids’.

<sup>511</sup> The so-called ‘EU anti-subsidy rules’ are contained in Council Regulation (EC) No. 597/2009 of 11 June 2009 on protection against subsidised imports from countries not members of the European Community (OJ L 188 of 18.07.2009, p. 93) (referred to hereinafter as the ‘Anti-subsidy Regulation’) that codifies the former provisions of Council Regulation (EC) No. 2026/97 of 6 October 1997.

<sup>512</sup> The Court sometimes also uses the term ‘charges’ in this context.

<sup>513</sup> Case C-169/08, para. 56. Emphasis added.

<sup>514</sup> Landmark cases relating to the definition of and distinction between subsidies and aids: Case C-156/98 *Germany v Commission* [2000] ECR I-6857, para. 25; Joined Cases C-341/06 P and C-342/06 P *Chronopost and La Poste v UFEX and Others* [2008] ECR I-4777, para. 123; Case C-6/97 *Italy v Commission* [1999] ECR I-2981, para. 15. See also: C-217/03 *Belgium and Forum 187 v Commission* [2006] ECR I-5479, para. 86; Case C-526/04 *Laboratoires Boiron* [2006] ECR I-7529, paras. 33 to 35; Case C-387/92 *Banco Exterior de España v Ayuntamiento de Valencia* [1994] ECR I-877, para. 13. Case C-200/97 *Ecotrade* [1998] ECR I-7907, para. 34; Case 30/59 *De Gezamenlijke Steenkolenmijnen in Limburg v High Authority* [1961] ECR 1, para. 19 ; C-75/97, *Belgique v Commission*, ECR I-3671, para. 23.

<sup>515</sup> Case C-295/97, *Industrie Aeronautiche e Meccaniche Rinaldo Piaggio SpA v International Factors Italia SpA (Ifitalia)* [1999] ECR I-03735, para. 34. Emphasis added.

<sup>516</sup> See L. Rubini, *The Definition of Subsidy and State Aid* (Oxford, 2009) and his comparison of the legal regimes relating to subsidies and state aids under EU and WTO law.

To classify TGCs schemes in general as subsidies would be misleading and legally unfounded. To state, as has been done previously, that ‘*there is a great range of market-based instruments governments use to subsidise renewable electricity*’<sup>517</sup> could lead very rapidly to an often erroneous legal conclusion. As demonstrated in this chapter, the very consequences of particular support schemes require the careful use of legal terminology. This thesis argues that green certificates should be generically defined as support schemes used for compliance with a quota obligation. In short, they represent a financial aid but not a subsidy. The question whether they represent state aids within the meaning of Article 107.1 of the TFEU is examined in the next section. In addition, the classification of any aid as state aid requires a case-by-case analysis. Each TGCs scheme, because of its specific design, has to be individually assessed under state aid rules.

The aid that RES-E generators receive when selling their TGCs is meant to ‘*cover the difference between the cost of producing energy from renewable energy sources and the market price of the form of energy concerned*’. This definition corresponds to that of an operating aid, as provided in paragraph 107 of the Community Guidelines on State Aid for Environmental Protection (‘the Environmental Guidelines’).<sup>518</sup> Accordingly, green certificates should be characterised as operating aids for the production of renewable electricity, by opposition to investment aids. The sale price of the green certificates is intended to cover the difference in production costs compared with conventional energy sources. This will indirectly reduce the operating expenses that RES-E generators must bear in their normal activities or ‘day-to-day management’. The sole determining element for the issuance of TGCs is proof of generation of renewable electricity. The ‘nature of the operations’<sup>519</sup> in question is electricity generation based on renewable sources. In accordance with the case law of the Court, an operating aid corresponds to the ‘*general operating cost that a company must bear in its normal activities*,’ or to the ‘*aid intended to relieve an undertaking of the expenses which it would itself normally have had to bear in its day-to-day management or its usual activities*’.<sup>520</sup>

According to the Environmental Guidelines, the production costs referred to include costs related to the production of energy for the purposes of subsequent sale on the market and for the purposes of the undertaking’s own consumption.<sup>521</sup> Operating aids in the form of green certificates are one of three options described by the Environmental Guidelines.

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<sup>517</sup> *The support of electricity from renewable energy sources*, Commission Staff Working Document, Accompanying document to the Proposal for a Directive of the European Parliament and of the Council on the promotion of the use of energy from renewable sources, SEC(2008)57, 23.01.2008, p. 4. Emphasis added.

<sup>518</sup> Community Guidelines on State Aid for Environmental Protection, OJ C82 of 01.04.2008, p. 1.

<sup>519</sup> Where the Court is not certain whether to classify the aids in question as investment or operating aids, it will look at the ‘nature of the operations’ giving rise to the costs the aid is intended to cover, from which it will derive the applicable legal framework. See, e.g., *Siemens v Commission* [1997] ECR I-02507, paras. 39-41 and 47-55.

<sup>520</sup> See classification of the different types of aids in Case C-278/95, *Siemens v Commission* [1997] ECR I-02507, paras. 18 to 24 respectively. See also the definition of operating aids provided in Case T-459/93, *Siemens SA v Commission*, ECR [1995] II-01675, para. 48.

<sup>521</sup> Applies to ‘*the production of renewable energy for the purposes of subsequently selling it on the market as well as for the purposes of the undertaking’s own consumption*.’ Community Guidelines on State Aid for Environmental Protection, OJ C82 of 01.04.2008, p. 1, para. 107.

Operating aids are more strictly regulated in EU law than other types of aid. This is due to the fact that they are deemed to be more distortive to competition than investment aids. At the same time, and in the particular case of renewable electricity, the Commission has stated that, ‘*in overall terms, operating aid – support per MWh – for renewable electricity is far more important than investment aid in creating incentives for companies to initiate or increase production of renewable electricity.*’<sup>522</sup>

Operating aids are in principle prohibited and generally do not fall within the scope of Article 107.3 TFEU. This is because the reductions in operating expenses that they entail are extremely distortive of competition, making them incompatible with the internal market and only rarely able to meet the criteria required to qualify as exceptions from the state aid rules.<sup>523</sup> This is also because operating aid ‘*seeks to relieve expenses borne in the daily operation of the company concerned without requiring any restructuring or improvement in the company’s business.*’<sup>524</sup> As a result, operating aids will only be regarded as compatible with the internal market in ‘exceptional circumstances’.<sup>525</sup> Both operating and investment aids are considered to be distortive of competition,<sup>526</sup> but

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<sup>522</sup> ‘Electricity: Renewables and smart grid,’ submitted by the European Union to the Working Party No.2 on Competition and Regulation, Directorate for Financial and Enterprise Affairs, Competition Committee, OECD, Doc. DAF/COMP/WP2/WD(2010)10, 15 February 2010, para. 7.

<sup>523</sup> See Case C-86/89, *Italy v Commission* [1990] ECR I-3891, para.18; Case C-301/87, *France v Commission* [1990] ECR I-307, para. 50; Case T-459/93, *Siemens v Commission* [1995] ECR II-1675, para. 48; Case C-278/95 P, *Siemens v Commission* [1997] ECR I-2507, para. 37.

The standard formulation used by the Court in those cases was recalled in a more recent judgment, in Case T-348/04, *Société internationale de diffusion and d’édition SA (SIDE) v Commission*, judgment of 18 April 2008, para. 99: ‘[...] *operating aid, that is to say, aid intended to relieve an undertaking of the expenses which it would itself normally have had to bear in its day-to-day management or its usual activities, does not in principle fall within the scope of Article 87(3) EC. The effect of such aid is in principle to distort competition in the sectors in which it is granted, whilst nevertheless being incapable, by its very nature, of achieving any of the objectives of the abovementioned derogations.*’

<sup>524</sup> Case C-278/95, *Siemens v Commission* [1997] ECR I-02507, para. 12.

See also, albeit in respect of a different sector than environmental protection, the manner in which the Commission perceives operating aids, as well exemplified in Recital 17 of Commission Regulation (EC) No 1857/2006: ‘*Unilateral State aid measures which simply seek to improve the financial situation of producers but which in no way contribute to the development of the sector, and in particular aids which are granted solely on the basis of price, quantity, unit of production or unit of the means of production are considered to constitute operating aids which are incompatible with the common market.*’ Commission Regulation (EC) No 1857/2006 of 15 December 2006 on the application of Articles 87 and 88 of the Treaty to State aid to small and medium-sized enterprises active in the production of agricultural products and amending Regulation (EC) No 70/2001 (OJ L 358 of 16.12.2006, p. 3)

<sup>525</sup> Case T-211/05, Judgment of 4 September 2009, *Italian Republic v Commission of the European Communities*, paras. 174 and 180.

<sup>526</sup> See the landmark case *Diputación Foral de Álava and Others v Commission*, para. 72. In Case T-211/05, Judgment of 4 September 2009, *Italian Republic v Commission of the European Communities*, para. 162, the Court insists on the fact that, as both structural and operating aids distort competition, there is no need to make a distinction in order to assess the distortive effect of the aid: ‘*as regards the distinction which the Italian Republic attempts to draw between operating aid and aid that is structural in scope, according to the case-law cited at paragraphs 152 to 155 above it is irrelevant for the purposes of examining the plea under consideration. Indeed, any grant of aid to an undertaking*

operating aids are considered to be even more distortive. The extent to which exemption might be granted to TGCs schemes that provide operating aid to RES-E generation is dealt with in the Environmental Guidelines. This issue is analysed in section 7.3.1 below. This issue also has to be assessed in relation to the wide discretion that the Commission has when applying Article 107.3 TFEU.<sup>527</sup>

### **7.1.2 Green certificates: an instrument for compliance with EU mandatory requirements that may involve state aids**

Directive 2009/28/EC requires Member States to adopt adequate measures ‘*to ensure that the share of energy from renewable sources equals or exceeds that shown in the indicative trajectory*’ (Article 3.2). To do so, Member States ‘*may, inter alia,*’ implement support schemes and/or the measures of cooperation defined in Articles 6 to 11 of the directive. TGCs remain compliance mechanisms with a quota obligation defined at the national level of each Member States. But a TGCs scheme is also one way for a Member State to increase the share of RES-E generation in its national consumption in order to meet the RES-E national mandatory target defined in Directive 2009/28/EC.

The large margin of appreciation left to the Member States corresponds to the logic of the directive as EU legal act, as it is defined in Article 288 TFEU: while the directive binds Member States in terms of the results to be achieved and the date of transposition, the Member States are free to choose how to achieve the required results.<sup>528</sup> In addition to the flexibility left to the Member States by primary EU law, Directive 2009/28/EC contains other elements that allow flexible implementation. The directive does not define the components of the support schemes beyond the broad definition of ‘support scheme’ and ‘renewable energy obligation’ contained in Article 2 (k) and (l). It harmonises the rules concerning the manner in which Member States can cooperate in their compliance strategies, but not the design of the schemes themselves. This means that Member States enjoy a wide freedom as regards the choice of compliance instruments, their design and possible cooperation with other Member States or third countries.

In complying with the mandatory national target defined in Article 3.1 and in the third column of the table in part A of Annex I of Directive 2009/28/EC, Member States may adopt measures that involve state aids. This may cause one to wonder whether Article

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*pursuing its activities in the Community market is liable to distort competition and affect trade between Member States.*’

<sup>527</sup> Due to the large margin of appreciation left to the Commission by the Treaty, ‘*Judicial review of the manner in which that discretion is exercised is confined to establishing that the rules of procedure and the rules relating to the duty to give reasons have been complied with and to verifying the accuracy of the facts relied on and ascertaining that there has been no error of law, manifest error in the assessment of the facts or misuse of powers* (see Case C-372/97 *Italy v Commission* [2004] ECR I-3679, paragraph 83 and the case-law cited),’ Case T-211/05, Judgment of 4 September 2009, *Italian Republic v Commission of the European Communities*, para. 169.

<sup>528</sup> See also Recommendation from the Commission of 12 July 2004 on the transposition into national law of Directives affecting the internal market, Official Journal L 98 of 16.04.05, p. 47. The Recommendation recalls the obligation borne by Member States in terms of timely and correct transposition and identifies in the Annex some practices that facilitate the transposition into national law of directives affecting the internal market. See also the 2002 Communication on better monitoring of the application of European Community law, COM(2002) 725 final of 11.12.2002.



107.1 TFEU applies where a measure adopted for compliance with an EU mandatory requirement involves state aids. The state aid measure may be seen as necessary in order for the Member State to comply with its EU obligations. This question has been debated by legal commentators, who have arrived at divergent conclusions. It seems clear, however, that a support scheme established for the purposes of compliance with a directive is not exempt from the state aid rules, as demonstrated below.

The question has some justification in the mere fact that, in its assessment of RES-E support schemes, the Commission will always take into account the need for Member States to fulfil their obligations under EU law, which in this case consists of an obligation to meet a national overall target for the share of energy from renewable sources in gross final energy consumption. The Environmental Guidelines also accommodate exemptions for state aid granted for early adaptation to future Community standards (point 1.5.3 of the Environmental Guidelines). Recently, in Case No N 65/2010 of 30.03.2010 concerning amendments proposed by the United Kingdom to the Renewables Obligation Certificates (ROCs) scheme, the Commission affirmed that it ‘takes into account the need of the UK to build additional capacity for renewable electricity in order to meet the national 2020 renewables targets.’<sup>529</sup> The argument according to which the common principles of EU state aid control may be accommodated in order to comply with mandatory targets and binding requirements of secondary EU law finds here some justification.

The argument has been taken a step further, in particular in German legal literature.<sup>530</sup> Notably, Ehrlicke argues that the correct transposition of a directive can never constitute state aid because a Member State has a choice of either violating Article 107.1 TFEU by transposing the directive or of violating its duties under the directive by not transposing it.<sup>531</sup> Both positions have been criticised by T. M. Rusche,<sup>532</sup> with whom the present thesis agrees.

First, the above-mentioned line of argument is contrary to the general logic of EU state aid policy with regard to the implementation of directives. EU law does not deny that compliance with EU law requirements can involve state aids. Most of the national RES-E support schemes implemented so far constitutes state aids, as acknowledged by the Commission itself.<sup>533</sup> It is the role of the Commission to assess whether these state aids are compatible with the internal market and, if not, whether they can be justified on

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<sup>529</sup> Case No N 65/2010 of 30.03.2010 concerning amendments proposed by the United Kingdom to the Renewables Obligation Certificates (ROCs), point (8).

<sup>530</sup> See, e.g., A. Reuter and K. Kindereit (2004), ‘EG-Emissionshandelsrichtlinie und Beihilferecht am Beispiel prozessbedingter Emissionen’, in *Deutsches Verwaltungsblatt* 9/2004, pp. 537-543.

<sup>531</sup> A similar line of argumentation has been developed by Reuter and Kindereit (2004), Doering and Ewringmann (2003) and Ewringmann and Thoenes (2002).

<sup>532</sup> T. M. Rusche, ‘Emissions Trading’ Chapter 14 in M. S. Rydelski (ed.), *The EC State Aid Regime – Distortive Effects of State Aid on Competition and Trade* (Cameron May, 2006), p. 375.

<sup>533</sup> ‘The support of electricity from renewable energy sources,’ Commission Staff Working Document, SEC(2008)57, 23.01.2008, point 3.3: ‘Support schemes may entail granting of state aid in the sense of Article 87(1) EC Treaty, and are subject to state aid control, except for support schemes where one or more of the State aid criteria is not fulfilled. Many of the support schemes currently in place do constitute state aid in the sense of Article 87(1).’ Original emphasis.

particular grounds. As stated by Rusche,<sup>534</sup> the Commission takes into account in its assessment, *inter alia*, the purpose of the aid. This is also why the Commission has developed specific guidelines for state aids granted for environmental protection.

Second, Directive 2009/28/EC itself excludes this line of argument. Directives often include a provision concerning Member States' obligation to respect state aid rules when adopting implementation measures for compliance purposes. Directive 2009/28/EC does not require Member States to adopt measures that may constitute state aids. While this may happen, the text of the directive is clear: Member States must respect Articles 107 and 108 TFEU.

The most explicit statement in that regard is contained in the Commission Decision No. 2009/548/EC on the National Renewable Energy Action Plans (NREAPs) under Directive 2009/28/EC: '*The Commission reminds Member States that all national support schemes must respect the State aid rules as foreseen in Article 87 and 88 of the EC-Treaty. The notification of the NREAPs does not replace a State aid notification in accordance with Article 88(3) of the EC-Treaty.*'<sup>535</sup> Article 3.3, last paragraph, of Directive 2009/28/EC adds an additional element in the context of measures of cooperation between Member States and third countries: '*Without prejudice to Article 87 and 88 of the Treaty, Member States shall have the right to decide, in accordance with Articles 5 to 11 of this Directive, to which extent they support energy from renewable sources which is produced in a different Member State.*'<sup>536</sup> This provision can be interpreted as a reminder to Member States that, even if the support measure is implemented between one or several Member States and may potentially benefit RES-E generators located in other Member States, the rules on state aids apply. Cooperation between Member States, for the benefit of the common EU interest, does not preclude the need to respect competition rules.

Former Directive 2001/77/EC, in Recital 12 and Article 4.1, contained clear – and to some extent clearer – provisions on the application of state aids rules.<sup>537</sup> Those provisions were indeed more explicit than those of Directive 2009/28/EC in that they stated the general principle underlying state aid control. The final version of Directive 2009/28/EC was the result of the co-decision procedure, during which the Commission originally proposed the reproduction of such an explicit and general statement in one of the recitals, although no

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<sup>534</sup> T. M. Rusche, 'Emissions Trading' Chapter 14 in M. S. Rydelski (ed.), *The EC State Aid Regime – Distortive Effects of State Aid on Competition and Trade* (Cameron May, 2006), p. 375.

<sup>535</sup> Commission Decision No. 2009/548/EC of 30 June 2009 establishing a template for National Renewable Energy Action Plans under Directive 2009/28/EC of the European Parliament and the Council, OJ L 182 of 15.07.2009, p. 33.

<sup>536</sup> Emphasis added.

<sup>537</sup> Recital 12 of Directive 2001/77/EC provided that: '*The need for public support in favour of renewable energy sources is recognised in the Community guidelines for State aid for environmental protection, which, amongst other options, take account of the need to internalise external costs of electricity generation. However, the rules of the Treaty, and in particular Articles 87 and 88 thereof, will continue to apply to such public support.*'

Similarly, Article 4.1 provided that: '*Without prejudice to Articles 87 and 88 of the Treaty, the Commission shall evaluate the application of mechanisms used in Member States according to which a producer of electricity, on the basis of regulations issued by the public authorities, receives direct or indirect support, and which could have the effect of restricting trade, on the basis that these contribute to the objectives set out in Articles 6 and 174 of the Treaty.*'

such statement was retained in the adopted text.<sup>538</sup> The only references to state aid are consequently contained in Article 3.3, last paragraph of Directive 2009/28/EC, and in Commission Decision No. 2009/548/EC. The latter decision is legally binding in its entirety on the Member States in accordance with Article 288 TFEU. While the result in legal terms is the same, the reference to the application of state aid rules was made more explicit in Directive 2001/77/EC, since it was contained in the core text of the directive. At the same time, this reference was intended as a reminder of the application of state aid rules to national support schemes, not as the definition of a brand new principle. This fact may justify the manner the principle is referred to under the current regime.

To conclude, the fact that national support measures may involve state aids in the sense of Article 107.1 TFEU for the purpose of compliance with Directive 2009/28/EC does not preclude the application of EU state aid rules. Indeed, the latter rules are fully applicable. The only point at which the ‘compliance argument’ becomes relevant is when the Commission is assessing the compatibility of a measure’s objectives, components and effects with state aid rules. The Commission’s previous and current practice for conducting this assessment is examined in the following sections.

### 7.1.3 Definition of state aid

In the context of EU law, state aid has a precise meaning. The concept of state aid was defined early on in primary EU law and this definition has been completed by secondary EU law, extensively interpreted by the Court and commented on by legal authors. Indeed, the European Commission services can rightly affirm that ‘[t]he most comprehensive data about state aids are those covering the European Union.’<sup>539</sup>

The general prohibition on state aid is contained in Article 107.1 TFEU:

*Save as otherwise provided in the Treaties, any aid granted by a Member State or through State resources in any form whatsoever which distorts or threatens to distort competition by favouring certain undertakings or the production of certain goods shall, in so far as it affects trade between Member States, be incompatible with the internal market.*

A measure has to fulfil four cumulative criteria to qualify as state aid under Article 107.1 TFEU: (i) there must be an intervention by the state or through state resources; (ii) the intervention must confer an advantage on the recipient; (iii) the intervention must distort or threaten to distort competition; and (iv) the intervention must be liable to affect trade between Member States. Some of these criteria can be further sub-divided and this is the

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<sup>538</sup> ‘Support measures taken pursuant to this Directive that constitute State aid in the sense of Article 87 of the Treaty have to be notified to and approved by the Commission before their implementation, pursuant to Article 88(3) of the Treaty. Information provided to the Commission on the basis of this Directive does not substitute for the obligation of Member States under the notification obligation pursuant to Article 88(3) of the Treaty.’ Amendment No. 78 on Recital 51, Legislative Report on the proposal for a directive of the European Parliament and of the Council on the promotion of the use of energy from renewable sources, by the European Parliament Committee on Industry, Research and Energy, Doc. A6-0369/2008, 26.09.2008.

<sup>539</sup> *Competition, State Aids and Subsidies*, Background Note, OECD Global Forum on Competition, DAF/COMP/GF(2010)3, January 2010, p. 6.

approach adopted below to apply the criteria to green certificates schemes. But as far as the general definition of state aid is concerned, four main criteria need to be remembered. This simplified manner of presenting the analytical framework for state aids is itself enshrined within ‘*long standing jurisprudence*’.<sup>540</sup>

All the criteria must be fulfilled concomitantly for an aid to qualify as state aid in the sense of Article 107.1 TFEU.<sup>541</sup> Article 107.1 TFEU does, however, have a very precise scope of application in that it only applies to undertakings. Aids or subsidies granted to individuals, as well as general measures applicable to all undertakings, fall outside this scope and do not constitute state aid.<sup>542</sup>

Article 107.1 TFEU expresses the very purpose of the internal market in its original inception, *i.e.*, the removal of trade barriers between Member States. However, the integration of other objectives into EU competition policy has resulted in some exceptions to the general prohibition on state aid, as is illustrated below in the case of support for renewable electricity generation.<sup>543</sup>

### 7.1.4 Principles of state aid control

Article 107.1 TFEU is the expression of the very purpose of the internal market in its original inception, *i.e.*, the removal of trade barriers between Member States.<sup>544</sup> As already laid down in the founding Treaties of the European Communities, the control of aids granted by Member States is justified by the necessity of ensuring that government interventions do not distort competition and trade within the Communities. The 1951 European Coal and Steel Community (ECSC) Treaty contained provisions on state aid control, even before the establishment of a common competition policy. At the time, the key objective of state aid control was to achieve market integration between Member States. The level of ambition in matter of state aid control envisaged at that time has been deemed higher than that envisaged under the EC Treaty. The ECSC targeted the prohibition of ‘*special charges imposed by States*’ in addition to ‘*subsidies or aid*’.<sup>545</sup>

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<sup>540</sup> Expression used in, *e.g.*, Decision of the European Commission in State aid NN 162/B/2003 and State aid N 317/B/2006 – Austria Support of CHP under the Austrian Green Electricity Act (support-tariff), C (2006) 2964, 04.07.2006, point 35. See also the landmark Case C-78/76 *Steinike & Weinlig* [1977] ECR 595.

<sup>541</sup> Case C-142/87 *Belgium v Commission* [1990] ECR I-959, para. 25; Joined Cases C-278/92 to C-280/92 *Spain v Commission* [1994] ECR I-4103, para. 20; and Case C-482/99 *France v Commission* [2002] ECR I-4397, para. 68.

<sup>542</sup> See below discussions on the beneficiaries of selective aid schemes and on the concept of general measure in Section 7.2.3.

<sup>543</sup> See Case C-142/87 *Belgium v Commission* (‘Tubemeuse’) [1990] ECR I-959, para. 25, and Joined Cases C-341/06 P and C-342/06 P *Chronopost and La Poste v Ufex and Others* [2008] ECR I-4777, para. 121.

<sup>544</sup> On state aid control and the objectives of the Treaties, see: P. Nicolaidis, M. Kekelelis and M. Kleis, *State Aid Policy in the European Community – Principles and Practice*, International Competition Law Series, (Wolters Kluwer, 2<sup>nd</sup> edition, 2008), p. 5 and p. 9.

<sup>545</sup> Article 4(c), ECSC Treaty. See to that effect: *EC State Aid Law*, Liber Amicorum Francisco Santaolalla Gadea, (Wolters Kluwer, 2008), p. 227, referring to the difficulties of the Court in applying these provisions of the ECSC Treaty in, *e.g.*, Joined Cases 7/54 and 9/54 *Industries Sidérurgiques Luxembourgeoises v High Authority* [1956] ECR 175, p. 195, part c II. See also: G. Grin, *The Battle of*

According to current understanding and practice, the objective of the Commission when controlling the conformity with the internal market of state aids granted by Member States is to ensure that all European undertakings operate on a level playing field, where the most competitive succeed. To achieve that objective, state aid measures distorting competition between European undertakings and affecting trade between Member States must be prevented, because of their negative effects on the internal market, the competitiveness of the EU as a whole, and on customers.<sup>546</sup> Government intervention may be justified, but it should not threaten the proper functioning of the internal market. In the particular area of environmental protection, under which the promotion of renewable energy sources fall in terms of EU state aid policy, the Community Guidelines on State Aid for Environmental Protection defines the primary objective of state aid control as to:

*‘ensure that State aid measures will result in a higher level of environmental protection than would occur without the aid and to ensure that the positive effects of the aid outweigh its negative effects in terms of distortions of competition, taking account of the polluter pays principle (hereafter ‘PPP’) established by Article 174 of the EC Treaty.’<sup>547</sup>*

Since the entry into force of the ECSC Treaty, the tasks of the European institutions with regard to state aid control have evolved, as have the terms under which the control is exercised.

The task of controlling the granting of state aids by Member States is attributed to the European Commission in Article 108.1 of the TFEU:

*1. The Commission shall, in cooperation with Member States, keep under constant review all systems of aid existing in those States. It shall propose to the latter any appropriate measures required by the progressive development or by the functioning of the internal market.*

This means that the Commission is charged exclusively with assessing the compatibility of aid measures with the internal market and deciding whether notified measures constitute state aid under Article 107.1 TFEU.<sup>548</sup> If a measure is deemed to qualify as state aid, the Commission is also competent to grant an exemption from the general prohibition on such aid, pursuant to Article 107.2 and 107.3 TFEU. In some particular cases, aid may be exempted from the notification requirement in accordance with the rules defined in

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*the Single European Market: Achievements and Economic Thought, 1945-2000* (London: Kegan Paul, 2003); and *Competition, State Aids and Subsidies*, Background Note, OECD Global Forum on Competition, DAF/COMP/GF(2010)3, January 2010, para. 23.

<sup>546</sup> See the definition of the objectives of state aid control, as provided by the Commission in its State Aid Action Plan (SAAP): *State Aid Action Plan – Less and better targeted state aid: a roadmap for state aid reform 2005-2009*, COM(2005) 107 final, 07.06.2005, para.7, p. 3. For a comment on the objective of state aid control at EU level, see ‘The Economics of granting and controlling state aid,’ in particular Section 3 ‘Why Supranational Rules on Subsidies?’, in L. Hancher, T. Ottervanger, P. J. Slot, *EC State Aids*, 3<sup>rd</sup> ed. (Sweet & Maxwell, 2006), pp. 19-22.

<sup>547</sup> Community Guidelines on State Aid for Environmental Protection, OJ C 82, 01.04.2008, p. 1, para (6).

<sup>548</sup> When conducting its assessment, the Commission is subject to the principle of good administration. Any natural or legal person that claims to have suffered from an act of maladministration in the course of the assessment of the state aid by the Commission can lodge a complaint with the European Ombudsman pursuant to Article 228 TFEU. See, e.g., Decision of the European Ombudsman of 20 August 2009 on complaint 3205/2007/PB against the European Commission. See also comment in L. Hancher, T. Ottervanger, P. J. Slot, *EC State Aids*, 3<sup>rd</sup> ed. (Sweet & Maxwell, 2006), p. 11.

Articles 108.4 and 109 TFEU and corresponding legislation adopted by the Council and the Commission. Decisions by the Commission are subject to review by the Court.

The control of state aids by the European Commission is undertaken ‘*in cooperation with Member States,*’ which means that the latter have a duty to inform the European Commission of ‘*any plans to grant or alter aid.*’ This duty is defined in Article 108.3 of the TFEU:

*3. The Commission shall be informed, in sufficient time to enable it to submit its comments, of any plans to grant or alter aid. If it considers that any such plan is not compatible with the internal market having regard to Article 107, it shall without delay initiate the procedure provided for in paragraph 2. The Member State concerned shall not put its proposed measures into effect until this procedure has resulted in a final decision.*

The notification procedure establishes how Member States should inform the Commission of the adoption or modification of aids they intend to grant or alter to the benefit of, *inter alia*, renewable energy sources. The extent to which operating aids like green certificates schemes are subject to the notification requirement is the subject of the next Section.

As regards the terms under which the control is exercised, the earlier ‘*purely legalistic approach*’ has evolved into an approach focusing on the effects of the state aids. In a standard formulation, the Court has repeatedly stated that Article 107.1 TFEU ‘*does not distinguish between the causes or the objectives of State aid, but defines them in relation to their effects.*’<sup>549</sup> In the case of TGCs schemes, the ‘*effect-based approach*’ will be particularly useful for assessing the selectivity of a measure.<sup>550</sup> It would however be false to conclude that the aim of the State measure never enters into account.<sup>551</sup> It does play a role, in particular in relation to the grant of an exemption from the general prohibition on state aids where a measure relates to the realisation of an EU objective or is intended to correct a market failure, as further detailed in Section 7.3.

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<sup>549</sup> This can already be noticed in Case 30/59, *De Gezamenlijke Steenkolenmijnen in Limburg v High Authority of the European Coal and Steel Community*, [1961] ECR 1, p. 19. However, the case also mentions the ‘purpose’ and ‘objective’ of the aid. Later affirmation of an ‘effects approach’ can be found in: Case 173/73, *Commission v Italy*, [1974] ECR 709, para. 13. Subsequently this approach has been maintained consistently. See: Case C-56/93 *Belgium v Commission* [1996] ECR I-723, para. 79; Case C-241/94 *France v Commission*, [1996] ECR I-04551, para. 20; Case C-409/00 *Spain v Commission*, [2003] ECR I-01487, para. 46; Case C-487/06 P *British Aggregates v Commission* [2008] ECR I-10505, paras. 84-85.

*Competition, State Aids and Subsidies*, Background Note, OECD Global Forum on Competition, DAF/COMP/GF(2010)3, January 2010, para. 33. The Commission adds that: ‘*This evolution, in the jurisdiction with the longest state aid control experience, testifies to the need for a better assessment of the economic consequences of state aid and subsidies across countries.*’

<sup>550</sup> See, e.g., Case C-75/97 *Belgium v Commission*, [1999] ECR I-03671, para. 25, where the Court concluded that the solely social character of the State measures was not sufficient to exclude them outright from classification as aid for the purposes of (now) Article 107.1 TFEU.

<sup>551</sup> See A. Biondi, P. Eeckhout and J. Flynn (eds.), *The Law of State Aid in the European Union*, (Oxford University Press, 2004), pp. 7-8.

## 7.1.5 State aid control and notification requirements for TGCs schemes

This section examines the circumstances in which Member States must notify their TGCs schemes to the European Commission, as well as possible grounds for exemption from the notification requirement. The first step is to identify whether the TGCs scheme fulfils the four criteria for state aids as defined in Article 107.1 TFEU (see section 7.2). If it does, the nature and objective of the scheme may qualify it for exemption from the notification requirement. Where a TGCs scheme does have to be notified, the nature of the scheme will cause specific rules to apply concerning the notification procedure and, possibly, re-notification.<sup>552</sup>

### 7.1.5.1 The notification requirement

The control of support measures granted by Member States that are anticipated to qualify as state aids in the sense of Article 107 TFEU follows a system of *ex ante* authorisation before the European Commission. The duty imposed on Member States to inform the Commission of ‘any plans to grant or alter aid’ is based on a procedure of *ex ante* notification.<sup>553</sup> Member States cannot put the aid into effect until the final decision of the Commission if the latter decides to authorise it, which corresponds to the standstill-principle. Notification to the Commission and authorisation by the Commission are two mandatory and supplementary steps in the EU state aid control procedure. Any aid granted without prior notification and authorisation will be classified as ‘unlawful.’<sup>554</sup> Any unlawful aid, either because it is recognised as incompatible with EU internal market rules or unlawfully granted, will have to be recovered from its beneficiaries on the order of the European Commission. National courts may also be competent in the recovery of unlawful aids as recognised by the Court of Justice of the EU.

The first assessment of the TGC scheme towards the EU state aid rules is conducted by the Member State. The mere fact that almost all national schemes have been notified to the European Commission underlines the dubiousness of their qualifiability. At the same time, not all green certificates schemes have been subject to notification. One reason could be that, based on the decisions adopted by the European Commission in previous cases, that national authorities have assessed their scheme as in compliance. If the Member State estimates that the four criteria for state aid are not met, there is no obligation or need to notify. However, if the aid that was not notified has been implemented and an investigation by the Commission’s services reveals that it is a state aid, the Commission can adopt a negative decision requiring the reimbursement of the aid, and in the absence of reimbursement, can sue the Member State before the Court. Due to the direct effect of Article 108.3 TFEU, parties affected by the payment of an unlawful state aid can also bring a direct action before their national court. Member States have consequently

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<sup>552</sup> More generally on state aid procedure in the context of the energy sector, see L. Hancher, ‘State aid procedure,’ Chapter 6, in C. Jones (ed.) *EU Competition Law and Energy Markets*, Vol. II, Coll. EU Energy Law, 3<sup>rd</sup> edition (Clayes & Casteels, 2011), pp. 797-830.

<sup>553</sup> Article 108.3 TFEU.

<sup>554</sup> As defined in Article 1(f), Council Regulation (EC) No 659/1999. See also standstill clause defined in Article 3 of the same regulation, prohibiting Member States from putting a notifiable aid into effect before the Commission’s decision.

preferred to notify their national support scheme even when they believed and argued that it did not constitute state aid.

Member States must also assess whether the measure must be notified as an ‘individual aid’ (also called ‘*ad hoc* aid’) or an ‘aid scheme.’ The distinction is of great importance for the beneficiaries, for the Member States as notifying authority, and for the whole qualification of the TGCs scheme as state aid. An individual aid concerns the granting of support to a particular undertaking in a separate manner. An aid scheme is generally defined by law or regulation and benefits all the undertakings corresponding to pre-defined criteria. The difference in terms of notification is that individual aids must be notified separately, while aids granted under an aid scheme do not need individual notification when the aid scheme has been notified and authorised. A TGCs scheme corresponds exactly to the situation of an aid scheme and must be notified as such even if it may involve individual state aids. In practice, all the notified TGCs schemes have been notified as aid schemes.<sup>555</sup> The same applies to other RES-E support schemes such as feed-in tariffs.

#### **7.1.5.2 Possible exemptions from notification**

Besides the general notification requirement, certain aids, due to their nature or their objective, have been exempted from notification or follow a simplified notification procedure. The question here is to know whether a TGCs scheme, in the situation where it qualifies as state aid, can be exempted from notification, and under which grounds.

For the categories of state aid identified in the regulation adopted by the Council, the Commission can adopt regulations on its own providing for exemption of notification.<sup>556</sup> In application, the Council has adopted the so-called Enabling Regulation (EC) No 994/98 of 7 May 1998<sup>557</sup> which provided the Commission with the legal basis for the adoption of: on the one hand, regulations that declare certain pre-defined categories of aid as compatible with the internal market and falling within the so-called ‘group exemption regulations’ (Article 1 ER); and, on the other hand, certain categories of aids as not fulfilling the criteria for state aids because they fall under the ceilings of notification, such as the *de minimis* Regulation (Article 2 ER). If Member States consider that the conditions are met, the aids are exempted from the notification requirement defined in Article 108.3 TFEU. Member States can put them into effect without prior notification to the Commission, but must respect the procedures of monitoring and reporting to the Commission, as well as the duty to publish information on the Internet as long as the aid is applied. The underlying principles of the Enabling Regulation are the ones defined in the 2005 State Aid Action Plan (SAAP) of the Commission, following the call from the European Councils for ‘*less but better targeted state aids*.’<sup>558</sup> The SAAP resulted in the

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<sup>555</sup> See list of cases in Section 7.1.6.

<sup>556</sup> Combined reading of Articles 109 and 108.4 of the TFEU.

<sup>557</sup> Council Regulation (EC) No 994/98 of 7 May 1998 on the application of Articles 92 and 93 (now 107 and 108 TFEU respectively) of the Treaty establishing the European Community to certain categories of horizontal State aid, OJ L 142, 14.05.1998, p. 1.

<sup>558</sup> The SAAP is based on the prioritization and simplification of state aid control, focusing on the more problematic measures. It is also meant to ease state aid control when the Commission has gained enough experience to be able to publish guidelines that national authorities can apply in their



consolidation of previous exemption regulations in 2008, the review of horizontal guidelines, and the adoption of a Simplification Package in 2009.

The extent to which a state aid qualifies for exemption outside the scope of application of the GBER and the *de minimis* Regulation remains a decision under the competence of the Commission. A TGCs scheme that constitutes state aid but is suspected to be compatible with the internal market according to the criteria put forward in the Environmental Guidelines must nevertheless be notified to the European Commission. The positive assessment of previous schemes does not presume the compatibility of future schemes. This is also because each green certificate scheme is subject to a different design.

Part of the nature of the aid scheme is the type of support it entails. Green certificates are qualified by the Environmental Guidelines themselves as ‘operating aids.’ As previously mentioned, operating aids are estimated to be extremely distortive of competition and would rarely be deemed compatible with the internal market. For that reason, there is no notification exemption rule applicable to state aids in the form of operating aids. The General Block Exemption Regulation (GBER)<sup>559</sup> chapter on aids to RES covers solely investment aids. It takes into account the coverage of certain operating costs in the calculation of the ceilings, but does not address them separately. The TGCs schemes that involve state aids would consequently not qualify for exemption under the GBER. The only circumstance under which the GBER can apply is in conjunction with the assessment of the cumulative effects of TGCs schemes with other aids.<sup>560</sup> State aids that do not fall within the scope of application of the GBER are subject to the generation regime of state aid control defined above.

Another characteristic of the nature of the aid is its volume. Notification derogation can eventually be granted to operating aids under the *de minimis* Regulation.<sup>561</sup> The Commission, it will be recalled, has the competence to define the threshold for notification by the means of Regulation pursuant to Regulation (EC) No. 994/98. The reasoning behind the *de minimis* Regulation is the same as the SAAP. Small amounts of state aids will have limited distortive effect on competition and likewise on trade between Member States. State aids fulfilling the requirements of the *de minimis* Regulation are exempted from notification (Article 2). These requirements include: the threshold amount of EUR 200 000 as the maximum ceiling for *de minimis* aid, granted over any three-year period; the ceiling applying to the total amount of aids granted to the recipient, subject to some accumulation rules (see section 7.4.2.2 on that point); with the exception of export aids (Recital 6, Article 1) and certain undertakings in difficulty (Recital 7, Article 1), all types of aid are considered under the ceiling, irrespective of their form or objective, which means that operating aids and aid schemes are also covered; finally, the Regulation only applies to transparent *de minimis* aids, which are aids for which ‘*it is possible to calculate*

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assessment. Reference document: *State Aid Action Plan – Less and better targeted state aid: a roadmap for state aid reform 2005-2009*, COM(2005) 107 final, 07.06.2005.

<sup>559</sup> Commission Regulation (EC) No 800/2008 of 6 August 2008 declaring certain categories of aid compatible with the common market in application of Articles 87 and 88 of the Treaty (General block exemption Regulation), OJ L 214 of 9.8.2008, p. 3.

<sup>560</sup> See on that point Section 7.4.2.1 on the Accumulation rules under the General Block Exemption Regulation.

<sup>561</sup> Commission Regulation (EC) No 1998/2006 of 15 December 2006 on the application of Articles 87 and 88 of the Treaty to *de minimis* aid, OJ L 379 of 28.12.2006, p. 5.

*precisely the gross grant equivalent ex ante without a need to undertake a risk assessment*' (Recital 13, Article 4).

Undertakings active in the power sector that may become beneficiaries under a TGCs scheme fall without doubt under the scope of application of the *de minimis* Regulation (Article 1). The determining element will be the volume of the aid granted under the scheme. Assessing this volume requires looking at the very end of the TGCs scheme, where a re-distribution fund is established. As explained below in Section 7.2.5.6, this is the core element of the scheme that can conclude on the presence of state aid. The assessment of the volume of aids granted through the re-distribution fund will be a very difficult operation as Member States do not know exactly in advance how many parties will be obliged to pay the compliance fees either because the obligated parties could not or did not want to issue or buy green certificates. The aid granted in this way is 'transparent' in terms of its form, but not necessarily in terms of its amount with respect to the *ex ante* rule. The assessment also requires determining the correct period of three fiscal years on the basis of which the amount of *de minimis* aid will be calculated.<sup>562</sup> The Regulation also provides some basic harmonised rules for the method of calculation of the amounts in question (Recital 12). *De minimis* rules could be applicable to TGCS schemes due to the high threshold fixed in the Regulation, but this will require an *ex post* evaluation when the money from the re-distribution fund will have been granted. It could alternatively be based on figures from previous years, but the uncertainty of the evolution of the TGCs market may result in a situation where more compliance fees are paid and the *de minimis* threshold is exceeded, which will ultimately require reimbursement of aids. This will be a very cumbersome exercise with much uncertainty for beneficiaries. Where the conditions laid down under the *de minimis* Regulation are not met, the general regime of state aid control is applicable.

As the promotion of renewable energy sources falls under the objective of protection of the environment, the assessment of a TGCs scheme involving elements of state aids would need to be conducted by reference to the Community Guidelines on State Aid for Environmental Protection.<sup>563</sup>

The Environmental Guidelines foresee two types of assessments: the standard assessment and the detailed assessment. The standard assessment applies to '*measures involving aid under a certain threshold or aid granted to installations with a production capacity below a certain threshold.*'<sup>564</sup> The applicable rules are defined in Chapter 3 of the Environmental Guidelines. They are based on a balancing test defined in point 16 of the Environmental Guidelines, which resembles the conditions of a proportionality test, and through which the Commission will assess: (i) whether the aid objective is effectively to contribute to environmental protection as an objective of common EU interest; (ii) whether the aid is well designed to attain this objective; (iii) whether the aid will not adversely affect competition and trade between Member States. Operating aids like TGCs schemes, when

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<sup>562</sup> On that point the *de minimis* Regulation provides that the *de minimis* aid should be considered to be granted at the moment the legal right to receive the aid is conferred on the recipient, pursuant to the national regime.

<sup>563</sup> Community Guidelines on State Aid for Environmental Protection, OJ C 82, 01.04.2008, p.1.

<sup>564</sup> See definitions provided in point (13) of the Guidelines. Rules applying to a standard assessment under the Environmental Guidelines or other types of horizontal aid guidelines are also termed 'safe harbour' provisions in the Commission's documents.

they involve elements of state aids, are subject to the standard assessment, as foreseen in point 110 of the Environmental Guidelines, which provides for specific conditions ensuring the incentive effects of the schemes. It is important to note that the scheme is here assessed as a whole. While the TGCs scheme might have been authorised under the standard assessment, an individual operating aid granted under the scheme resulting in renewable electricity generation capacity exceeding 125 MW is subject to a detailed assessment.<sup>565</sup> The detailed assessment applies to the potentially most distortive cases for competition and trade. In this case, it is the support given to a high volume of RES-E generated from one particular plant – or several plants under the same project - that raises risks of distortion. In such a case, the Commission proceeds to a detailed factual analysis and balancing test, on a case-by-case basis, pursuant to Chapter 5 of the Environmental Guidelines.<sup>566</sup> The calculation of the threshold amount of aid received by the plant can be a complex exercise. Because TGCs themselves are not state aids, the amount of aid subject to detailed assessment as a starting point will be the one granted from the redistribution fund only, independent of the eventual financial support received by the same plant in the form of TGCs. However, to assess the risk of overcompensation, the amounts of aid received from the redistribution fund and the sale of TGCs should also be cumulated. It must be concluded from the above that a national TGCs scheme that involves elements of state aids will be subject to a standard assessment only, under the conditions defined above. A detailed assessment could be envisaged in the case of an individual operating aid granted under the authorised TGCs scheme, primarily deriving from the redistribution fund. This latter hypothesis, however, seems to have very limited implications.

### **7.1.5.3 Information to be submitted in accordance with the standard and simplified notification procedures**

Member States are required by the Commission, in accordance with the powers conferred on it by the Council, to submit a list of information along with the notification. This list is defined in standard form and includes dedicated supplementary forms for aid for environmental purposes. In accordance with Article 109 TFEU, Council Regulation No 659/1999 of 22 March 1999<sup>567</sup> provides the Commission with the necessary competence to adopt detailed rules applying to the state aid notification procedure laid down in Article 108 TFEU. This competence has been exercised through Commission Regulation (EC) No

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<sup>565</sup> Point 160 of the Environmental Guidelines provides that:

*‘In order to enable the Commission to carry out a more detailed assessment of any substantial amounts of aid granted under authorised schemes and to decide whether such aid is compatible with the common market, Member States must notify it in advance of any individual case of investment or operating aid granted under an authorised scheme or individually where the aid satisfies the following conditions:... (b) for individual measures covered by these Guidelines: ... iii) operating aid for the production of renewable electricity and/or combined production of renewable heat: when the aid is granted to renewable electricity installations in sites where the resulting renewable electricity generation capacity exceeds 125MW.’*

<sup>566</sup> Point 165 of the Environmental Guidelines sets the general framework for application of the detailed assessment: *‘The detailed assessment will be conducted on the basis of the positive and negative elements specified in sections 5.2.1 and 5.2.2 which will be used in addition to the criteria set out in Chapter 3. The aid intensities set out therein must in any event not be exceeded. Furthermore, the detailed assessment will be conducted on the basis of the specific positive and negative elements, when they are relevant for the type or form of aid.’* Emphasis added.

<sup>567</sup> Council Regulation No 659/1999 of 22 March 1999 laying down detailed rules for the application of Article 93 (now Art. 108 TFEU) of the EC Treaty, OJ L 83, 27.03.1999, p. 1, as amended.

794/2004 of 21 April 2004,<sup>568</sup> which contains in Annexes I and II a standard notification form, and which is supplemented by the non-binding 2009 Best Practice Code.<sup>569</sup> Commission Regulation No 794/2004 was amended by Commission Regulation (EC) No 1147/2008 of 31 October 2008, which revised Part III.10 of Annex I relating to the ‘*Supplementary information sheet on state aid for environmental protection*’ (the ‘supplementary information sheet’).<sup>570</sup> When notifying a green certificates support scheme to the Commission, Member States must submit the information indicated in the supplementary information sheet. Point 3.5.3.2 of this document covers precise information on the green certificates scheme that will be used by the Commission as a starting point for its assessment.<sup>571</sup>

Green certificates schemes may be eligible for the simplified notification procedure. Under the 2009 Simplification Package, the Commission adopted two notices that aimed to improve the effectiveness, transparency and predictability of state aid control in accordance with the objectives of the 2005 SAAP: the Best Practices Code on the conduct of state aid proceedings; and the Notice on a Simplified Procedure for the Treatment of Certain Types of State Aid.<sup>572</sup> The Simplified Procedure can apply to the notification of TGCs scheme involving state aids for several reasons. Three categories of state aid measures are identified as suitable for treatment under the simplified procedure in the Notice. First, the Notice envisages the application of the simplified procedure to aid measures falling within the standard assessment section of existing guidelines, including the Environmental Guidelines.<sup>573</sup> As pointed out in a previous paragraph, such is the case of notifiable TGCs schemes, under Section 3 of the Environmental Guidelines. A second category concerns state aid measures corresponding to well-established Commission decision-making practice.<sup>574</sup> Here it is envisaged that the Commission has approved

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<sup>568</sup> Commission Regulation (EC) No 794/2004 of 21 April 2004 implementing Council Regulation (EC) No 659/1999 laying down detailed rules for the application of Article 93 of the EC Treaty, OJ L 140, 30.04.2004, p. 1, as amended.

<sup>569</sup> Code of Best Practice for the conduct of State aid control procedures, Commission notice, OJ C 136, 16.06.2009, p. 13. The Best Practice Code primarily aims to increase quality and speed of cooperation between the Member States and the European Commission in the treatment of notifications.

<sup>570</sup> Commission Regulation (EC) No 1147/2008 of 31 October 2008 amending Regulation (EC) No 794/2004 implementing Council Regulation (EC) No 659/1999 laying down detailed rules for the application of Article 93 of the EC Treaty, as regards Part III.10 of its Annex 1, OJ L 313, 22.11.2008, p. 1.

<sup>571</sup> These include: A) a detailed description of the green certificates system, including the level of discretionary powers, the role of the administrator, the price determination mechanism, the financing mechanism, the penalty mechanism and re-distribution mechanism; B) the duration of the measure, keeping in mind that the Commission can authorise aid schemes for a period of ten years; C) data/calculations demonstrating that the aid is essential to ensure the viability of RES; D) data/calculations demonstrating that the aid does not result, in the aggregate, in overcompensation for renewable energy; E) information/calculations proving that the aid does not dissuade RES producers from becoming more competitive.

<sup>572</sup> Notice from the European Commission on a simplified procedure for treatment of certain types of State Aid, OJ C 136, 16.06.2009, p.3. Both the Best Practices Code and the Notice on a Simplified Procedure entered into force on 1 September 2009. Both documents are of non-binding character.

<sup>573</sup> Notice from the European Commission on a simplified procedure for treatment of certain types of State Aid, OJ C 136, 16.06.2009, p. 3, point 5(a).

<sup>574</sup> Notice from the European Commission on a simplified procedure for treatment of certain types of State Aid, OJ C 136, 16.06.2009, p. 3, point 5(b).

similar types of aid in at least three earlier decisions within the last ten years preceding the date of pre-notification. The decisions taken by the Commission on the compatibility of TGCs schemes with the internal market is stable enough to argue that there is a required number of ‘preceding decisions.’ Indeed, the ‘*established Commission practice*’ established in precedent cases N 414/2008, N 22/2009 and N 590/2009, has been referred to and used by the Commission in its assessment of the state aid case N 65/2010 concerning an amendment to the ROCs scheme in the United Kingdom.<sup>575</sup> While the argumentation may be identical, it must be recalled that each TGCs scheme has its own design characteristics. This means that the notification of a new TGCs scheme could be subject to a simplified procedure, but that its compatibility cannot be presumed. A third category of aid measures relates to the prolongation or extension of existing schemes. This category is applicable in particular to TGCs schemes as concerns: the ‘*prolongation of an existing authorised aid scheme by up to six years,*’ which has already been the case with existing TGCs schemes; and the ‘*tightening of the criteria for the application of an authorised aid scheme,*’ which has likewise occurred as regards the eligible RES technologies. Since the entry into force of the Notice, several prolongations of authorised TGCs schemes have been notified under that provision in the United Kingdom.<sup>576</sup> It must be noted here that a ‘simplified notification procedure’ already exists for certain alterations to existing aid, as defined in Article 4 of Commission Regulation (EC) No 794/2004. This procedure continues to apply since the Notice on a Simplified Procedure is not legally binding on the Member States or the Commission, contrary to the regulation. Nevertheless, the Commission ‘*invites*’ Member States to proceed in accordance with the Notice, and in particular to pre-notify the aid while using the simplified notification form contained in the Annex to Regulation (EC) No 794/2004.<sup>577</sup> The European Commission had already examined several amendments to authorised national TGCs schemes through the Simplified Procedure defined in the 2009 Notice. In all the different circumstances identified above, the pre-notification phase defined in the Notice on a Simplified Procedure (points 13-16) plays an essential role.

#### 7.1.5.4 Re-notification requirement

As indicated in the preceding paragraph, authorised green certificates schemes are subject to a re-notification requirement in the event of any amendment. Article 108.3 TFEU provides that Member States have a legal obligation to notify any projected amendment to an aid regime.<sup>578</sup> In the case of authorised green certificates schemes, re-notification may be necessitated by either an amendment to or the renewal of the scheme. Both these types of situations have already been assessed and approved by the Commission. Green certificates schemes in the UK that had been accepted by the Commission and were

<sup>575</sup> State aid case No N 65/2010 of 30.03.2010 – United Kingdom, amendments to the Renewables Obligation Certificates (ROCs) scheme, point (6). The United Kingdom notified the measure under point 5(b)(ix) of the Notice on simplified procedure.

<sup>576</sup> E.g.: SA.31350, United Kingdom – Amendments to the Renewable Obligation Certificate Scheme 2011, notified on 15.12.2010. The scheme duration is from 01.04.2011 to 31.03.2037. See also state aid case N 259/2010, United Kingdom – Renewables Obligation (Scotland) Order 2009, notified on 18.06.2010. The scheme duration is from 01.07.2010 to 31.03.2015.

<sup>577</sup> Notice from the European Commission on a simplified procedure for treatment of certain types of State Aid, OJ C 136, 16.06.2009, p. 3, point 5(c), last sub-paragraph.

<sup>578</sup> Article 108.3 TFEU: ‘*The Commission shall be informed, in sufficient time to enable it to submit its comments, of any plans to grant or alter aid....*’

subsequently amended have all been re-notified (e.g., state aid case N 259/2010). As regards the case of prolongation, Section 3.1 of the Environmental Guidelines makes it clear that the duration of the scheme must be limited to ten years. After that period has expired, re-notification is required:

*‘... the duration of aid schemes should be subject to reasonable time limits, without prejudice to the possibility for a Member State to re-notify a measure after the time limit set by the Commission decision has passed. Member States may support notifications of aid measures by rigorous evaluations of similar past aid measures demonstrating the incentive effect of the aid.’<sup>579</sup>*

In State Aid Case N 65/2010, the Commission approved the extension of the lifetime of the Renewable Obligation to 2037, subject to re-notification of the scheme in 2018.<sup>580</sup>

### 7.1.5.5 Conclusion

In conclusion, a Member State is not obliged to notify a green certificates scheme if it does not consider that it meets all four criteria of Article 107.1 TFEU. Such an approach, however, entails a risk that a control by the European Commission will conclude otherwise, resulting in an order to reimburse the state aid. If a Member State considers that a scheme represents a state aid, it has a legal obligation to notify it. Finally, all Commission decisions are subject to review by the Court of Justice of the European Union under Article 263 TFEU. National courts are also involved in the enforcement of recovery decisions taken by the European Commission.

## 7.1.6 List of the Commission’s state aid decisions on national green certificates schemes

The following contains a list of the main decisions taken by the Commission in cases relating to national green certificates schemes.

Green certificates schemes in Belgium:

- State aid N 550/2000 – Belgium/Flanders – Green certificates in the electricity sector, SG (2001) D/290545, published in OJ C 330 of 24.11.2001, p. 3;<sup>581</sup>
- State aid N 415/A/2001 – Belgium/Wallonia, C(2001) 3738 of 28.11.2001, published in OJ C 30 of 02.02.2002, p. 14.

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<sup>579</sup> Notice from European Union Institutions and Bodies, Community Guidelines on State Aid for Environmental Protection, 2008/C 82/01, OJ C 82 of 01.04.2008, p.1, point (71).

<sup>580</sup> State aid case No N 65/2010 of 30.03.2010 – United Kingdom, amendments to the Renewables Obligation Certificates (ROCs) scheme, point (14): *‘As regards duration, even if the scheme lifetime is extended to 2037, the Commission notes that the UK authorities are committed to renotify the scheme in 2018 if they intend to continue granting aid under the ROC scheme.’*

<sup>581</sup> The Commission concluded that the green certificates scheme, as notified, does not constitute ‘in principle’ state aid pursuant to Article 87.1 ECT (now Article 107.1 TFEU). But the Commission does not exclude totally the eventuality of a qualification as state aid. In that case, the Commission decided that the measure must be assessed as compatible with the internal market in accordance with Article 97.3 c) of the ECT, since the measure met the conditions set by the EU state aids guidelines for environmental protection.

- State aid N 14/2002 of 02.08.2002 – Belgium, Federal scheme to promote renewable sources of energy, C(2002) 2904, published in OJ C 309 of 12.12.2002, p.14;<sup>582</sup>
- State aid N 254/06 – Belgium *Panneaux Photovoltaïques*, C(2006) 4954, 24.10.2006.<sup>583</sup>

The green certificates scheme in Sweden:

- State aid case N 789/2002 – Sweden, *Elcertifikatsystemet*, decision of 05.02.2003, C(2003)382fin, published in OJ C 120 of 22.05.2003;
- State aid case N 294/2003 – Sweden, *Ändring av systemet med gröna certifikat*, decision of 19.11.2003, C(2003)4415, published in OJ C 6 of 10.01.2004.

Renewables Obligation and Renewables Obligation Certificates (ROCs) in the United Kingdom (England and Wales; Scotland; Northern Ireland):

- State aid case N 504/2000 of 28.11.2001 – Renewables Obligation and Capital Grants for Renewable Technologies, published in OJ 2002 C30, p. 15;<sup>584</sup>
- State aid case N 414/2008 UK – Renewable Obligation – Introduction of a banding mechanism, published in OJ C 106 of 08.05.2009;
- State aid case No N 65/2010 of 30.03.2010 – United Kingdom, amendments to the Renewables Obligation Certificates (ROCs) scheme,;<sup>585</sup>
- State aid case 557/2010 of 01.02.2011 – United Kingdom, amendments to the Renewables Obligation Certificate Scheme 2011;
- SA.31350 notified on 15.12.2010 according to the simplified procedure – United Kingdom, amendments to the Renewables Obligation Certificate Scheme 2011.
- State aid case N 22/2009 – Northern Ireland, The Renewables Obligation, published in OJ C 249 of 17.10.2009;
- State aid case N 76/2010 of 30.03.2010 – United Kingdom, The Renewables Obligation – Northern Ireland (small-scale generation) (OJ C 162, 22.06.2010);
- State aid case N 556/2010 of 09.02.2011 – United Kingdom, Amendments to the Renewables Obligation Northern Ireland 2011;

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<sup>582</sup> The Commission decided that neither the issuance of green certificates to offshore RES-E installations nor the purchase obligation at fixed prices put on the federal grid operator involve state resources and, in doing so, do not represent state aids.

<sup>583</sup> It concerns a re-notification of state aid case N 550/2000. In this case, the Commission concluded that *‘the notified measure on the purchase obligation and the minimum price guarantee for green certificates which resent the production of 1000 kWh photovoltaic energy does not constitute State aid within the meaning of Article 87(1) EC Treaty, because there is no transfer of state resources involved’* (para. 15).

<sup>584</sup> The Commission concluded that the measure constituted state aid within the measure of Article 107.1 TFEU. This case came just after the decision in the PreussenElektra Case C-379/98 delivered on 13 March 2001.

<sup>585</sup> The measure is an amendment to the approved aid N 414/2008 scheme (OJ C 106, 08.05.2009). The Commission concludes that *‘the modification envisaged do not influence the original compatibility assessment regarding the approved measure N 414/2008’* and concludes that *‘the notified measure is in line with the Environmental Guidelines and is therefore compatible with the Internal Market in accordance with Article 107(3) (c) TFEU.’*

- SA.31537 notified on 09.09.2010 – United Kingdom, Northern Ireland, Amendments to the Renewables Obligation Northern Ireland 2011.
- State aid case N 851/2006 – United Kingdom, Renewables Obligation (Scotland) – amendment to an existing scheme, C(2007)1308, 19.03.2007, published in OJ C100 of 04.05.2007;
- State aid case N 590/2008 – Scotland, Renewables Obligation Order 2009, published in OJ C 109 of 13.05.2009);
- State aid case N 259/2010 – United Kingdom, Scotland, Renewables Obligation (Scotland) Order 2009, Amendment to approved scheme N 590/2008.

The green certificates scheme in Romania:

- State aid case SA.33134 2011/N – Romania, Green certificates for promoting electricity from renewable sources, C (2011) 4938, decision adopted on 13.07.2011.<sup>586</sup>

First it should be noted that all the green certificates schemes operated in the United Kingdom were amended in 2010. These amendments reflected necessary adjustments due to the evolution of market conditions for renewable technologies over the course of time.

Second, all the above green certificates schemes were established almost simultaneously in the early 2000s.<sup>587</sup> This can be interpreted as a result of regulatory trends, since green certificates were perceived at that time as adequate instruments in the countries concerned. It can also be interpreted as a consequence of the liberalisation of the electricity market and a choice to adopt more market-oriented strategies to support energy generation using renewable sources.<sup>588</sup>

Finally, it could not be recorded any notified case to the Commission for the following EU Member States that have established a national TGCs scheme: Poland and Italy. This can be explained by, in the case of Poland, the transitory regime before the accession to the EU, and, in the case of Italy, by an assessment made by the national authorities that the scheme did not involve elements of state aids and did not require notification. It must be noted here that, for reason of legal certainty, Member States have the possibility to notify a measure that they nevertheless consider not being a state aid. They will in that case notify the measure as ‘a non-aid for reasons of legal certainty.’ This was the procedure followed by Romania when notifying its TGCs scheme in 2011.<sup>589</sup>

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<sup>586</sup> See also press release from the European Commission, *State aid: Commission approves Romanian Green Certificates renewable energy support scheme*, IP/11/867, 13.07.2011.

<sup>587</sup> Even the Romanian TGCs scheme, the modification of which was notified to the Commission in 2011, has been functioning since 2004.

<sup>588</sup> See on that issue Chapter 2.2.

<sup>589</sup> Romania had pre-notified its TGCs scheme in 2009 following the adoption of Law 220/2008 (pre-notification registered under reference number PN 288/2009).



## 7.2 Qualification of TGCs schemes under state aid rules

The central question examined in the following sections is whether the financial support received by RES-E generators under a green certificates scheme may involve elements of state aids in the sense of Article 107 TFEU. To answer this question, it is necessary initially to identify the different issues surrounding the qualification of a green certificates scheme as state aid (7.2.1) and then to apply successively the four criteria of Article 107.1 TFEU to the scheme, *i.e.*: the grant of an economic advantage (7.2.3); the selective character of the scheme (7.2.4); the effect on competition and trade (7.2.5); and the involvement of state resources (7.2.5). While the three first criteria are almost always fulfilled, a careful design of the scheme can avoid the involvement of state resources, and thus the qualification as state aid. Where the green certificates scheme does represent state aid, it will be necessary to examine whether it can be deemed compatible with the internal market on the grounds that it contributes to the protection of the environment (7.3). Finally the question is raised concerning the accumulation of aids in favour of RES-E generation under TGCs scheme (7.4).

### 7.2.1 Central issues

The answer to the question of the qualification of TGCs scheme under state aid rules requires looking at the scheme in its entirety and not solely at the sale of certificates. Elements of state aids may indeed appear at different stages of the scheme. In addition, and despite a certain common basis, green certificates schemes operate under different parameters that can entail elements of state aid. Each scheme consequently requires a careful design by the national public authorities, and a separate assessment by the Commission.

Three sets of transversal issues are identified and analysed hereafter through the application of the criteria for state aid.

First, it is necessary to qualify the nature of the aid received by the RES-E generators under the scheme. Here, the issue is twofold: on the one hand, there is the green certificate itself; on the other hand there is the direct grant that public authorities can give to RES-E generators based on the redistribution of collected compliance fees under the quota obligation (redistribution fund).

Second, public authorities usually define by law a set of legal obligations on parties, such as: the obligation on electricity suppliers to purchase green certificates, the requirements to be fulfilled in order to obtain green certificates or the obligation to buy certificates. These obligations usually apply to the whole sector without distinction, but it may happen that undertakings under state ownership bear a higher burden than the private sector. This can be explained by the traditional involvement of the state in certain segments characterised by a situation of natural monopoly or by the dominance of public actors in certain segments of the electric industry.

Third, public authorities often set requirements associated with the green certificate itself such as a minimum purchase price above the market price of competing conventional energy sources, or differentiated certificates' price according to the type of RES technology. These different issues are the most common ones under TGCs schemes.

## 7.2.2 The grant of an economic advantage

For a national measure to be qualified as state aid in the sense of Article 107.1 TFEU, it must 'favour' its recipient. The concept of 'favour' has been further interpreted by the Court and associated to that of achieving an 'advantage.' According to settled case-law, measures, 'whatever their form,' that are likely to favour certain undertakings directly or indirectly, or represent an economic advantage that the recipient undertaking would not have obtained under normal market conditions – or as says the Commission 'under the normal course of business'<sup>590</sup> – are regarded as state aids.<sup>591</sup> The case law of the Court reveals that the advantage can be conferred in different manners. The undertaking can be favoured directly or indirectly by a measure, or the undertaking can receive an economic advantage. Under a TGCs scheme, the favour or economic advantage conceded to RES-E generators have several origins.

First, the quota obligation defined onto, e.g., electricity suppliers indirectly supports RES-E generation compared to other sources of generation by increasing the demand for green certificates. Either in the situation where suppliers possess the sufficient certificates by themselves or in the situation where they buy them on the TGCs market, a minimum amount of green certificates needs to be generated. This fixed amount guarantees a minimum level of financial support to RES-E producers, which constitutes an economic advantage. In state aid case N 550/2000, the Commission took the view that the legal obligation defined by the Flemish region on all electricity providers located in Flanders to hold a certain quota of green certificates by the end of each year provided to RES-E generators an additional revenue to cover a part of their production costs. This granted an undeniable advantage to these producers.<sup>592</sup> The Commission concluded in a similar manner in its other decisions on TGCs schemes.<sup>593</sup> The attribution of TGCs to RES-E generators consequently gives RES-E producers an advantage over their competitors that they would not have received under normal market conditions. A similar economic advantage exists under a FITs regime.<sup>594</sup> In the case of green certificates, the 'certain

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<sup>590</sup> *Vademecum Community Law on State Aid*, European Commission, Directorate-General for Competition, 30 September 2008, para. 2(b).

<sup>591</sup> Case C-237/04 *Enirisorse* [2006] ECR I-2843, para. 30; Case C-451/03 *Servizi Ausiliari Dottori Commercialisti* [2006] ECR I-2941, para. 59; and Case C-206/06 *Essent Netwerk Noord and Others* [2008] ECR I-5497, para. 79.

<sup>592</sup> State aid N 550/2000 – Belgium/Flanders – Green certificates in the electricity sector, SG (2001) D/290545, OJ C 330 of 24.11.2001, p. 3.

<sup>593</sup> In State Aid Case N 504/2000 concerning the UK Renewables Obligation, the Commission estimates similarly that 'the obligation imposed by the UK government for all licensed electricity suppliers in Great Britain to possess a certain number of certificates at the end of each compliance period will result in an additional income for producers of green electricity to cover a part of their production costs. It is therefore an advantage granted to these producers.' See: State aid case N 504/2000 of 28.11.2001 – Renewables Obligation and Capital Grants for Renewable Technologies, pp. 10-11, published in OJ 2002 C30, p. 15.

<sup>594</sup> The Commission has concluded on the existing of an economic advantage in favour of certain RES-E producers under the Austrian FITs system (State Aid Case NN 162/A/2003 and State Aid Case N 317/A/2006 – Austria, Support of electricity production from renewable sources under the Austrian Green Electricity Act (feed-in tariffs), OJ C 221 of 14.09.2006, point 42; as amended following State Aid Case N 47/2008 – Austria, Modification of feed-in tariffs for electricity from renewable sources, OJ C 253 of 04.10.2008). in See Case C-379/98, *PreussenElektra AG v Schlesweg AG*, [2001] ECR I-02099, para. 54, where the Court concludes that: 'an obligation to purchase electricity produced from

economic advantage' conferred to RES-E generators originates in the minimum quantity of TGCs that must be redeemed each year by suppliers, while in the case of FITs it resides in a minimum electricity price and the purchase obligation. Certain national legislations also fix a minimum price for certificate, which guarantee RES-E generators higher profits than they should have received.<sup>595</sup> Consequently, the same criteria of certainty are contained in a TGCs scheme than in a FITs scheme, although the former concerns quantity and the latter concerns price.

Second, the economic advantage in favour of RES-E generators is materialised at the moment of the entry of the certificates on the account of the RES-E generators in the registry. RES-E generators receive certificates for free from the authorities, and can sell them afterwards on the TGCs market. According to the interpretation given by the Court, the sole issuance for free of the intangible asset that is the green certificate is sufficient to constitute an advantage since it favours the recipient by providing him with additional revenues. RES-E generators receive via the sale of their TGCs an income that they would not normally receive from the market. Therefore, the measure confers them an obvious economic advantage that other power generators.

Third, and even more obvious is the economic advantage transferred in the form of a grant that RES-E producers can receive directly from the state when a re-distribution fund is established. The part of the TGCs scheme relating to such funds is qualified as 'direct grant' by Member States themselves in their notification to the Commission.<sup>596</sup>

These advantages, in their diverse forms, result in clear economic advantages for RES-E generators who see their production costs compensated and reduced and their competitive position strengthened compared to competitors.

### 7.2.3 The selective character of the TGCs scheme

In order to qualify as state aid, an aid measure pursuant to Article 107.1 TFEU must involve a degree of selectivity by '*favouring certain undertakings or the production of certain goods.*'<sup>597</sup> This entails that the aid will benefit only a 'specific' category of undertakings or goods (material selectivity, 7.2.3.1) or a 'specific' part of the territory of a Member State (geographical selectivity, 7.2.3.2). The extent to which green certificates schemes constitute selective aids is examined in the present section. The selectivity criterion can indeed be fulfilled on several grounds.

Selectivity and specificity are often used as synonyms to describe the nature of the aid measure. To fall under the definition of Article 107.1 TFEU, the Treaty requires that an

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*renewable energy sources at minimum prices, such as that laid [in the German FIT law], confers a certain economic advantage on producers of that type of electricity, since it guarantees them, with no risk, higher profits than they would make in its absence.'*

<sup>595</sup> See on that point, Section 7.2.5.5.

<sup>596</sup> See State aid case N 259/2010 – United Kingdom, Scotland, Renewables Obligation (Scotland) Order 2009, Amendment to approved scheme N 590/2008.

<sup>597</sup> Emphasis added. See Case C-88/03 *Portugal v Commission* [2006] ECR I-7115, para. 52.

aid is ‘of a specific nature’ or is ‘selective in its application.’<sup>598</sup> The aid is ‘selective’ because it applies only to a ‘specific’ category of undertakings or goods.

### 7.2.3.1 Material selectivity in green certificates schemes

An aid measure is deemed to be selective when it provides an advantage to its beneficiaries compared to competitors that, ‘*in the light of the objective pursued by that measure, are in a comparable factual and legal situation.*’ This so-called material selectivity criterion was made explicit by the Court in its 2001 judgment in the *Adria-Wien Pipeline* case C-143/99. Material selectivity is there defined as ‘*the suitability of a given national measure to grant an advantage to undertakings which are both legally and factually in a comparable situation as other undertakings not enjoying this advantage.*’<sup>599</sup>

Two criteria are crucial when assessing the degree of selectivity of the aid. The first element relates to a comparative assessment; the second relates to the discretionary powers of the authority granting the aid. These two criteria are alternative. In several decisions, the Court has set that where an aid is recognised as selective based on one of the criteria and thus fulfils the condition of specificity, ‘*it is no longer necessary to examine whether the selective nature of the measures at issue is or is not also the result of the authority’s discretionary power in implementation of those measures [...] particularly when that criterion, whether or not the authority has a discretionary power, is, in the present case, only used by the Commission as an alternative.*’<sup>600</sup> The criterion of discretionary power in the implementation of the measure will consequently be a supplementary criterion in the event of an unclear situation but not a cumulative one.

Under the first criteria of comparative assessment, the situation between the beneficiary of the aid and its competitors will be evaluated. For that, the effects of the aid granted on the beneficiary do not matter, whether they are positive, negative or non-existent.<sup>601</sup> The decisive element when assessing selectivity is ‘*whether, under a particular statutory scheme, a State measure is such as to favour certain undertakings or the production of certain goods within the meaning of Article 87(1) EC in comparison with other undertakings which are in a legal and factual situation that is comparable in the light of*

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<sup>598</sup> Case C-200/97 *Ecotrade* [1998] ECR I-7907, para. 40; Case T-55/99 *CETM Commission* [2000] ECR II-3207, para. 39; Case C-75/97 *Belgium v Commission* [1999] ECR I-3671, para. 26; Case C-66/02 *Italy v Commission* [2005] ECR I-10901, para. 94; Case T-335/08 of 1 July 2010, *BNP Paribas and BNL v Commission*, para. 160.

<sup>599</sup> Case C-143/99 *Adria-Wien Pipeline and Wietersdorfer & Peggauer Zementwerke* [2001] ECR I-8365, para. 41. See also later judgements: Case C-308/01 *GIL Insurance and Others* [2004] ECR I-4777, para. 68; Case C-172/03 *Heiser* [2005] ECR I-1627, para. 40; and *Commission v Portugal*, para. 54; C-172/03 *Italy v Commission* [2005] ECR I-10901, para. 94; Case T-335/08 of 1 July 2010, *BNP Paribas and BNL v Commission*, para. 160 (not yet published).

<sup>600</sup> Joined Cases T-227/01 to T-229/01, T-265/01, T-266/01 and T-270/01, Decision of 9 September 2009, para. 167. See case law quoted there, and in particular: Case C-501/00 *Spain v Commission* [2004] ECR I-6717, paras. 120 and 121. See also assessment of the discretionary powers in Case C-143/99 *Adria-Wien Pipeline and Wietersdorfer & Peggauer Zementwerke* [2001] ECR I-8365, para. 39 et seq.

<sup>601</sup> See landmark Case 57/86 *Greece v Commission* [1988] ECR 2855, para. 10. And more recently Case C-143/99 *Adria-Wien Pipeline and Wietersdorfer & Peggauer Zementwerke* [2001] ECR I-8365, para. 41: ‘*For the application of Article 92 [now 107.1] of the Treaty, it is irrelevant that the situation of the presumed beneficiary of the measure is better or worse in comparison with the situation under the law as it previously stood, or has not altered over time.*’

*the objective pursued by the measure in question.*<sup>602</sup> The methodology used by the Commission in this comparative assessment is quite clear in the event of taxation measures and which is not directly relevant for green certificates schemes.<sup>603</sup> The manner by which to conduct this comparative assessment in other areas than taxation is less clear in the case law of the Court. A general approach followed by the Court is to first look at the economic sector the undertaking the good pertains to and then the adequation between the purpose of the measure and the means employed.<sup>604</sup> It should be noted that the Court has recognised an aid to be selective even if it concerns a large number of undertakings<sup>605</sup> or even a whole economic sector.<sup>606</sup>

As regards the scope of application of the measure, the TGCs scheme it relates to cannot qualify as a ‘general measure’ and should be distinguished from this concept. If two undertakings or goods subject to comparable legal and factual conditions benefit similarly from the measure in question, the latter cannot be deemed to be selective, but does not entail that the measure is general in scope. As set by the Court, ‘[a] State measure which benefits all undertakings in national territory, without distinction, cannot therefore constitute State aid.’<sup>607</sup> Here lies the difference between the selective aids that can qualify as state aid and the ‘general measures’ defined by the Commission as ‘measures which apply without distinction across the board to all firms in all economic sectors in a Member State (e.g. most nation-wide fiscal measures such as lower tax rates or interest rates).’<sup>608</sup> In such a case, the benefit will be available for all undertakings and will not constitute state aid. An aid will fall short of being general when it applies only to a restricted category of economic operators within one particular sector,<sup>609</sup> as in the case of TGCs schemes. The obligation applies only to a specific category of undertakings defined in national legislation. Note that the Court has recently rejected the argument according to which one Member State intended to extend the scope of application of a selective aid so

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<sup>602</sup> Case C-143/99 *Adria-Wien Pipeline and Wietersdorfer & Peggauer Zementwerke* [2001] ECR I-8365, para. 41.

<sup>603</sup> For assessing the existence of an advantage in taxation cases, it will suffice to compare with a situation of ‘normal taxation’ (Case C-88/03 *Portugal v Commission* [2006] ECR I-7115, para. 56), which has been defined by the Court as ‘the taxation normally applicable to undertakings which are, in the light of the objective pursued by the scheme in question, in a factual and legal situation that is comparable to that of the undertakings benefiting from the scheme’ in Case C-143/99 *Adria-Wien Pipeline and Wietersdorfer & Peggauer Zementwerke* [2001] ECR I-8365, para. 41.

<sup>604</sup> See for example Case C-75/97 *Belgium v Commission* [1999] ECR I-3671, paragraphs 28 to 31 where the Court proceeds to such adequation test.

<sup>605</sup> On the presence of selectivity, even in the case of aid scheme applicable to a large number of undertakings, see: Case C-409/00 *Spain v Commission*, [2003] ECR p. I-01487, paras. 47-48. In the literature, see R. Plender, ‘Definition of Aid,’ in A. Biondi, P. Eeckhout and J. Flynn (eds.), *The Law of State Aid in the European Union* (Oxford University Press, 2004), pp. 7-8.

<sup>606</sup> Case C-66/02 *Italy v Commission* [2005] ECR I-10901, para. 95 and case law cited.

<sup>607</sup> Case C-143/99 *Adria-Wien Pipeline and Wietersdorfer & Peggauer Zementwerke* [2001] ECR I-8365, para. 35.

<sup>608</sup> *Vademecum Community Law on State Aid*, European Commission, Directorate-General for Competition, 30 September 2008, para. 2(c).

<sup>609</sup> Case T-445/05 of 4 March 2009, *Associazione italiana del risparmio gestito and Fineco Asset Management SpA v Commission*, para. 156.

that it would qualify as a general measure in the future.<sup>610</sup> Finally, general aid schemes should also be distinguished from general economic measures.<sup>611</sup>

The issue of selectivity in a green certificates scheme is twofold: on the one hand, there is a quota obligation put on obligated parties, which can be suppliers but also other generators competing with RES-E producers, depending on the scheme design; and, on the other hand, there are the green certificates that are issued for free to RES-E generators in proportion to the green MWh produced, and which can be sold further on the TGCs market.

As regards the quota obligation, the question is whether putting a legal constraint, entailing a financial burden on competitors that do not have access to free or cheap TGCs represents a selective measure in favour of the latter. Depending on the scheme design, the quota obligation can be defined, *e.g.*, on generators or suppliers, which have different access to TGCs. The legal obligation for electricity generators or suppliers to redeem a certain quota of green certificates each year will not be qualified as selective as long as it applies equally to a business category that is in a same legal and factual situation in the light of the objective of the TGCs scheme. In other words, a quota obligation is not in itself a state aid.<sup>612</sup> No particular group of undertakings is favoured by the measure within this sector, and the selectivity criterion is not met.<sup>613</sup> However, if the quota obligation does not apply equally to the same category of undertakings, under the same legal and factual situation, this may raise issues of selectivity. It should be mentioned in this respect that the exemption of the energy intensive industries from the quota obligation, as it is provided under certain national TGCs schemes, is present.

While all electricity generators or providers are subject to the quota obligation, the scheme provides a benefit only to a specific category of undertakings within the power generation sector. The green certificate, as a support mechanism, will benefit the undertakings receiving them for free, *i.e.* the RES-E generators (or providers owning RES-E generation assets). The latter represent a smaller group or undertakings within the category of electricity generators (or suppliers).<sup>614</sup> In both State aid cases N 550/2000<sup>615</sup> and N

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<sup>610</sup> In the case at stake, the Commission argued that:

*'The approach of making the classification of an aid measure dependent on the intention of the Member State to generalise the measure would deprive Community law of its effectiveness in the area of State aid. The Member State concerned would then be able, in such a case, to escape application of Community rules simply by declaring its intention to generalise the contested measure in the future. The same reasoning applies a fortiori in a case such as the present, in which the measure, which was previously of general application, is retained in respect of one sector alone and thus becomes a selective measure.'* Case T-335/08 of 1 July 2010, *BNP Paribas and BNL v Commission*, para. 156 (not yet published).

<sup>611</sup> See C-57/86, *Greece v Commission*, and T-67/94, *Tierce Ladbroke*.

<sup>612</sup> See: B. Nagel, *Die Vereinbarkeit des Gesetzes für den Vorrang Erneuerbarer Energien (EEG) mit dem Beihilfenrecht der EG* (2002) 2 *Zeitschrift für neues Energierecht*, p. 107, where the author states that neither the purchase obligation nor fixed quantity systems constitute state aid *per se*.

<sup>613</sup> See for a similar conclusion: J. Schwarze, *EU-Kommentar* (Baden-Baden: Nomos, 2000) p. 1050, para.26.

<sup>614</sup> RES-E suppliers are undertakings. There is consequently no need to discuss whether the measure will benefit a real undertaking engaged in economic activity. This is a given fact. The extent to which RES-E generators are always undertakings is however less obvious. Auto-generators could be eligible to TGCs schemes, according to the scheme design.

504/2000,<sup>616</sup> the Commission comes to the conclusion that renewable energy producers are ‘a specific group of electricity producers.’ The measure will also benefit a specific category of goods, namely electricity, when the TGCs are sold bundled with electricity in the power purchase agreement. Since the measure solely favours certain RES-E generators and not all generators, the scheme is deemed selective.

A green certificates scheme can also be materially selective with regards to possible differentiation between different renewable energy sources. This additional level of selectivity is introduced when certain types of renewable energy sources receive a higher amount of certificates compared to others under the same scheme. Authorities acknowledge in doing so that it is necessary from a sustainability perspective to grant a higher financial support to new renewable energy sources that are based on more expensive, less mature technologies. This is the reasoning followed by the UK authorities when they introduced in April 2009 the so-called ROC banding mechanism.<sup>617</sup> The UK introduced ROC bands based on technology groupings according to the level of technology development. Under the first period (2009-2011), RES-E generators pertaining to these different RES technology groups are entitled to receive 0.25, 0.5, 1, 1.5 or 2 ROCs per MWh generated.<sup>618</sup> The banding mechanism is subject to periodical review with consequent state aid notification to the Commission.<sup>619</sup> The latter has accepted such differentiated approach for the first period in State aid case N65/2010<sup>620</sup> that concerned, *inter alia*, the project of granting a higher support to offshore wind projects (2 ROCs/MWh instead of 1.5 ROCs/MWh). The UK submitted to the Commission costs and revenue calculations for justifying the increased level of support.<sup>621</sup> The Commission validated the approach as avoiding overcompensation, being subject to review and a progressive decrease of the support.<sup>622</sup> A similar differentiated approach had been

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<sup>615</sup> State aid N 550/2000 – Belgium/Flanders – Green certificates in the electricity sector, SG (2001) D/290545, JO C 330 of 24.11.2001, p. 3.

<sup>616</sup> State aid case N 504/2000 of 28.11.2001 – Renewables Obligation and Capital Grants for Renewable Technologies, p. 2, published in OJ 2002 C30, p. 15.

<sup>617</sup> Until March 2009, one ROC was issued for each MWh of eligible renewable electricity generated. As of April 2009, the value of the ROC is banded in accordance with the generation technology type.

<sup>618</sup> In 2010, four bands were proposed: (1) technologies in the established band will receive 0.25 ROCs/MWh (e.g. landfill gas); (2) technologies in the reference band receive 1 ROC/MWh (e.g., hydro-electric power generation, onshore wind, geopressure, energy from waste with CHP, co-firing of energy crops, co-firing of biomass with CHP); (3) technologies in the post-demonstration band will receive 1.5 ROCs/MWh (e.g., offshore wind, co-firing of energy crops with CHP, dedicated biomass); (4) technologies in the emerging technologies band will receive 2 ROCs/MWh (wave, tidal stream, tidal impoundment like tidal barrage or tidal lagoon, solar photovoltaic, geothermal, gasification/pyrolysis, anaerobic digestion, dedicated energy crops, dedicated biomass with CHP, dedicated energy crops with CHP). Source: UK government, Department of Energy & Climate Change, <<http://chp.defra.gov.uk/cms/roc-banding/>>.

<sup>619</sup> *Renewable Obligation Banding Review Process*, UK Government, Department of Energy & Climate Change, March 2010.

<sup>620</sup> State aid case N 65/2010 – United Kingdom, Amendments to the Renewables Obligation Certificates (ROCs) scheme, C(2010)2211, 30.03.2010.

<sup>621</sup> *Ibid.*, see point 9 of the decision.

<sup>622</sup> The Commission decided in that case that:

‘(12) On the basis of the information submitted, the Commission considers that the increased support to offshore wind result in levelised costs matching the mid-point of the predicted revenues, and will therefore prevent overcompensation in the aggregate of

proposed and approved by the Commission in State aid case N 14/2002 concerning the federal green certificates Belgium with a different fixed price by certificate according to the green technology.

The TGCs scheme to be introduced in Norway on 1 January 2012 challenges the criteria of material selectivity, as foreseen in Article 61.1 of the EEA Agreement. Norway's electricity generation is indeed based almost entirely – 99 per cent – on hydropower.

In conclusion, a mandatory green certificates scheme under quota obligation must be qualified as selective, because it benefits only to a 'specific' category of undertakings or goods that are RES-E generators and renewable electricity.

A reflection must be added here on the comparative assessment associated to the selectivity requirement. This material selectivity criterion involves an element of comparison with competitors and constitutes the preliminary necessary step for qualifying the measure as providing an economic advantage and potentially or actually distorting competition (see next section). The two criteria of selectivity and disruption of competition remain nevertheless distinct in the definition of state aid in the sense of Article 107.1 TFEU and should not be merged. A similar conclusion has been advanced by other authors who concluded that '*selectivity is to be considered a stand-alone requisite, which presence is not only necessary but also sufficient to conclude for the existence of State aid.*'<sup>623</sup>

When the comparative assessment does not conclude on the selectivity of the measure, an alternative indicator in the determination of the selective nature of the aid is the degree of discretion of the competent authority responsible for granting the aid. According to the Commission in its *Vademecum on State Aids*, '*[a] scheme is considered "selective", if the authorities administering the scheme enjoy a degree of discretionary power.*'<sup>624</sup> In the case of green certificates, such discretionary power can be limited by the fact that the schemes are usually established by an act passed by the legislature. Competent authorities are consequently obliged to implement a selective measure without any particular discretion.<sup>625</sup> As it has been recognised in other cases, the legislature '*leave[s] the competent authorities no latitude, in particular in the choice of recipient undertakings or*

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*the different producers. Additionally, the Commission considers that the design of the scheme will prevent overcompensation in the aggregate of the duration of the scheme, since the banding levels will be reviewed in 2014 and since the value of the ROCs should fall over time as deployment will increase, thus increasing the compliance level with the RO and reducing the amount of the buyout fund accordingly.*'

<sup>623</sup> J. L. da Cruz Vilaça, 'Material and Geographical Selectivity in State Aid – Recent Developments', *European State Aid Law Quarterly* (4; 2009), p. 444: '*In short, the courts appear to take in general the view that when "selectivity" is present then distortion of competition follows as a consequence, thus triggering application of Article 87(1) EC.*'

<sup>624</sup> *Vademecum Community Law on State Aid*, European Commission, Directorate-General for Competition, 30 September 2008, para. 2(c).

<sup>625</sup> L. Rubini argues for making the impact of regulatory measures more clear, based on the selectivity criterion. In particular, he criticises the *PreussenElektra* judgement '*as formalistic and leading to results which do not make much sense from the point of view of their economic effect. Instead, he advocates the use of the selectivity criterion to distinguish between advantages flowing from purely regulatory measures which are caught by Article 87.1 of the EC Treaty as opposed to those which are not.*' Foreword in L. Rubini, *The Definition of Subsidy and State Aid – WTO and EC Law in Comparative Perspective*, (Oxford University Press, 2009) p. xi.



sectors.<sup>626</sup> In that case, national competent authorities have no discretionary power in the implementation of green certificates schemes. The latter are meant to be selective from their legal inception, both in objective and design. This differs from the situation where an aid scheme is not defined by law as selective, such as a general fund, but that competent authorities have the power to allocate the revenues of the fund in a discretionary manner to ‘specific’ beneficiaries and to decide on the amount and conditions of the financial assistance.<sup>627</sup> If the revenues from the compliance fees under a green certificates scheme are collected in a fund but that the legislation does not specify the way the revenues from the fund should be re-distributed, it should be expected that the power of the competent authorities in managing the fund will be qualified as discretionary, and that the scheme will also be qualified as selective for that purpose. In conclusion, the discretionary power left to the competent authorities in managing the revenues of the re-distribution fund includes another element of material selectivity in the green certificates scheme.

### 7.2.3.2 Geographical selectivity in green certificates schemes

In addition to the criterion of material selectivity described above, the argument of geographical selectivity could also be raised as regards green certificates schemes. As stated by the Commission in its Vademecum on State Aids: ‘[t]he selectivity criterion is also satisfied if the scheme applies to only part of the territory of a Member State (this is the case for all regional and sectoral aid schemes).’<sup>628</sup> Such a statement is based on the well established case law of the Court.

Although most of the green certificates schemes are national, some intra-state legislatures or authorities may adopt schemes of more limited territorial applications than the national territory because of the repartition of competences. Belgium is a good example with four green certificates schemes co-existing at regional (three) and federal (one) levels. Similarly in the United Kingdom, England and Wales are operating the Renewables Obligation (RO) since 2002, Scotland is operating the Renewables Obligation Scotland (ROS) since 2002 and Northern Ireland has adopted the Northern Ireland Renewables Obligation (NIRO) in 2005. All three schemes include a compliance system based on Renewables Obligations Certificates (ROCs) and a buy-out fund. The recycling funds

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<sup>626</sup> Case C-75/97, *Belgium v Commission* [1999] ECR I 03671, para. 27:

‘... it cannot be contended that the measures in question constitute State aid on the ground that the competent national authorities have a discretionary power in the application of the increased reduction of social charges (see Case C-241/94 *France v Commission* [1996] ECR I-4551, paragraph 23). In this instance, the conditions for the grant of the increased reductions in question are laid down by the Belgian legislature, in the aforementioned royal decrees, and leave the competent authorities no latitude, in particular in the choice of recipient undertakings or sectors.’

<sup>627</sup> Case C-241/94, *France v Commission*, [1996] ECR I-04551, para. 22-23. The case concerned the National Funds for Employment (Fonds National pour l’Emploi):

22. It must also be noted that [the National Fund for Employment] FNE intervention is not limited sectorially or territorially or by reference to a restricted category of undertakings.

23. However, as the Commission has rightly pointed out, the FNE enjoys a degree of latitude which enables it to adjust its financial assistance having regard to a number of considerations such as, in particular, the choice of beneficiaries, the amount of the financial assistance and the conditions under which it is provided. The French Government itself concedes that the administration may depart from its own guidelines where particular circumstances justify that course of action.

24. In those circumstances, it must be held that, by virtue of its aim and general scheme, the system under which the FNE contributes to measures accompanying social plans is liable to place certain undertakings in a more favourable situation than others and thus to meet the conditions for classification as aid within the meaning of Article 92(1) of the Treaty.

<sup>628</sup> *Vademecum Community Law on State Aid*, European Commission, Directorate-General for Competition, 30 September 2008, para. 2(c).

were after time merged together and allowed licensed suppliers to submit ROCs under the RO, ROS or NIRO.<sup>629</sup>

The relationship between the autonomous powers of sub-national territorial entities competence and the geographical selectivity of potential state aids has given rise to a broad case law primarily related to taxation. In those cases, the Court defined three conditions of institutional, procedural and economic autonomy of the sub-national entity.<sup>630</sup> In that respect, the role of the central government in defining the political and economic environment is determinant for identifying the reference framework.<sup>631</sup> The level of the autonomy of the infra-state body that has adopted the measure is also of central importance for defining whether there is geographical selectivity. In Case C-88/03 *Portugal v Commission*, the Court ruled that an infra-state body can also enjoy a sufficient level of autonomy in relation to the central government, in terms of legal and factual status, as the body playing the fundamental role in the definition of the political and economic environment in which the beneficiary of the aid operates. The Court concluded that: *'In such a case it is the area in which the infra-State body responsible for the measure exercises its powers, and not the country as a whole, that constitutes the relevant context for the assessment of whether a measure adopted by such a body favours certain undertakings in comparison with others in a comparable legal and factual situation, having regard to the objective pursued by the measure or the legal system concerned.'*<sup>632</sup> The reference framework would in this case be that of the geographical area on which the infra-state body exercises autonomous competence.<sup>633</sup> In the case of Belgium, the regional authorities have the constitutional competence to adopt their own scheme. Due to that competence, the regional aid scheme is not territorially selective because applying to the whole territory of the entity having competence on it. Where the regional or territorial authorities have the sole competence to adopt such schemes, the same criteria as for a national green certificates scheme apply when assessing whether it represents a state

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<sup>629</sup> The Commission has assessed these schemes in particular in state aid cases:

- N 851/2006 – United Kingdom, Renewable Obligation (Scotland) – amendment to an existing scheme, C(2007)1308, 19.03.2007, published in OJ C100 of 04.05.2007;
- N 590/2008 – Scotland, Renewables Obligation Order 2009 (OJ C 109, 13.05.2009);
- N 22/2009 – Northern Ireland, The Renewables Obligation (OJ C 249, 17.10.2009).

<sup>630</sup> See landmark Cases T-211/04 and T-215/04, *Gibraltar and United Kingdom v. Commission*, paras. 79-84. See also Case C-88/03 *Portugal v Commission* [2006] ECR I-7115, concerning tax measures adopted by the Autonomous Region of the Azores that includes the definition of three conditions of institutional, procedural and economic autonomy as laid down by the Court in paragraph 67 of that judgment. As summarized in Joined Cases C-428/06 to C-434/06, *UGT-Rioja and Comunidad Autónoma de La Rioja* paras. 51-52.

<sup>631</sup> In Joined Cases C-428/06 to C-434/06, *UGT-Rioja and Comunidad Autónoma de La Rioja*, previously mentioned, the Court concludes that:

*'Article 87(1) EC is to be interpreted as meaning that, for the purpose of assessing whether a measure is selective, account is to be taken of the institutional, procedural and economic autonomy enjoyed by the authority adopting that measure. It is for the national court, which alone has jurisdiction to identify the national law applicable and to interpret it, as well as to apply Community law to the cases before it, to determine whether the [regional governments] have such autonomy, which, if so, would have the result that the laws adopted within the limits of the areas of competence granted to those infra-State bodies by the Constitution and the other provisions of [national] law are not of a selective nature within the meaning of the concept of State aid as referred to in Article 87(1) EC.'* (Para. 144.)

<sup>632</sup> Case C-88/03 *Portugal v Commission* [2006] ECR I-7115, paras. 57-58.

<sup>633</sup> Case C-88/03 *Portugal v Commission* [2006] ECR I-7115, para. 62.

aid.<sup>634</sup> Consequently, a regional green certificates scheme will not automatically be geographically selective insofar as the regional authorities have corresponding constitutional competences in this policy area. The reasoning would have been different if the scheme were to apply (although unlikely to occur) to a precise part of the national territory or to a renewable technology only available for natural reason in this part of the territory under national competence (*e.g.*, offshore wind or geothermal).

### 7.2.3.3 Conclusion

Tradable green certificates schemes are meant to be selective from their inception. They entail a direct, selective economic advantage in favour of RES-E generators. For that purpose, the selectivity of the green certificates schemes cannot be argued to be an indirect consequence or part of ‘*the nature or the general scheme of the system*’<sup>635</sup> or that it does not preclude the normal application of the system.<sup>636</sup> It cannot be argued either that there is ‘*no prior identification [...] of the individual addresses of the measure contained therein.*’ Such an argument would be mostly relevant in tax exemption measures.<sup>637</sup>

As demonstrated above, a tradable green certificates scheme can be qualified as a selective aid scheme based not only on one but several grounds. There is little doubt about the qualification of the scheme as materially selective due to the clear benefit granted to RES-E generators. In the less probable situation where central national authorities establish a green certificates scheme that benefits only to a part of the national territory more limited than its geographical scope of competence (*e.g.*, in one particular region), the measure will probably be deemed geographically selective as well.

Because of its selective character, the aid entails the granting of an economic advantage to a certain category of undertakings or goods only, distorts or threatens to distort competition, and ultimately affects trade between Member States. Such consecutive effects are the subject of the next two paragraphs.

## 7.2.4 Effect of the TGCs scheme on competition and trade between Member States

The regime of state aids is based on a general prohibition because of the incompatibility of such aids with the internal market rules. Pursuant to Article 107.1 TFEU, a state aid ‘*distorts or threatens to distort competition [...] in so far as it affects trade between*

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<sup>634</sup> Case 248/84 *Germany v Commission* [1987] ECR 4013, para. 17; Case C-88/03 *Portugal v Commission* [2006] ECR I-7115, para. 62.

<sup>635</sup> See Case T-335/08 of 1 July 2010, *BNP Paribas and BNL v Commission*, para.163 (not yet published):

*‘the concept of State aid does not refer to State measures which differentiate between undertakings and which are, therefore, prima facie selective, where that differentiation arises from the nature or the overall structure of the system of charges of which they form part (see Portugal v Commission, paragraph 52 and the case-law cited). The selective nature of a measure may, in fact, be justified by ‘the nature or the general scheme of the system’ (see, to that effect, Case 173/73 Italy v Commission [1974] ECR 709, paragraph 33). In that case, the measure avoids being classified as State aid under Article 87(1) EC since the requirement that an advantage be conferred is not satisfied.’*

<sup>636</sup> See Case T-442/03, *SIC v Commission*, [2008] II-01161, para. 64.

<sup>637</sup> See discussion on that argument raised by the applicant in Case T-55/99 *Confederación Española de Transporte de Mercancías (CETM) v Commission* [2000] ECR II-3207, para. 40.

*Member States.*' Two cumulative criteria are intertwined here: first, the aid must potentially or actually strengthen the position of its recipient in so far as it can have distorting effects on competition (7.2.4.1); second, the aid must have an effect on trade between Member States (7.2.4.2).

#### 7.2.4.1 The actual or potential distortion of competition

By the advantage they confer on certain undertakings, state aids have the potential to distort competition between companies. Such disruption of fair competition is contrary to the objectives of the Union as reflected in Articles 3 TEU, the Preamble of the TFEU,<sup>638</sup> Articles 119.1 TFEU (economic and monetary policy),<sup>639</sup> and 173 TFEU (industrial policy).

As already underlined by the legal literature, '*it seems surprising that a market-based regulation should distort competition,*' but that is only '*at first sight.*'<sup>640</sup> Indeed, an operating aid such as a green certificate will almost automatically qualify as distortive of competition. As held by the Court of First Instance, '*operating aid, that is to say aid which [...] is intended to relieve an undertaking of the expenses which it would normally have had to bear in its day-to-day management or its usual activities, in principle distorts competition.*'<sup>641</sup> Although the reasoning might result almost automatically, it should be applied properly with respect to the economic activity and the goods in question. The Court has sometimes, but too rarely in the view of the doctrine, criticised the rapid manner the Commission has applied the criteria of distortion of competition and effect in trade between Member States in state aid cases.<sup>642</sup>

*A contrario*, an aid that fulfils the other criteria but falls short of being distortive of competition will not be qualified as state aid. This corresponds to the logic of the *de minimis* Regulation that exempts small amounts of state aids from notification when they fall under the *de minimis* ceiling. The Commission considers that '*such aid falls outside the scope of [Article 107.1] of the Treaty.*'<sup>643</sup> The extent to which a green certificates scheme can fall within the scope of application of the *de minimis* Regulation has been reviewed in Section 7.1.5.

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<sup>638</sup> '*Recognising that the removal of existing obstacles calls for concerted action in order to guarantee steady expansion, balanced trade and fair competition.*'

<sup>639</sup> '*For the purposes set out in Article 3 of the Treaty on European Union, the activities of the Member States and the Union shall include, ..., the adoption of an economic policy which is ... conducted in accordance with the principle of an open market economy with free competition.*'

<sup>640</sup> T. M. Rusche, 'Emissions Trading' Chapter 14 in M. S. Rydelski (ed.), *The EC State Aid Regime – Distortive Effects of State Aid on Competition and Trade* (Cameron May, 2006), p. 349. The author was here referring to emissions trading, but, as the logic of allocation is similar, the reasoning can be extended to green certificates.

<sup>641</sup> Case T-214/95 *Het Vlaams Gewest v Commission* [1998] ECR II-717, para. 43.

<sup>642</sup> J. L. da Cruz Vilaça, 'Material and Geographical Selectivity in State Aid – Recent Developments', *European State Aid Law Quarterly* (4; 2009), p. 444.

<sup>643</sup> *Vademecum Community Law on State Aid*, European Commission, Directorate-General for Competition, 30 September 2008, para. 2(d).

#### 7.2.4.2 The effect on trade between Member States

In addition to having an actual or potential effect on competition, the aid must also affect trade between Member States in order to be qualified as state aids in the sense of Article 107.1 TFEU. The question examined hereafter is whether the support provided to RES-E generators through the TGCs scheme affects trade between Member States. The question of the legality of trade restrictive provisions in TGCs schemes, which is related to the present one, is examined in Part IV .

Several criteria are identified by the Commission for assessing the effect of trade of an aid measure: the beneficiary is involved in an economic activity (nature of the beneficiary not determinant); he operates in a market subject to trade between Member States.<sup>644</sup>

The application of these criteria to a TGCs scheme allows the following conclusions. First, the beneficiary of the aid granted through the scheme will be the RES-E generator. The latter is involved in the economic activity of electricity generation. Second, this economic activity relates to the production of a good, electricity, and sometimes also the delivery of associated services, which are subject to the free movement rules. The internal market aspect has been reinforced with the liberalisation of the electricity market. The RES-E producer is consequently involved in an activity related to the trading of a good in free movement between Member States. An aid granted to that good will almost automatically affect trade within the internal market. Even in the situation where the amount of aid or the size of the beneficiary RES-E generator is relatively small, the aid may be considered as affecting trade.<sup>645</sup> The TGCs scheme might be national in scope, RES-E generators are involved in an economic activity subject to European competition. The position of the RES-E producers will be reinforced by the revenues from the sale of green certificates or the direct grant. This involves the actual or potential modification of the market conditions for their competitors. Even if the electricity undertaking itself is not directly trading electricity with another Member State, the fact that it receives a financial support has the potential to affect trade.

In state aid case N 550/2000 the Commission takes the view that RES-E producers are a particular group of electricity producers who are engaged in trade with other Member States. The reinforced position of RES-E generators must be considered as affecting trade between Member States.<sup>646</sup> Similar reasoning was applied in other decisions on TGCs schemes. In case N 504/2000 concerning the Renewables Obligation and Capital Grants for Renewable Technologies in the United Kingdom, the Commission estimates that electricity producers, including RES-E producers, are active in trade between Member States. The fact that RES-E producers receive an additional support compared to their

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<sup>644</sup> *Vademecum Community Law on State Aid*, European Commission, Directorate-General for Competition, 30 September 2008, para. 2(d).

<sup>645</sup> Case C-206/06 *Essent Netwerk Noord and Others*, para. 76. See similar position of the Court in previous judgments: Case C-142/87 *Belgium v Commission* ('*Tubemeuse*') [1990] ECR I-959, para. 43; Case C-280/00 *Altmark Trans and Regierungspräsidium Magdeburg* [2003] ECR I-7747, para. 81.

<sup>646</sup> State aid N 550/2000 – Belgium/Flanders – Green certificates in the electricity sector, SG (2001) D/290545, JO C 330 of 24.11.2001, p. 3.

competitors may strengthen their position on the market. The Commission concluded that this effect on competition ‘*must be regarded as affecting that trade.*’<sup>647</sup>

A review of the Commission’s decisions shows that the criteria of effect on trade in state aid cases is ‘*easily satisfied*’, as noted by AG Jacobs in its Opinion in Cases C-278-280/92 *Spain v Commission*. The fulfilment of this criterion rarely raises complex or lengthy argumentation.

## **7.2.5 The involvement of state resources under TGCs schemes**

In its assessment in the *PreussenElektra* judgement, the lack of direct or indirect involvement of state resources was determinant for the Court to conclude on the absence of state aid. Although the judgement remains a broadly commented landmark decision, the European Commission has adopted other important decisions on the most refined elements of green certificates schemes that have concluded on the presence of state aids on the grounds that state resources were involved. For this reason, it is necessary to assess whether or not a TGCs scheme can involve state resources, according to the different scheme design identified hereafter. The requirement of involvement of state resources is first recalled.

### **7.2.5.1 The criterion of direct or indirect involvement of state resources**

This other cumulative criterion for qualifying an aid measure as state aid is enounced in Article 107.1 TFEU. Namely, the aid must be ‘*granted by a Member State or through State resources in any form whatsoever.*’

The interpretation given to this criterion is broadly discussed in the legal literature and gave rise to an abundant case law. A central element, which was questioned by Advocate General Jacobs in its conclusions in the *PreussenElektra* case, is whether the financing through state resources is a constitutive element of the concept of state aid in the case law of the Court.<sup>648</sup> As pointed out by Advocate General Jacobs, the wording of Article 107.1 TFEU opens for two interpretations:

- ‘an extensive interpretation’ according to which ‘*any measure which confers economic advantages on specific undertakings, and which is the result of conduct attributable to the State, constitutes State aid independently of whether it involves any financial burden for the State*’<sup>649</sup>;
- ‘a narrower interpretation’ according to which the fact that ‘*the measure at issue must necessarily cost the State money and financing through public resources is a constitutive element of the definition of State aid.*’ This entails that the ‘*aid must*

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<sup>647</sup> State aid case N 504/2000 of 28.11.2001 – Renewables Obligation and Capital Grants for Renewable Technologies, p. 2, published in OJ 2002 C30, p. 15.

<sup>648</sup> Opinion of A.G. Jacobs, Case C-379/98, *PreussenElektra AG v Schleswig AG*, point 113. His question is exactly formulated as follows: ‘*Is financing through State resources a constitutive element of the concept of State aid under the Court’s existing case-law?*’

<sup>649</sup> Opinion of A.G. Jacobs, Case C-379/98, *PreussenElektra AG v Schleswig AG*, point 115.

*necessarily be financed through State resources and that the distinction between aid granted by a State and aid granted through State resources serves to bring within the definition of aid not only aid granted directly by the State, but also aid granted by public or private bodies designated or established by the State.*<sup>650</sup>

A.G. Jacobs concluded, with the concurrence of the Court, that it is indeed the second interpretation, narrower in scope, which prevails in the most recent case law of the Court. He also concludes in favour of this narrower interpretation of the concept of state aids, which he finds to be more consistent with the basic principles and objectives of the Treaty.

*'I accept that there is some force in the above arguments in favour of an extensive understanding of the concept of State aid. I am none the less of the opinion that financing through State resources is a necessary element of the concept of State aid and that the Court should adhere to its current case-law.'*<sup>651</sup> [...] *'I therefore conclude that financing through State resources is a constitutive element of the concept of State aid under Article 92(1) of the Treaty and that the Court should not depart from its case-law.'*<sup>652</sup>

Indeed, the case law of the Court has given a corresponding interpretation of the Treaty and ruled that *'only advantages granted directly or indirectly through State resources are to be considered aid'* within the meaning of Article 107.1 TFEU.<sup>653</sup> The Court, through a well established case law, has affirmed the distinction it intended to make between aid granted by a state or through state resources, concluding that the determining element is the occurrence of a transfer of state resources. The distinction is made evident in the *PreussenElektra* judgement:

*'the case-law of the Court of Justice shows that only advantages granted directly or indirectly through State resources are to be considered aid within the meaning of Article 92(1). The distinction made in that provision between 'aid granted by a Member State' and aid granted 'through State resources' does not signify that all advantages granted by a State, whether financed through State resources or not, constitute aid but is intended merely to bring within that definition both advantages which are granted directly by the State and those granted by a public or private body designated or established by the State.'*<sup>654</sup>

While not all forms of advantage granted by the state are included in the definition of state aids, the *'additional charge'* that the aid represents *'for the state or for bodies designated or established by the State'*<sup>655</sup> is a determining element for establishing the presence of a state aid.<sup>656</sup> The presence of state resources will prevail for the qualification under Article 107.1 TFEU. This means *a contrario* that if no transfer of state resource has been made,

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<sup>650</sup> Opinion of A.G. Jacobs, Case C-379/98, *PreussenElektra AG v Schleswig AG*, point 116.

<sup>651</sup> Opinion of A.G. Jacobs, Case C-379/98, *PreussenElektra AG v Schleswig AG*, point 150.

<sup>652</sup> Opinion of A.G. Jacobs, Case C-379/98, *PreussenElektra AG v Schleswig AG*, point 159.

<sup>653</sup> Appears for the first time in Case 82/77 *Van Tiggele* [1978] ECR 25, paras. 24 and 25; Case C-72/91 and C-73/91, *Sloman Neptun*, ECR I-887, para. 19; *Viscido and Others v Ente Poste Italiane* [1998] ECR I-2629, para. 13; and Case C-379/98, *PreussenElektra AG v Schleswig AG* [2001] ECR I-02099, para. 58.

<sup>654</sup> Case C-379/98, *PreussenElektra AG v Schleswig AG* [2001] ECR I-02099, para. 58.

<sup>655</sup> See in particular: Case C-295/97, *Piaggio* [1999] ECR I-3735, para. 35; joined Cases C-52/97 to C-54/97 *Viscido and Others v Ente Poste Italiane* [1998] ECR I-2629, para. 13.

<sup>656</sup> See in that sense a concordant conclusion by T. M. Rusche, 'Emissions Trading' Chapter 14 in M. S. Rydelski (ed.), *The EC State Aid Regime – Distortive Effects of State Aid on Competition and Trade* (Cameron May, 2006), pp. 379-380.

the state measure cannot be qualified as state aid for the purposes of Article 107 TFEU, even if the other conditions are satisfied.<sup>657</sup>

Several Advocates General have argued in favour of an extensive interpretation of Article 107.1 TFEU. For example, in the *Sloman Neptun* case, A.G. Darmon suggested that ‘*the origin of the financing of an aid measure was irrelevant,*’ and that the Treaty ‘*required only that the aid measure was the result of conduct for which a Member State was responsible.*’<sup>658</sup> The Court itself has sometimes tried to apply an extensive interpretation of the Treaty’s provision in the 1980s without being backed by latter case law.<sup>659</sup> The Court refused to follow an extensive interpretation and came back to the narrower interpretation. In the most recent cases, the Court still refers to its decisions in *Sloman Neptun* or *Van Tiggele* where the purpose of the distinction between aid granted by the State and aid granted through State resources solely served the purpose of bringing within the definition of aid not only aid granted directly by the State, but also aid granted by public or private bodies designated or established by the State. In *Sloman Neptun*, the Court adds that ‘*That was because the wording of that provision and the procedural rules in Article 93 of the Treaty showed that advantages granted from resources other than those of the State did not fall within the scope of the State aid rules.*’

In its *Vademecum* on Community law on state aid, the Commission makes clear the manner it intends to apply the criterion. Only measures that involve a transfer of state resources are covered. As set by Article 107.1 TFEU, the aid does not need to be granted directly by the state itself, but state resources must be involved. The Commission further specifies that the financial transfers ‘*can take many forms*’, such as grants, interest rate rebates, ‘*but also loan guarantees, accelerated depreciation allowances, capital injections, tax exemptions, etc.*’<sup>660</sup>

However, an interpretation focusing only on state resources faces two important shortcomings. First, it risks being too broad in scope by including in the definition of state aid all operations from a public undertaking to private beneficiaries, which would go far beyond the objective of the control of state aid. Second, it may exclude measures taken by the state but not involving state resources, and lead to circumvention of state aids, which is contrary to the objective of Article 107.1 TFEU. To avoid such shortcomings, the Court has progressively developed supplementary criteria based on the existence of elements of state control, and imputability.

When state resources are not directly involved, it has been necessary to look at the fact that the state exercises a control over the resources linked with the aid (state control criteria). In Case T-25/07 of 11 February 2009, *Iride SpA and Iride Energia SpA v.*

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<sup>657</sup> Case T-95/03 of 12 December 2006, *Asociación de Empresarios de Estaciones de Servicio de la Comunidad Autónoma de Madrid and Federación Catalana de Estaciones de Servicio v. Commission*, para. 104 (not yet published).

<sup>658</sup> Opinion of A.G. Darmon, Case C-72/91 and C-73/91, *Sloman Neptun*, ECR I-887, points 40 to 43.

<sup>659</sup> Previously there have been a few decisions where the Court was opened to interpret more extensively Article 107.1, and did not require financing through state resources but an ‘action by the Member State’, e.g.: Joined cases 67, 68 and 70/85, *Van der Kooy and Others v Commission*, [1988] ECR 219, paras. 28 and 32-38 (role of the state in fixing the preferential tariffs for natural gas).

<sup>660</sup> *Vademecum Community Law on State Aid*, European Commission, Directorate-General for Competition, 30 September 2008, para. 2(a).



*Commission*, the General Court has concluded that Article 107.1 TFEU ‘covers all the financial means by which the public authorities may actually support undertakings, irrespective of whether or not those means are permanent assets of the public sector.’ The fact that the state or a public body does not own the sums in question all the time is irrelevant inasmuch as the sums remain under state control. In that sense: ‘even though the sums involved in the measure at issue are not held permanently by the public authorities, the fact that they remain constantly under public control, and therefore available to the competent national authorities, is sufficient for them to be categorised as State resources.’<sup>661</sup> The Court confirms here previous case law.<sup>662</sup> The point is of particular relevance for a green certificate scheme that includes a redistribution fund managed by the state or a public authority designated or established by the state, and based on compliance fees under the quota obligation (see Section 7.2.5.6). This line of interpretation has led some authors to conclude that the control over the resources by the state has become more relevant than the origin of the resources.<sup>663</sup>

The Court has then established that, for a measure to be capable of being categorised as state aid, it must first be granted directly or indirectly through state resources and secondly, be imputable to the state.<sup>664</sup>

The Court sometimes uses an additional criterion in relation to the imputability of the measure. In joined cases T-425/04, T-444/04, T-450/04 and T-456/04 of 21 May 2010, *Buygues Telecom v Commission*, the General Court characterized the involvement of state resources as the ‘requirement of connexity’ between the advantage provided by the aid and the involvement of state resources. According to the General Court, this requirement of connexity implies an additional charge for the state budget or creates, based on legally binding commitments made by the state, a sufficiently concrete risk for the state budget.<sup>665</sup>

It results from the above that a core issue for the qualification of a TGCs scheme as state aid under Article 107.1 TFEU is whether state resources are directly or indirectly involved, and whether the state has control over the attributed resources through the scheme. This question will be answered by looking at the different components and design alternatives for the scheme. Five main components of the schemes are discussed below: the quota obligation; the financial compensation for the purchase obligation; the issuance of the certificates; the minimum or fixed price for the certificates; the possible inclusion of a redistribution fund.

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<sup>661</sup> Case T-25/07 of 11 February 2009, *Iride SpA and Iride Energia SpA v Commission*, para. 25.

<sup>662</sup> Case C-83/98 P *France v Ladbroke Racing and Commission* [2000] ECR I-3271, para. 50, and Case C-482/99 *France v Commission* [2002] ECR I-4397, para. 37.

<sup>663</sup> M. Schütte, ‘The Notion of State Aid,’ in M. S. Rydelski (ed.), *The EC State Aid Regime – Distortive Effects of State Aid on Competition and Trade*, (Cameron May, 2007), p. 42.

<sup>664</sup> Case C-482/99 *France v Commission* [2002] ECR I-4397, para. 24; Case C-126/01 *GEMO* [2003] ECR I-13769, para. 24; and Case C-345/02 *Pearle and Others* [2004] ECR I-7139, para. 36; Joined Cases T-309/04, T-317/04, T-329/04 and T-336/04, *TV 2/Danmark v Commission*, [2008] ECR II-2935, para. 157.

<sup>665</sup> Joined cases T-425/04, T-444/04, T-450/04 and T-456/04 of 21 May 2010, *France and Others v Commission*, [2010] p. 00000, para. 262. See also previous case law: Case C-72/91 and C-73/91, *Sloman Neptun*, [1993] ECR I-887, para. 21; C-156/98, *Germany v Commission*, [2000] ECR I-6857, para. 27; Case C-379/98, *PreussenElektra AG v Schleswag AG* [2001] ECR I-02099, para. 58; AG Jacobs conclusions in *PreussenElektra* [2001] ECR I-2103, paras. 115 to 117.

### 7.2.5.2 The quota obligation: effects on the source of financing

#### a) *The quota obligation, similar in effects to an electricity purchase obligation*

Contrary to a FIT, there is no electricity purchase obligation for RES-E under a TGCs scheme. The quota obligation defined in the TGCs scheme requires obligated parties to possess a certain amount of certificates at the end of each compliance period. It does not oblige them to purchase certificates as such. However, the purchase becomes necessary when they do not possess enough certificates on their own. As observed by the Commission, ‘*the possession of the certificates is important as this is the only way to avoid a fine*’ from the public authorities.<sup>666</sup> Non-compliance with the quota obligation is sanctioned by a fine, which serves as roof for the TGC price. For this reason, the European Commission has assessed the quota obligation under the TGCs scheme to be *a priori* similar in effect to a purchase obligation of the FITs scheme for the purpose of state aid. It can indeed be held that the two obligations result in providing an economic advantage to RES-E producer by defining a legal obligation on obligated parties. The two obligations ‘*seem comparable*’ as put by the Commission in its different decisions, referring in that to the system of FITs described in the *PreussenElektra* case.<sup>667</sup> With the development of the schemes which have sometimes borrowed from one another, the similarities have even increased. Namely, certain FITs schemes require the presence of a GO for eligible RES to the tariff, and certain TGCs schemes provide for a fixed minimum price for the certificates combined with a purchase obligation.

While this comparison is valid from the perspective of state aid rules, it must be noted that the legal nature of the two obligations are relatively different. Beyond the regime of state aids, the two obligations also have different practical effects. In particular, the quota obligation of the TGCs scheme entails the creation of a market for TGCs.

#### b) *The mandatory purchase of TGCs*

Certain TGCs schemes define a real purchase obligation of TGCs on certain parties, which may not be obligated parties. Requiring these parties to buy the TGCs constitutes an additional level of certainty for the financing of RES-E production that might be more costly than others. The European Commission reviewed the mandatory purchase of certificates contained in the TGCs schemes of Belgium. In state aid case N 254/2006 (Belgium – Panneaux photovoltaïques) the Commission assessed the obligation defined on the Flemish distribution grid operators to purchase the certificates issued for solar panels when offered to them, at a certain minimum price. In case N 14/2002, the Commission reviewed the Belgian federal TGCs scheme applicable to offshore installations (mainly wind) and that requires the federal electricity network operator, Elia System Operator (ESO), to purchase at a priced determined by the state the TGCs when RES-E generators introduce a demand.<sup>668</sup> This possibility is offered to all RES-E generators on the Belgian territory, that is not only offshore but also onshore, and consequently includes RES-E

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<sup>666</sup> State aid case N 608/04 – Belgium, Flanders, Combined Heat and Power certificates, decision of 03.05.2005, published in OJ C 240 of 30.09.2005, p. 2.

<sup>667</sup> The same wording is to be found: State aid case N 608/04 – Belgium, Flanders, Combined Heat and Power certificates, decision of 03.05.2005, published in OJ C 240 of 30.09.2005.

<sup>668</sup> State aid N 14/2002 - Federal scheme to promote renewable sources of energy, decision of 02.08.2002, C(2002) 2904, as published in OJ C 309, 12.12.2002.

generators from regional schemes. The Walloon legislation also mandates TSOs/DSOs to purchase green certificates when they receive a demand.

The legal justification of the definition of a purchase obligation on certain undertakings like network operators is reviewed in Section 8.3.2.2. Only aspects related to state aids are addressed hereafter.

*c) When law mandates that financing originates from private resources*

Even if the state requires a mandatory purchase of TGCs in addition to the quota obligation, it will never have control over the sums transferred between private parties, even if a public body operates the green certificates market. The green certificates transaction is concluded between the parties to the TGCs market. The obligated parties are not mandated to manage resources originating from the state but their own private resources. For that reason, and in accordance with the narrow interpretation given to Article 107.1 TFEU, neither the quota obligation nor the purchase obligation can be deemed to involve direct or indirect transfer of state resources. This is the conclusion reached by the Court in the case of feed-in tariffs in the *PreussenElektra* judgment in relation to FITs, and which is applied by the Commission.<sup>669</sup> The obligation does not involve any financial state resources, but creates a demand for a good getting a financial value on the market.<sup>670</sup> Qualifying such obligation as state aid would follow the extensive interpretation of Article 107.1 TFEU that has been rejected by the Court as expounded above.

In its decisions in TGCs schemes, the European Commission has been consistent in its application of the criteria of state resources and the reference to the *PreussenElektra* case law. In state aid case N 550/2000 concerning the original Flemish green certificates scheme, the Commission took the view that when distributors purchase green certificates from RES-E generators or traders, the corresponding transaction does not involve any state resources as defined in Article 107.1 TFEU, since the transaction takes place on the green certificates market.<sup>671</sup> The resources remain private. This assessment has been repeated by the Commission in other cases, like in state aid case N 504/2000 – UK Renewables Obligation and Capital Grants for Renewable Technologies.<sup>672</sup> In state aid Case N 254/06 – Belgium ‘Panneaux Photovoltaïques’ mentioned above,<sup>673</sup> the revised Flemish scheme envisaged that the fixed minimum price for GCs was ‘*directly paid between the market participants from their own resources and without any transmission via a fund or account managed by the State.*’ No state resources were involved. In a case related to a similar mechanism as the TGCs but in the transport sector, namely the Renewable Transport Fuel Obligation (RTFO), the Commission notes as an additional proof of the non-involvement

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<sup>669</sup> Case C-379/98, *PreussenElektra AG v Schleswag AG* [2001] ECR I-2099, para. 59.

<sup>670</sup> As a matter of comparison, see *Van Tiggele* case that concerns the determination of minimum retail price for gin. The Court concluded that no state resources were involved since the economic advantage conceded to distributors of gin was financed at the exclusive expense of consumers. Case 82/77 *Van Tiggele* [1978] ECR 25, para.24.

<sup>671</sup> State aid N 550/2000 – Belgium/Flanders – Green certificates in the electricity sector, SG (2001) D/290545, JO C 330 of 24.11.2001, p. 3.

<sup>672</sup> State aid case N 504/2000 – UK Renewables Obligation and Capital Grants for Renewable Technologies of 28.11.2001, C(2001) 3267, p. 12.

<sup>673</sup> State aid N 254/06 – Belgium ‘Panneaux Photovoltaïques’, C(2006) 4954, 24.10.2006, point 10.

of state resources or state control the fact that the state is prevented from either putting new RTFO certificates on the market or buying them.<sup>674</sup> Finally, under a simple TGCs scheme, the revenues from the compliance fee go directly into the state budget. They are neither deposited into a fund nor redistributed.

In conclusion, even if ‘*an undeniable advantage*’ is conferred on certain undertakings by the quota and purchase obligations, this advantage is not sufficient for qualifying the measure as state aid due to the absence of transfer of state resources.<sup>675</sup>

Three additional issues must be raised in relation to the additional burden that the aid granted through the TGCs scheme could represent for the state or public bodies, namely: the conversion of private resources into state resources (d); the potential loss in tax revenue (e); the burden imposed on publicly owned undertakings through the quota obligation, and eventually also through the purchase obligation (f).

*d) The conversion of private resources into State resources*

The national authorities will never ‘control’ the money transferred between the RES-E generators and the buyers of green certificates (suppliers or brokers). Instead, the green certificate scheme is based on the involvement of private resources of the obligated parties subject to the quota obligation. In these circumstances, the question of the conversion of private resources into state resources was raised by plaintiffs in the *PreussenElektra* case.

The money transferred via the green certificates financial transaction remains under private control. These sums will never be ‘at the disposal of public authorities’ or ‘under state control’ under the interpretation given to Article 107.1 TFEU by the Court.<sup>676</sup> A.G. Jacobs concludes ironically on that point in his conclusions in the *PreussenElektra* case that: ‘*If the argument of the Commission and PreussenElektra were to be accepted then all sums which one person owes another by virtue of a given law would have to be considered to be State resources. That seems an impossibly wide understanding of the notion.*’<sup>677</sup> A.G. Jacobs bases his argumentation on the case law of the Court which set that ‘*measures financed exclusively through private resources are outside the scope of the State aid rules.*’<sup>678</sup> Consequently, the purchase obligation defined on private parties cannot be deemed to involve state resources. This part of the green certificates scheme will not qualify as state aid in the sense of Article 107.1 TFEU.

Whereas the State will never exercise control over the financial resources exchanged between parties to the TGCs market, the contrary may be true when public authorities

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<sup>674</sup> State aid case N 418/2006 – United Kingdom, Renewable Transport Fuel Obligation (RTFO), C(2007)8, decision of 04.01.2007, published in OJ C 35 of 17.02.2007.

<sup>675</sup> See in that sense, Case C-379/98, *PreussenElektra AG v Schleswig AG* [2001] ECR I-2099, para. 61.

<sup>676</sup> See formulæ ‘at the disposal of public authorities’ used in Case C-83/98 P, *French Republic v Ladbroke Racing Ltd*, [2000] I-03271 para. 50 and in case T-358/94 *Air France v Commission* [1996] ECR II-2109, para. 68. AG Jacobs refers to both these judgements in his opinion.

<sup>677</sup> Opinion of AG Jacobs in Case C-379/98 *PreussenElektra AG v Schleswig AG*, point 166.

<sup>678</sup> *Ibid.* Opinion of AG Jacobs in Case C-379/98 *PreussenElektra AG v Schleswig AG*, point 166.

decide to redistribute the funds constituted by the collection of fees for non-compliance with the TGCs scheme. See Section 7.2.5.6 on redistribution of collected compliance fees.

*e) The potential loss in tax revenue*

The Court never accepted the argument of the economic loss experienced by the government due to the decreased tax revenues as a result of the negative economic consequences of the measures on energy suppliers and other companies. In cases like *PreussenElektra*, *Sloman Neptun* and *Ecotrade*, the Court acknowledged the negative economic consequences that the purchase obligation has on obligated parties and that it will entail a diminution in tax revenues for the state. Nevertheless, this consequence was deemed to be ‘*an inherent feature of such a legislative provision*’ and ‘*cannot be regarded as constituting a means of granting to producers of electricity from renewable energy sources a particular advantage at the expense of the State.*’<sup>679</sup> Similarly, A.G. Jacobs observes in his conclusion in the *PreussenElektra* case that the economic advantages received by RES-E generators under the scheme ‘*do not come from the alleged loss in tax revenue but from the undertakings subject to the StrEG and probably ultimately from consumers.*’<sup>680</sup> The loss in tax revenues for the state is an ‘*inherent side-effect*’ of the support regime, not the origin of the financing.

As regards the negative financial consequences incurred by undertakings as a consequence of a measure or a scheme, it should be kept in mind that it is the discretionary power of the public authorities to impose regulation, even with negative consequences, on undertakings. The parallel can be drawn with energy efficiency measures, which require suppliers to invest in certain technologies or to encourage their customers to consume less, which will result in decreased earnings. It must be added that such logic is in accordance with the polluter-pays principle, as it is reflected in the Environmental Guidelines.

The same interpretation was applied by the Commission in its different decisions on TGCs schemes. In state aid case N 550/2000 on the Flemish green certificates scheme, the Commission concluded that the state grants for free certificates to RES-E generators cannot be considered as a loss of revenues for the state.<sup>681</sup> Similarly, in state aid case N 504/2000 concerning the UK Renewables Obligation, the Commission estimates that ‘*If suppliers fulfil their obligation without buying out, it cannot be said that the buyout price, practically a fine they will not pay by fulfilling an obligation, is a loss of revenue for the State. No State resources are involved in such a situation.*’<sup>682</sup>

*f) State ownership in obligated undertakings*

As noticed in Chapter 2.2, certain segments of the electricity sector are characterised by a dominance of state ownership. The fact that publicly owned undertakings are obligated

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<sup>679</sup> C-379/98, *PreussenElektra AG v Schleswag AG* [2001] ECR I-2099, para. 62. See also C-73/91, *Sloman Neptun*, ECR I-887, para. 21, and C-200/97, *Ecotrade* [1998] ECR I-07907, para. 36.

<sup>680</sup> Opinion of AG Jacobs in Case C-379/98, *PreussenElektra AG v Schleswag AG*, point 162.

<sup>681</sup> State aid N 550/2000 – Belgium/Flanders – Green certificates in the electricity sector, SG (2001) D/290545, JO C 330 of 24.11.2001, p. 3.

<sup>682</sup> State aid case N 504/2000 of 28.11.2001 – Renewables Obligation and Capital Grants for Renewable Technologies, p. 12, published in OJ 2002 C30, p. 15.

parties under the scheme raises the question as to whether the loss in revenues the publicly owned undertakings experience equals a financing of the scheme by state resources. Two situations are identifiable here: publicly owned companies as parties among others under *quota obligation*; and publicly owned companies as unique parties subject to a *purchase obligation* as an additional element of the quota system.

In the first situation, the quota obligation applies to the whole business category of the designated obliged parties (*e.g.*, suppliers), whether they be privately or publicly owned. The TGCs scheme does not make any distinction based on ownership. In addition, privately and publicly owned suppliers are subject to the same rules under Directive 2009/72/EC and under competition law, which both aim to ensure a level playing field between all actors. The burden should consequently be the same for the two categories, which is the case under the standard design of a TGCs scheme. The fact that the supply segment might be dominated by publicly owned undertakings is a development dependent on national market conditions. The present stage of the supply market reveals that it is composed of both private and public undertakings. Other competitive segments of the electricity chain are characterised by a stronger presence of the state, such as in generation. In certain countries like Norway (at EEA level), the generation segment is highly dominated by public ownership. If the TGCs scheme places the quota obligation on generators in a country where the generation segment is largely publicly owned, one might wonder whether the quota obligation results in a support measure financed through state resources. It might there be necessary to look at the structure of the undertakings concerned, the level of control of the state, and apply the criteria defined hereafter.

In the second case, the state defines in addition to the quota obligation a mandatory purchase obligation on certain undertakings, partly or totally owned by the state (*e.g.*, TSO or DSO). This obligation is likely to be defined as a public service obligation as assessed in section 8.3.2.2. In order to establish whether the aid granted by the partly or totally publicly owned undertaking to RES-E generators through the mandatory purchase of TGCs involve state resources, the Court has defined cumulative criteria related to, first, the level of control of the state over the resources of the undertaking, and, second, the imputability of the measure to the state. According to settled case law, both criteria must be fulfilled to categorise the measure as state aid within the meaning of Article 107.1 TFEU.<sup>683</sup>

The first criterion of control of the state over the undertaking and its resources is the most subject to discussion. The Court had to address such situation in several cases and has progressively developed a series of principles and indicators to assess whether state resources were involved. The practice of the Commission can also be referred to.

When the state operates or is able to operate a control over the undertaking, several principles apply. A first principle relates to the permanent or temporary nature of the control exercised by the state. In its judgment in *Ladbroke* and *Stardust Marine*, and as repeated in *Iride SpA*, the Court affirmed that Article 107.1 TFEU applies whether or not the undertakings' assets are permanently or non-permanently held by the state. This will be sufficient to determine that the undertakings' resources '*remain constantly under public*

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<sup>683</sup> Case C-482/99, *France v Commission* (Stardust Marine) [2002] ECR I-4397, para. 24, and case law cited.

control, and therefore available to the competent national authorities.’<sup>684</sup> This will consequently involve their qualification as state resources.<sup>685</sup> A second general principle was identified in *Ecotrade*, where the Court set that it is sufficient for the measure to have a ‘potential burden’ for the state to be qualified as state aid.<sup>686</sup>

When the state partly owns or controls the undertaking subject to the TGCs purchase obligation, the Commission usually assesses in more detail the exact level of involvement of the state. For example in the state aid case *Panneaux photovoltaïques in Belgium*, the Commission took note that the state only owned 31.89 percent of the DSOs subject to the TGCs purchase obligation.<sup>687</sup> In state case N14/2002 concerning the federal Belgium TGCs scheme which defines a mandatory purchase obligation on the federal TSO, Elia System Operator (ESO), the Commission examined the ownership structure and the direction of ESO to identify to extent to which the public authorities have a control on ESO. The Commission raised the question of whether ESO could be qualified as public undertaking but concluded by the negative.<sup>688</sup>

In certain circumstances the control of the state is as dominant as the undertaking can be regarded as a ‘public undertaking’. The criteria for qualifying an undertaking as public undertaking are defined in Commission Directive 2006/111/EC, so-called Transparency Directive.<sup>689</sup> Article 2 of the directive defines public undertaking as an ‘undertaking over which the public authorities may exercise directly or indirectly a dominant influence by virtue of their ownership of it, their financial participation therein, or the rules which

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<sup>684</sup> Case 83/98P (appeal), *France v. Ladbroke Racing and Commission*, [2000] ECR I-3271, para. 50; Case C-482/99, *France v Commission (Stardust Marine)* [2002] ECR I-4397, para. 37. Before these two judgements, see Case T-358/94 *Air France v Commission* [1996] ECR II-2109, para. 67. See also T-25/07, *Iride SpA v Commission*, judgment of 11 February 2009, para. 25.

As regards comments in the literature, on the judgements in *Ladbroke* and *Stardust Marine*, see comments by: Jan A. Winter, ‘Re(de)fining the notion of state aid in Article 87(1) of the EC Treaty’, in Alison McDonnell (ed.), *A Review of Forty Years of Community Law. Legal Developments in the European Communities and the European Union*, Chapter 11, pp. 206-209; L. Hancher, Case Note on *Ladbroke* judgment, 39:4 CML Rev. (2002), pp. 865-839; L. Hancher, Case Note on *Stardust Marine* judgment, 40:3 CML Rev. (2003), pp. 739-751.

<sup>685</sup> Case 83/98P (appeal), *France v. Ladbroke Racing and Commission*, [2000] ECR I-3271, para. 50; Case C-482/99, *France v Commission (Stardust Marine)* [2002] ECR I-4397, para. 37. Before these two judgements, see Case T-358/94 *Air France v Commission* [1996] ECR II-2109, para. 67. See also T-25/07, *Iride SpA v Commission*, judgment of 11 February 2009, para. 25.

As regards comments in the literature, on the judgements in *Ladbroke* and *Stardust Marine*, see comments by: Jan A. Winter, ‘Re(de)fining the notion of state aid in Article 87(1) of the EC Treaty’, in Alison McDonnell (ed.), *A Review of Forty Years of Community Law. Legal Developments in the European Communities and the European Union*, Chapter 11, pp. 206-209; L. Hancher, Case Note on *Ladbroke* judgment, 39:4 CML Rev. (2002), pp. 865-839; L. Hancher, Case Note on *Stardust Marine* judgment, 40:3 CML Rev. (2003), pp. 739-751.

<sup>686</sup> C-200/97, *Ecotrade* [1998] ECR I-07907.

<sup>687</sup> State aid N 254/06 – Belgium ‘Panneaux Photovoltaïques’, C(2006) 4954, 24.10.2006, point 12.

<sup>688</sup> State aid N 14/2002 – Federal scheme to promote renewable source of energy, C(2002) 2904, 12.12.2002, p. 4.

<sup>689</sup> Commission Directive 2006/111/EC of 16 November 2006 on the transparency of financial relations between Member States and public undertakings as well as on financial transparency within certain undertakings, so-called Transparency Directive, (Codified version), published in the OJ L 318 of 17.11.2006, p. 17.

*govern it.*' The directive further sets that it shall be presumed that a dominant influence is exercised by the public authorities when these authorities, directly or indirectly in relation to an undertaking: (i) hold the major part of the undertaking's subscribed capital; (ii) control the majority of the votes attaching to shares issued by the undertakings; or (iii) can appoint more than half of the members of the undertaking's administrative, managerial or supervisory body. Obviously, when the undertaking is totally owned by the state, the criterion is easily met. If the obligated party qualifies as public undertaking, the public undertakings' resources constitute state resources.<sup>690</sup>

In the particular case where it is a TSO or a DSO which is subject to the purchase obligation, and that the TSO/DSO is a public undertaking, the level of independence of the TSO/DSO vis-à-vis the state may be discussed on the background of the provisions of Directive 2009/72/EC<sup>691</sup> and in relation to the imputability criterion.

The second and cumulative criterion of imputability of the measure to the state has been re-affirmed by the Court in the *Stardust Marine* judgment. The Court set there that state ownership alone does not suffice to prove that state resources are involved. In the case at stake, the decision to purchase TGCs is attributed to the state and is not in the commercial interest of the public undertaking (private investor test). The mandatory purchase of TGCs by the designated public undertakings is consequently a measure imputable to the state. This criterion is easily met in the present case since it is the state, usually by means of a legislative act, that adopts the measure. There is little need to question further the imputability of the aid or to detail the additional criteria identified in the *Stardust Marine* judgement.<sup>692</sup>

### 7.2.5.3 The financial compensation for the purchase obligation

Under certain national schemes, the GCs purchase obligation can give rise to compensatory measures when the price of the certificates becomes too high.

In state aid case N 254/06 – Belgium, *Panneaux Photovoltaïques*,<sup>693</sup> the Flemish measure notified to the Commission concerned an obligation for the Flemish distribution system operators to purchase the green certificates generated by photovoltaic energy when offered

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<sup>690</sup> See landmark Case C-482/99 *France v Commission (Stardust Marine)* [2002] ECR I-4397, paras. 32 to 43. See also arguments in Commission Decision in state aid case N 41/05 concerning state aid awarded by Hungary through Power Purchase Agreements C(2008)2223 final of 4 June 2008, published in OJ L225 of 27.08.2009, points 289-290. Finally, see Decision No. 787/08/COL of EFTA Surveillance Authority of 17 December 2008 regarding the Danice project (Iceland), pp. 8-11 of the judgment.

<sup>691</sup> See analysis in section 8.1.2 and in *The Unbundling Regime*, Commission Staff Working Paper, Interpretative Note on Directive 2009/72/EC concerning common rules for the internal market in electricity and Directive 2009/73/EC concerning common rules for the internal market in natural gas, para. 2.3.

<sup>692</sup> Case C-482/99, *France v Commission (Stardust Marine)* [2002] ECR I-4397, para. 56. On imputability in relation to the fact that the measure results from an action of the state, see: Joined Cases 67/85, 68/85 and 70/85 *Van der Kooy and Others v Commission* [1988] ECR 219, para. 35. In the literature, see comments by P. Nicolaides, M. Kekelekis and M. Kleis, *State Aid Policy in the European Community – Principles and Practice*, International Competition Law Series, 2<sup>nd</sup> edition (Wolters Kluwer, 2008), p. 13.

<sup>693</sup> State aid N 254/06 – Belgium 'Panneaux Photovoltaïques', C(2006) 4954, 24.10.2006.



to them. In order to compensate the burden placed on distribution companies, the Flemish rules foresaw a recovery mechanism. To recover the costs incurred by the mandatory purchase of the green certificates, in particular when the operators cannot use or sell certificates further, the system operators can increase the grid connection costs and the network use tariffs paid by end users.<sup>694</sup> In that case, the Commission observed that the recovery mechanism as described by the Belgian authorities was not based on any state resources or any fund established or designated by the state.<sup>695</sup>

A similar purchase obligation was at stake in state aid case N 14/2002 concerning the Belgian federal scheme to promote renewable sources of energy.<sup>696</sup> Under the federal green certificates scheme, the system operator ESO, subject to a GCs purchase obligation, re-sells the green certificates on regional GCs markets. A recovery mechanism also applies. If the revenues of the sale are not sufficient to recover the costs incurred by ESO, the operator can increase the tariffs for the connection and use of the system for the end users. To assess whether state resources were involved, and consequently if the criterion of state resources is met, the Commission discussed the legal status of ESO and the level of involvement of the State in the company. As ESO could not be qualified as a public enterprise pursuant to Article 2 of Directive 80/723/EEC of 25 June 1980,<sup>697</sup> the state would never have had control over the sums purchased by ESO through the recovery mechanism. The Commission concludes that the recovery mechanism does not involve the intervention of a fund managed or designated by the state, or of any state resources. As was the case in *PreussenElektra*, no state resources are involved.

However, it may be the case that the system operator which bears a purchase obligation defined as a public service obligation (PSO) is publicly owned.<sup>698</sup> In such situation, it might be necessary to discuss the level of control of the state over the undertakings, as pointed out above.

Finally must be recalled the interpretation given by the Court as regards the application of state aid rules to financial compensation for the execution of a PSO. The Court has defined, in the landmark *Altmark* judgment, four cumulative criteria that must be complied with for the compensation to escape the classification as state aid: (1) the company has actually to be responsible for the implementation of such obligations, which have to be defined clearly; (2) the parameters for the calculation of the costs have to be established beforehand in an objective and transparent way; (3) the compensation can under no circumstances exceed what is necessary to cover the costs incurred; (4) if the selection of the undertaking to carry out the obligation is not done by a public tendering procedure, the

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<sup>694</sup> State aid N 254/06 – Belgium ‘Panneaux Photovoltaïques’, C(2006) 4954, 24.10.2006, point 5.

<sup>695</sup> State aid N 254/06 – Belgium ‘Panneaux Photovoltaïques’, C(2006) 4954, 24.10.2006, point 13.

<sup>696</sup> State aid N 14/2002 of 02.08.2002, OJ C 309, 12.12.2002, p. 14 - Federal scheme to promote renewable sources of energy, C(2002) 2904.

<sup>697</sup> Now codified by Commission Directive 2006/111/EC of 16 November 2006 on the transparency of financial relations between Member States and public undertakings as well as on financial transparency within certain undertakings

<sup>698</sup> On the justification for defining the purchase obligation as a public service obligation, see section 8.3.2.2.

compensation level has to be determined compared to the costs that a well managed and adequately resourced company would have to bear.<sup>699</sup>

#### **7.2.5.4 The lack of involvement of state resources at the stage of issuance of green certificates**

As demonstrated above, the definition of a purchase obligation does not in itself involve the transfer of state resource. The question raised in this paragraph is whether the issuance of the green certificate could involve such a transfer of state resources. To answer this question it is necessary to examine the issuing body and the issuance method for green certificates.

##### **The nature of the issuing body for green certificates**

The resources can originate from any form of public body or organ, at all levels of the state, including national, regional or local authorities, public banks or foundations, and qualify as ‘state’ resources. However, as the role of the these bodies or authorised authorities is limited to producing a proof of the renewable origin of the electricity generated, and based on the Nox case law, it cannot not be deemed to involve state resources, even if the body or authority in question is publicly owned or under state control. There is in addition no transfer of resources at all along the operation of issuance of the certificates. There is consequently no need to explore the issue further.

##### **The issuance of green certificates**

Green certificates are issued for free to RES-E generators, based on their ability to prove that they comply with the requirements of the scheme (e.g., licensed installations, source of renewable energy covered by the scheme).

A question arises from the fact that green certificates, although they are issued for free, derive a financial value when they are sold on the green certificates market. The reasoning of the Commission is that the issuance gives the possibility – but no absolute (price) certainty - to RES-E generators to trade certificates for money but does not at any moment involve state resources. The financing remains private.

This is the conclusion reached by the Commission in state aid cases N 550/2000 and N 415/A/2001 (regional schemes in Belgium), where it concluded that no state resources were involved by the issuing operation. In particular in state aid case N 550/2000 (Flemish green certificates), the Commission was of the opinion that the state, by the free allocation of green certificate to eligible RES-E facilities, was offering intangible assets based on their ability to prove that they are eligible facilities generating eligible green electricity. RES-E generators must prove that they fulfil these requirements to get the certificates (with for example GOs). However, issuance in itself does not constitute state aids because the fact that the state provides the certificates for free does not equate with acceptance of a

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<sup>699</sup> Case C-280/00, *Altmark Trans GmbH and Regierungspräsidium Magdeburg v Nahverkehrsgesellschaft Altmark GmbH* (Altmark) [2003] ECR I-7747, paras. 88-94.

lack of income.<sup>700</sup> Similarly, in State aid case N 504/2000 concerning the UK Renewables Obligation, the Commission estimates that:

*'They [the producers of green electricity] can sell these certificates to the suppliers on the (future) green certificate market, hence the State offers them intangible assets. However, the State does not seem to accept foregone revenues by offering the green certificates for free. The State only provides official proof that the green electricity is actually produced. Hence, with regard to the provision of green certificates by the State to producers no State resources in the meaning of Article 87(1) of the EC Treaty are at stake.'*<sup>701</sup>

The same wording appears in the Commission's decision in state aid N 789/2002 related to the Swedish electricity certificates scheme, with the same conclusion.<sup>702</sup>

A core difference between green certificates and emission allowances resides in the allocation procedure, although in both cases the state confers a financial value to the certificates by allowing trade. Under a tradable green certificate scheme, certificates are issued by the public authorities for free as a proof of RES-E generation. Under an emission trading scheme, public authorities provide for free an intangible asset that could have been purchased on the market or auctioned. Here lies an important difference in relation to the operations of grand-fathering or auctioning under the EU ETS.<sup>703</sup> By contrast, under TGCs scheme, the state does not foregone revenues.

#### **7.2.5.5 When public authorities set a minimum or fixed price for TGCs (price guarantee)**

The price of green certificates is normally fixed by the market, based on the confrontation of supply and demand. Certain national authorities found it necessary to provide an additional certainty to some RES-E producers by defining a minimum price for TGCs, and in doing so introducing an element of price guarantee. The necessity to fix a minimum price or a fixed price for certain technologies corresponds to the same line of thinking as

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<sup>700</sup> State aid case N 550/2000 – Belgium/Flanders – Green certificates in the electricity sector, SG (2001) D/290545, JO C 330 of 24.11.2001, p. 3. In the text:

*'L'Etat leur offre donc des biens incorporels. On ne peut cependant considérer qu'il accepte un manque à gagner en procurant les certificats verts gratuitement. Il ne fournit qu'une preuve officielle attestant que l'électricité verte a effectivement été produite. En conséquence, la fourniture de certificats verts par l'Etat aux producteurs ne met pas en jeu des ressources d'Etat au sens de l'article 87, paragraphe 1, du traité CE.'*

<sup>701</sup> State aid case N 504/2000 of 28.11.2001 – Renewables Obligation and Capital Grants for Renewable Technologies, pp. 11-12, published in OJ 2002 C30, p. 15. Emphasis added.

<sup>702</sup> State aid case N 789/2002 of 05.02.2003 – Sweden, *Elcertifikatsystemet*, C(2003)382fin, point 3.1.1.

<sup>703</sup> On the presence of state aids due to foregone revenues for the state, see case C-387/92, *Banco Exterior de España* [1994] I-877, para. 14. For a recent interpretation of the criteria of involvement of state resources in the case of emissions trading, see Opinion Advocate General Mengozzi delivered on 22.12.2010 in Case C-279/08 P *Commission v The Netherlands*, point 87, which is the appeal case of the NOx case referred to above.

For a discussion of the presence of state resources in emissions trading schemes in the legal literature, see: J. de Sepibus, *The European emission trading scheme put to the test of state aid rules*, Swiss National Centre of Competence in Research (NCCR) Trade Regulation, Working Paper Nr. 2007/34, September 2007, pp. 8-10; R. A. Pfomm, *Emission Trading and State Aid Law (Emissionsrecht und Beihilfenrecht)* (Duncker & Humblot, 2010); A. Johnston, 'Free allocation of allowances under the EU emissions trading scheme: legal issues,' *Climate Policy* 6 (2006), pp. 115-136 ; M. Lorenz, 'Emission Trading – the State Aid Dimension,' *European State Aid Law Quarterly* 3/2004, pp. 400-401.

the UK banding mechanism, granting higher support to the more costly and less developed renewable technologies. This also intends to provide confidence in investors, which may find that financing RES-E projects under a TGCs scheme bears a higher degree of risk than under a FITs scheme.<sup>704</sup>

In state aid case N 254/2006 – Belgium ‘Panneaux Photovoltaïques’,<sup>705</sup> the European Commission had to assess a system of purchase obligation of green certificates and price guarantee under the GCs Flemish scheme designed to promote energy production in photovoltaic installations. The minimum guarantee price fixed under the Flemish scheme was €450 for a ‘PV’ green certificate.<sup>706</sup> In its decision, the Commission raised the issue of the minimum price for PV green certificates as a new element of the scheme but did not treat it as problematic. It did not even discuss it.

In state aid case N 14/2002 concerning the Belgian federal scheme to promote renewable sources of energy,<sup>707</sup> the European Commission reviewed the purchase obligation of green certificates set for the federal electricity grid operator ESO, but not the associated system of price guarantee system. A difference between this case and state aid case N 254/2006 is that in this case the price was fixed and not minimum.<sup>708</sup> At the time of the Commission’s investigation, the fixed prices for federal green certificates were: €90/MWh for offshore wind power; €50/MWh for onshore wind power; €50/MWh for hydropower; €150/MWh for solar power; €20/MWh electricity generated from other renewable energy sources. The Commission took note of the fixed price element of the scheme, but did not treat it further in its decision.

Before and after these two cases, the Commission did address the question of minimum or fixed TGCs price in more detail. In state aid case N 789/2002 on the Swedish elcertificates scheme, the Commission concluded on the presence of state resources due to the combined effects of a guaranteed minimum price with the presence of a fund administrated by the state. Meanwhile, as the conditions for exemption set in the Environmental State Aid Guidelines were met, the Commission concluded on the compatibility of the scheme with the Treaty’s provisions on state aids.<sup>709</sup>

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<sup>704</sup> It can be noted there that another security for RES-E generators is provided by the level of the compliance fee. The compliance fee should represent a maximum price for the certificates in the sense that if the certificate’s price exceeds the compliance fee, obligated parties will prefer to pay the fee than buy expensive certificates on the market.

<sup>705</sup> State aid N 254/06 – Belgium ‘Panneaux Photovoltaïques’, C(2006) 4954, 24.10.2006.

<sup>706</sup> Article 25ter.§1, decree concerning the organisation of the electricity market of 17 June 2000 and the decree of 7 May 2005.

<sup>707</sup> State aid N 14/2002 - Federal scheme to promote renewable sources of energy, C(2002) 2904. Decision of 02.08.2002, OJ C 309, 12.12.2002, p. 14.

<sup>708</sup> Slightly amended since the time of the Commission’s decision, the federal legislation provides now for the following fixed minimum prices for the TGCs according to technology type: offshore wind, 107 €/MWh - 90 €/MWh, whether the electricity is generated for the 216 first MW of installed capacity for the concessionary plant or additional MW generated ; onshore wind, 50 €/MWh; hydropower, 50 €/MWh; solar energy, 150 €/MWh; other renewable energy sources, including biomass, 20 €/MWh. Legal basis : Article 14 §1, *Arrêté royal du 16 juillet 2002 relatif à l’établissement de mécanismes visant la promotion de l’électricité produite à partir des sources d’énergie renouvelables*, *Moniteur Belge*, 23.08.2003, as amended, and as for 2011.

<sup>709</sup> State aid case N 789/2002 of 05.02.2003 – Sweden, *Elcertifikatsystemet*, C(2003)382fin.

The issue of minimum (and maximum) price for TGCs is discussed in a slightly more detailed manner in the Commission's decision in state aid case SA.33134 2011/N concerning the Romanian green certificates scheme.<sup>710</sup> In this decision, the Commission starts by saying that the role of the state is limited to defining the minimum (and maximum) price limits for the certificates, and does not extend to any market intervention (e.g., purchase of the surplus of certificates on the market).<sup>711</sup> Surprisingly, the Commission affirms in the same time that, by defining a minimum price for the certificates, the latter cannot be considered solely as a proof of renewable electricity generation. The Commission is there of the opinion that: '*Since Romania has established a minimum price at which certificates can be traded, the certificates have a minimum value ab initio.*'<sup>712</sup> This statement, made in a footnote of the decision, is in contradiction with the practice of the Commission so far. The arguments developed in the text of the decision face also some shortcomings when compared to the criteria for involvement of state resources. To support its arguments on the possible involvement of state resource through the definition of a minimum price, the Commission sets in the decision that:

*'49. ... the State provides free green certificates to green electricity producers. [...] They can sell these certificates to the electricity suppliers on the green certificates market. The State thus offers them intangible assets. The State not only provides a formal proof demonstrating that green electricity was actually produced, but configures such certificates as tradable assets and vests them with a pre-defined value (minimum price).*

[...]

*'54. Irrespective of whether the State could have sold or auctioned these certificates and thereby has foregone revenue, the fact remains that the State provides certain undertakings with an asset, which has a monetary value, and that asset originates with the State which has created it. This is further demonstrated by the fact that the undertakings not having purchased the necessary number of certificates on the market are subject to a penalty – hence, the certificates created by the State serve as an alternative to payment of a fine which would constitute State resources.'*

The reasoning developed in these paragraphs by the Commission defers from its previous decisions and the Court case law. It would result in saying that, by defining a minimum price, the state confers *de facto* a value to the certificates, and, because the asset is created by the state, it involves a transfer of state resources. The argument is hardly acceptable as such and needs to be refined. Indeed, it is difficult to argue that it is the definition of a minimum price for the certificates that ensures them a source of revenue and that these revenues originate from the state (on the latter point, see previous paragraph on the conversion of private resources). The fixed minimum price certainly brings a higher element of certainty in the support, but the certificates only acquire a financial value when they are sold. The financial support would only be certain if the scheme includes a purchase obligation through, for example, a PSO on TSOs/DSOs. As regards the presence of state resources, reference must be made to the *Van Tiggele* judgment, which concerns the fixing of minimum retail price of gin by the government of The Netherlands. In that case, the Court concluded that the measure did not constitute state aid because state resources were not involved.<sup>713</sup> The *Van Tiggele* case law entails that minimum TGCs

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<sup>710</sup> State aid case SA.33134 2011/N – Romania, Green certificates for promoting electricity from renewable sources, C (2011) 4938, decision adopted on 13.07.2011.

<sup>711</sup> *Ibid.*, point 50.

<sup>712</sup> *Ibid.*, footnote 27.

<sup>713</sup> Case 82/77 *Openbaar Ministerie v Van Tiggele* (Van Tiggele) [1978] ECR 25, paras. 24-25.

price fixing does not constitute a state aid in the sense of Article 107.1 TFEU as long as state resources are not involved, even if it represents an economic advantage for the RES-E producers. It is here advanced that the answer to the question of the presence of state resources would have been different if the fixation of a minimum price for TGCs above the market value was combined with a purchase obligation defined on public undertakings.<sup>714</sup>

Even more surprising is the manner the Commission concludes on the qualification of the Romanian scheme as state aid:

*'55. In any event, in the present case it is not necessary to take a definitive position as to the existence of aid within the meaning of [Article] 107(1) [TFEU], because even if State aid is involved, the measure is compatible with the internal market, as assessed below ...'*

In practice, two selling price modalities for green certificates can coexist under the same scheme: at fixed price when the grid operator bears a purchase obligation; and at market price for obligated parties, eventually combined with a minimum price. This is the case in the Bruxelles-Capitale region in Belgium, where RES-E generators have the choice of either selling their green certificates at a fixed price to Elia, the system operator, or selling their green certificates on the market at market price. The fixation of a minimum price might be subject to regular review in order to adapt to the commercial evolution of the green electricity market and the RES-E generation capacity situation.

#### **7.2.5.6 When the scheme includes a redistribution fund**

The question of the transfer of state resources within TGCs schemes reappears when the compliance fees are gathered in a fund administrated by the state or a public authority that redistributes the collected revenues directly to renewable energy projects. This mechanism is hereafter termed 'redistribution fund.' This is a quite common feature in green certificates schemes both in Europe and abroad. The European Commission has examined a series of cases involving this type of fund. The review of the national TGCs schemes reveals that the inclusion of a redistribution fund as part of the scheme is a fundamental element for determining the involvement of state resources, and consequently the qualification of the whole scheme as state aid, the other criteria being met. The analysis will start with a short presentation of the functioning principles back a redistribution fund, taken the examples of Romania and the United Kingdom, before looking at the criteria for deciding on the involvement of state resources.

The latest state aid case examined by the Commission (decision of 13 July 2011)<sup>715</sup> that involves a redistribution fund concerns the Romanian TGCs scheme. Romania has been operating a TGCs scheme since 2004, but has amended its legislation (now Law 220/2008) at several occasions. These amendments required notification to the Commission. A central criterion for assessing the transfer of state resource and the imputability of the measure that should have been discussed in the Commission's decision was the existence of an Environmental Fund associated with the TGCs scheme. Under the Romanian scheme, the penalties for non-compliance with the quota obligation are collected by the

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<sup>714</sup> See above section 7.2.5.2 (f).

<sup>715</sup> State aid case SA.33134 2011/N – Romania, Green certificates for promoting electricity from renewable sources, C (2011) 4938, decision adopted on 13.07.2011.

TSO, and gathered into the Environmental Fund. The Fund is managed by the ‘Administration of the Environmental Fund,’ which is a public body attached to the Ministry of Environment and Forest. The revenues from the Environmental Fund are redistributed to RES-E generation facilities with an installed generation capacity not exceeding 100 kW. As noted in the previous section, this decision is on several points inconsistent with the previous practice of the Commission. The central question of the involvement of state resources via the use of a redistribution fund, which is determinant for the qualification of the scheme as state aid, is not discussed in the decision. Based on the criteria defined below, there is little doubt that this particular element of the scheme would involve the transfer of state resources, and consequently the qualification of the scheme as state aid for the purpose of Article 107.1 TFEU.

One of the most prominent examples of redistribution fund examined by the Commission is found in the United Kingdom. Here, the Renewables Obligation includes a so-called buy-out fund collecting the buy-out payments when suppliers cannot purchase sufficient ROCs. The revenues collected through the buy-out fund are then returned to those firms who submitted ROCs to Ofgem in accordance with their obligations, in proportion of the number of ROCs submitted. This is another incentive to generate or buy ROCs instead of paying the compliance fee, that is, the buy-out price. The UK also includes a ‘mutualisation ceiling’ in the situation where not enough buy-out payments were submitted.<sup>716</sup> A final element is integrated in the UK buy-out fund system in the form of a reinvesting mechanism established under a private law contract between suppliers getting support from the buy-out fund and the RES-E generators. By this arrangement, suppliers commit themselves to pass along a certain percentage (*e.g.*, 80 per cent) of the buy-out receipts to the RES-E generators. This represents an additional source of financial support for the generators. This also represents an additional incentive to obligated parties to supply RES-E themselves instead of paying the buy-out price, since the funds will be otherwise redistributed to their competitors. This reinvesting mechanism remains a private contractual arrangement and is not secured by law.

In the United States, the state of Massachusetts has established a similar mechanism termed ‘Alternative Compliance Payment’ where the revenues of the compliance fees under the RECs scheme are used in renewable energy generation capacity investment.<sup>717</sup>

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<sup>716</sup> When there is a shortfall in the buy-out fund, the system of mutualisation applies: all suppliers that met their obligation are required to make a payment to make good the shortfall. The ceiling for mutualisation is determined by the public authorities (*i.e.*, the Department of Energy and Climate Change in England and Wales; the Scottish Executive in Scotland). As reported by Ofgem, the level of mutualisation is, in 2009-10, £9.7m in England & Wales and £970,000 in Scotland; and in 2010-2011, £10.4m in England and Wales and £1.04m in Scotland. Source: Ofgem, *The Renewables Obligation Buy-out Price and Mutualisation Ceiling 2010-2011*, Information Note, 04.02.2011 <<http://www.ofgem.gov.uk/Media/PressRel/Documents1/RO%20Buy-Out%20price%202010%2011%20FINAL%20FINAL.pdf>>

<sup>717</sup> In the state of Massachusetts, when retail suppliers cannot render sufficient RECs to comply with RPS-requirements, they can proceed to an ‘Alternative Compliance Payment’ ACP, which is an alternative compliance instrument. By paying the ACP, the retail supplier is discharged from its obligation (in whole or in part) by the issuance of Alternative Compliance Credits. The ACP is managed by the Massachusetts Technology Corporation. Then, the state legislation provides for the redistribution of the funds collected through the ACP payments for the benefit of new renewable energy generation capacity investment. See C. Banet, ‘Terms and Conditions of Renewable Energy Certificates Trading in the United States,’ in *EU Energy Law and Policy Issues*, ELRF Collection, 2<sup>nd</sup> edition (Euroconfidentiel, 2010), p. 358.

Even if the redistribution fund is added at the end of the TGCs scheme, it is nonetheless an integral part of it and must be included in the notification to the European Commission.

The first question to be raised in relation to the redistribution fund is the nature of the aid it intends to grant. Taken individually, the money received from the redistribution fund can be qualified as a *de minimis* aid. This is indeed the argument raised by the Romanian authorities in their notification in state aid case SA.33134 2011/N.<sup>718</sup> The *de minimis* Regulation defines threshold values that would certainly not be reached by the direct grants from the redistribution fund. However, it should be remembered that the scheme should be taken in its entirety, and not only individual aids. This is at the advantage of the recipient since individual aids granted under an aid scheme do not require individual notification.<sup>719</sup>

The second question to be raised is whether the sums granted through the redistribution fund involve any transfer of state resources, and may entail the qualification of the scheme as state aid in the sense of Article 107.1 TFEU, considering that the other criteria are met. The Commission has assessed in detail the compatibility of national redistribution funds in state aid case N 504/2000 concerning the Renewables Obligation and Capital Grants for Renewable Technologies in the United Kingdom. The mechanism of the UK buy-out fund has been described above. It is important to note here that the compliance fee, buy-out payment, was collected by the fund and ‘recycled to suppliers.’<sup>720</sup> The question raised by the Commission in its assessment was ‘*whether the buyout price amount is to be regarded as state resources, and thus state aid.*’ The question, however, is incorrectly formulated: it is not the compliance fee that is a state aid in itself, but rather the grant redistributed from the fund and which is based on the collection of the compliance fees. In other words, the buy-out payment which is originally based on private resources can be deemed to be ‘recycled’ into a public resource. The reasoning of the Commission nevertheless answers the question of the involvement of state resources and applies the criteria established by the Court in similar cases.

The Court has defined in its case law<sup>721</sup> three cumulative criteria in order to assess whether state resources are involved when money is transferred by a fund: first, the fund must be established by the state; second, the fund must be fed by contributions imposed by the state; and third, the fund must be used to favour specific enterprises. While the case law establishing these criteria was relatively early, the European Commission is still referring to it in its decisions.<sup>722</sup> By using these criteria, the Commission also refers to

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<sup>718</sup> In their notification, the Romanian authorities insisted on the fact that the revenues redistributed comply with the *de minimis* rules of Commission Regulation (EC) No 1998/2006.

<sup>719</sup> See section 7.1.5 on notification rules.

<sup>720</sup> State aid case N 504/2000 of 28.11.2001 – Renewables Obligation and Capital Grants for Renewable Technologies, p. 2, published in OJ 2002 C30, p. 15.

<sup>721</sup> See in particular early case law in: case 173/73, *Italy v. Commission* [1974] ECR 709, para. 16, and case 78/76 *Steinike & Weinlig v Germany*, ECR [1977] 595, paras. 21-22.

<sup>722</sup> See *e.g.*, Decision of the European Commission in State aid NN 162/B/2003 and State aid N 317/B/2006 – Austria Support of CHP under the Austrian Green Electricity Act (support-tariff), C (2006) 2964, 04.07.2006, point 35. The standard formulation adopted by the Commission is that the three criteria established by the Court for qualifying a levy of for example fiscal nature as being state aid are: (i) ‘*the levy must be imposed by the State*’; (ii) ‘*Its proceed must be poured into a body designated by the State*’.



decisions delivered before the PreussenElektra case (e.g., *Steinike & Weinlig* judgement) but insisted that ‘*this jurisprudence was not altered by the PreussenElektra ruling*’ and that the ‘*Commission’s reasoning in this respect is that the levying mechanism turns the resources into State resources before they reach the beneficiary*’).<sup>723</sup>

Concerning the first criterion – the fund must be established by the state –, the Commission estimated in state aid case N 504/2000 concerning the UK Renewables Obligation that the fund was set up by the state. In addition, the fund was managed by a state body, the energy regulator Ofgem. This criterion was thereby met.

Concerning the second criteria - the fund must be fed by contributions imposed by the state - , the Commission observed that ‘*at least in the first years of the obligation, supply of renewables will fall short of the demand created by the Obligation. Therefore, some suppliers will have to pay the buyout price and will not have the possibility to choose between the options of the Obligation.*’ In addition, the level of the buyout price is fixed by the state body.

Concerning the third criterion – the fund must be used to favour specific enterprises –, the Commission concluded that the measure was selective and favoured certain undertakings since the contributors to the funds, the electricity suppliers, and the ultimate beneficiaries, RES-E generators, do not pertain to the same group of undertakings. The redistribution of fund’s revenues is combined, in the case in question, with a private law arrangement between the parties that suppliers – who are first entitled to the grants from the redistribution fund – will pass on about 80 per cent of this money to RES-E generators. For these reasons, the Commission concluded that: ‘*The distribution is thus not a proportional partial compensation for the obligation, but may favour some enterprises within the obliged group. The entire mechanism also favours producers of ‘green electricity’ by raising demand for their product, compared to other electricity producers.*’ On the effect on competition and trade, the Commission concludes that ‘*Green electricity producers are a specific group of electricity producers, who are active in trade between Member States. The position of these green electricity producers will be strengthened by this scheme, which may lead to a change in the market conditions for their competitors. This strengthening must be regarded as affecting that trade.*’

Based on these three criteria, the Commission decided in state aid N 504/2000 that the system of redistribution through the UK buy-out fund involved state resources, and that all the criteria of prohibited state aid in the sense of Article 107.1 TFEU were also met. The same reasoning will apply to other TGCs scheme involving a redistribution fund. The extent to which the prohibited state aid can nevertheless be subject to exemption is examined in next section.

In conclusion, if compliance fees collected by the public authorities in a fund in response to a legal obligation are redistributed by the state or by an organism administered by the state, the latter financial support will be qualified as state aid because of the involvement of state resources. The sums are under the control of the state and become state property.

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(*this body does not have to be State owned, not do the proceeds have to become the property of the State*’); (iii) ‘*The proceeds must be used to give an advantage to certain undertaking.*’

<sup>723</sup> See e.g., Decision of the European Commission in State aid NN 162/B/2003 and State aid N 317/B/2006 – Austria Support of CHP under the Austrian Green Electricity Act (support-tariff), C (2006) 2964, 04.07.2006, point 36.

Besides these three criteria, the Court has several times discussed the involvement of state resources in funds based on contributions from the private sector. Such an approach has been confirmed by the General Court in Case T-25/07 of 11 February 2009, *Iride SpA and Iride Energia SpA v Commission*,<sup>724</sup> which clarifies the distinction with the mechanism in question in the *PreussenElektra* judgment. In *Iride SpA*, the Equalisation Fund, which was a public body, was involved in the management of the revenues from the application of a fixed component (so-called A.6) of the electricity tariff. The Fund collected and managed these revenues in a special account before redistributing them to recipients. The Court concluded on the qualification of the resulting revenues as state aids ‘*not only because they are under constant State control, but also because they are State property.*’<sup>725</sup> It cites well established case law already referred to above under the discussion of involvement of state resources.<sup>726</sup>

## **7.3 When TGCs schemes involve elements of state aids – possible exemptions**

### **7.3.1 Could a TGCs scheme representing a state aid be compatible for reasons of environmental protection**

All the TGCs schemes notified so far to the European Commission have been accepted either on the grounds that they did not involve state aids or that they were compatible with the internal market based on the objective of protection of the environment. The present Section looks at the latter situation. It looks at the conditions under which a TGCs scheme deemed to involve state aids can nevertheless be compatible and derogate from the application of the general prohibition defined in Article 107.1 TFEU.

While the Treaty enounces a general prohibition, some state aids might be justified for the attainment of certain objectives such as environmental protection. The first legal basis for

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<sup>724</sup> The case has been appealed but the Court dismissed the appeal by Order of 21 January 2010, JO C134 of 22.05.2010, p. 14.

<sup>725</sup> T 25/07, *Iride SpA and Iride Energia SpA v Commission of the European Communities*, ECR [2009] II-00245, para. 27.

<sup>726</sup> T 25/07, *Iride SpA and Iride Energia SpA v Commission of the European Communities*, ECR [2009] II-00245, para. 25:

*‘as regards the concept of State resources, it should be noted that it follows from the case-law of the Court of Justice that Article 87(1) EC covers all the financial means by which the public authorities may actually support undertakings, irrespective of whether or not those means are permanent assets of the public sector. Consequently, even though the sums involved in the measure at issue are not held permanently by the public authorities, the fact that they remain constantly under public control, and therefore available to the competent national authorities, is sufficient for them to be categorised as State resources (see, to that effect, Case C-83/98 P France v Ladbroke Racing and Commission [2000] ECR I-3271, para. 50, and Case C-482/99 France v Commission [2002] ECR I-4397, para. 37).’*

In particular, in the *Ladbroke Racing* case, the Commission made clear that the sums are stake ‘*were continuously subject to the State’s control and therefore at the disposal of the competent national authorities, which was sufficient for them to be characterised as State resources within the meaning of Article 92(1).*’ See Case C-83/98 P *France v Ladbroke Racing and Commission* [2000] ECR I-3271, confirming the judgment of the Court of First Instance in Case T-67/94 *Ladbroke Racing v Commission* [1998] ECR II-1, paras. 45-51.

such exemption is to be found in Article 107.3 TFEU itself (ex-Article 87.3 ECT), which reads as follows:

3. The following may be considered to be compatible with the internal market:

(b) aid to promote the execution of an important project of common European interest or to remedy a serious disturbance in the economy of a Member State;

(c) aid to facilitate the development of certain economic activities or of certain economic areas, where such aid does not adversely affect trading conditions to an extent contrary to the common interest;

(e) such other categories of aid as may be specified by decision of the Council on a proposal from the Commission.

Contrary to the legislative process based on cooperation between the Commission, the Member States and the European Parliament, the application of exemptions to the general prohibition on state aids remains the competence of the Commission.<sup>727</sup> The European Commission can base its decision on one of the provisions reproduced above in order to grant exemption to state aids in favour of renewable energy. Paragraphs (b), (c) and (e) could apply to state aids for environmental protection. Paragraphs (c) and (e) are of particular relevance for TGCs schemes.

According to Section 3.1 of the Environmental Guidelines (Compatibility of aid under Article 87.3 c) of the EC Treaty):

*'State aid for environmental protection is compatible with the common market within the meaning of Article 87(3)(c) of the EC Treaty if, on the basis of the balancing test, it leads to increased environmental protection activities without adversely affecting trading conditions to an extent contrary to the common interest.'*<sup>728</sup>

This means, first, that according to the same Environmental Guidelines, operating aid in favour of renewable energy sources, such as green certificates, 'may be found to be compatible' under Article 107.3, c) TFEU. The latter will consequently be the correct legal basis for exempting green certificates schemes representing state aids. Second, the starting point for analysing the compatibility of a green certificates scheme qualified as state aid with the internal market will be the application of the balancing test defined in point 1.3 of the Environmental Guidelines.

The Environmental Guidelines contain precise rules applicable to aid to renewable energy and their compatibility with the Treaty. First, the Environmental Guidelines provide in general terms that:

*'Environmental investment and operating aid for the promotion of energy from renewable sources will be considered compatible with the common market within the meaning of Article 87(3)(c) of the EC Treaty, if the conditions in points 102 to 111 are fulfilled. State aid may be justified if there is no mandatory Community standard concerning the share of energy from renewable sources for individual undertakings. [...]'*<sup>729</sup>

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<sup>727</sup> A Member State may also introduce an application for exemption before the Council pursuant to Article 108.2, which has rarely happened.

<sup>728</sup> Notice from European Union Institutions and Bodies, Community Guidelines on State Aid for Environmental Protection, 2008/C 82/01, OJ C 82 of 01.04.2008, p. 1, point (71). Emphasis added.

<sup>729</sup> Notice from European Union Institutions and Bodies, Community Guidelines on State Aid for Environmental Protection, 2008/C 82/01, OJ C 82 of 01.04.2008, p. 1, point (101).

Second, the Environmental Guidelines stipulate more precisely, on operating aids for renewable energy sources, that:

*‘Operating aid for the production of renewable energy may be justified in order to cover the difference between the cost of producing energy from renewable energy sources and the market price of the form of energy concerned. That applies to the production of renewable energy for the purposes of subsequently selling it on the market as well as for the purposes of the undertaking’s own consumption.’<sup>730</sup>*

It must be noted that the Guidelines open for the full coverage of the difference of production costs between renewable and conventional energy sources.

The Environmental Guidelines then define three options for the granting of state aids for renewable energy sources. The second option refers directly to market-based instruments and green certificates.

*‘(110) Option 2*

- a) Member States may also grant support for renewable energy sources by using market mechanisms such as green certificates or tenders. These market mechanisms allow all renewable energy producers to benefit indirectly from guaranteed demand for their energy, at a price above the market price for conventional power. The price of these green certificates is not fixed in advance but depends on supply and demand.*
- b) Where the market mechanisms constitute State aid, they may be authorised by the Commission if Member States can show that support is essential to ensure the viability of the renewable energy sources concerned, does not in the aggregate result in overcompensation and does not dissuade renewable energy producers from becoming more competitive. The Commission will authorise such aid systems for a period of ten years.’<sup>731</sup>*

The latter paragraph 110.b) enounces four cumulative criteria for declaring a TGCs scheme representing a state aid compatible with the internal market. The Member State must show that the support granted:

- (i) is essential to ensure the viability of the renewable energy sources concerned;
- (ii) does not in the aggregate result in overcompensation for renewable energy;
- (iii) does not dissuade renewable energy producers from becoming more competitive;
- (iv) is limited to a duration of ten years.

To a very few exceptions, the wording of this paragraph is identical to the one in the 2001 Environmental Guidelines.<sup>732</sup> Several cases of green certificates schemes have been analysed under the 2001 Environmental Guidelines by the European Commission where state resources were involved. These cases must be referred to here as an example of the manner the Commission applies these criteria. First, in state aid Case N 504/2000 concerning the Renewables Obligation in the UK,<sup>733</sup> the Commission had to assess the

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<sup>730</sup> Notice from European Union Institutions and Bodies, Community Guidelines on State Aid for Environmental Protection, 2008/C 82/01, OJ C 82 of 01.04.2008, p. 1, point (107).

<sup>731</sup> Notice from European Union Institutions and Bodies, Community Guidelines on State Aid for Environmental Protection, 2008/C 82/01, OJ C 82 of 01.04.2008, p. 1, point (110).

<sup>732</sup> Community guidelines on State aid for environmental protection (2001/C 37/03, OJ C 37 of 03.02.2001, p. 3, points (61) and (62).

<sup>733</sup> State aid case N 504/2000 of 28.11.2001 – Renewables Obligation and Capital Grants for Renewable Technologies, pp. 13-15, published in OJ 2002 C30, p. 15.

conformity of the certificates system used to comply with the Renewables Obligation with the 2001 Environmental Guidelines. As detailed in Section 7.2.5.6, the contentious element of the scheme was the ‘buyout fund’ that the Commission qualified as being a state aid. Second, in state aid Case N 550/2000, the Commission had to assess the compatibility with the internal market of the Flemish green certificates scheme. As the functioning rules for the redistribution fund were not yet defined at that time, the assessment of the Commission did not include a review of the fund itself subject to latter notification. In both cases, the Commission assessed whether the scheme could be deemed compatible with the internal market based on the application of the four criteria defined in the Environmental Guidelines. So far, these decisions are the only ones containing a detailed application of these criteria.

Concerning the first criteria, the Commission concluded that the UK authorities demonstrated successfully that green electricity could not yet compete with fossil-derived electricity, and thus needed additional support. The argument was based on a market analysis and comparison of contracted prices for renewable and wholesale prices for fossil-derived electricity. The Commission accepted the argument of the United Kingdom and declared that the support was ‘*therefore required for renewable energy sources to be viable.*’ In the Flemish case, the authorities also submitted data describing the difference in electricity production costs between renewable and conventional sources in Belgium. The data submitted was convincing enough for the Commission to consider that the support granted by the TGCs scheme was ‘essential’ for ensuring the viability of the renewable energy concerned. The criteria should be consequently met by the submission of sufficiently founded data on the state of the market demonstrating the remaining financing gap with other competing energy sources at national level.

Concerning the second criteria of ‘no overcompensation,’ several arguments can be put forward. The level of the compliance fee is an important safeguard against overpayments to RES-E generators. In theory, the price of the green certificate should never exceed that of the compliance fee. However, this may happen at the initial phase of the scheme. This is why the Commission expressed doubts regarding the arguments put forward by the Flemish and the UK authorities. During the first years of functioning of the TGCs scheme, there will be a shortage on the market resulting in higher prices for certificates. As it is possible to bank the certificates during a couple of years, some actors may speculate on the future development of the market, anticipating that the compliance fee will progressively increase. An expensive certificate during the first year is likely to become a cheap certificate during subsequent years. This results in a risk of overcompensation in favour of RES-E generators. Nevertheless, the Commission admits that this risk is an integral part of the system and will be corrected by the periodical review of the scheme and of the level of the compliance fee in time. ‘Globally’, the scheme should not lead to overcompensation in favour of RES-E generators by this means.<sup>734</sup>

In the case of the UK, the Commission noted another source of overcompensation. In addition to the sale of the certificate, RES-E generators can get additional support through the recycling mechanism established as part of the buy-out fund. The buy-out payments returned to suppliers by the buy-out fund can be partly distributed over the RES-E generators. As noticed by the Commission: ‘*In this situation, overcompensation to*

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<sup>734</sup> State aid case N 550/2000, Belgium-Certificats verts dans le secteur de l’électricité, SG(2001) D/290545, 25.07.2001, point 3.2.

electricity generators at the aggregate level cannot immediately be ruled out.<sup>735</sup> Indeed, the recycling of buy-out payments (passing on 80 percent of the pay-out receipts to RES-E generators)<sup>736</sup> will secure, according to the Commission, that the buy-out payments are reinvested into new generating capacity. The cumulative effect of the recycling mechanism cannot be excluded. Nevertheless, the Commission concluded that it ‘will lead in the medium term to stringer competition and decreasing prices, acting against overcompensation.’ Nevertheless, the Commission gives priority to the need to secure a level playing field between renewable and conventional energy sources in the long-term and the need for the Member States to reach their objectives in terms of RES-E consumption. The latter argument might become even stronger in the view of the Commission, under the mandatory targets defined by Directive 2009/28/EC, even if there is a risk of overcompensation in practice. In that case, it appears necessary for each individual TGCs scheme to secure a mechanism that will avoid overcompensation. In the UK case, the Commission concluded as follows:

*‘The Commission takes into account the need of the UK to build additional capacity for renewable energy in order to meet its targets. Overall it can be assumed that the design of the scheme itself will prevent overcompensation at the aggregate level, this being seen in a double sense. Firstly, the system will prevent overcompensation in the aggregate of the different producers. Secondly, while the system will overcompensate producers in the beginning, the market mechanism will prevent in the aggregate of the duration of the scheme overcompensation. The Commission notes the undertaking of the UK authorities to review the operation of the buyout recycling mechanism after 5 years and considers this undertaking to be an important element of its assessment.’<sup>737</sup>*

Concerning the third criteria of competitiveness, the Commission concluded in the UK case that the increase in RES-E generating capacity stimulated by the whole TGCs scheme will allow competition between RES-E and conventional electricity generators.<sup>738</sup> Similarly, in the Flemish case, the Commission noted that since there is not ‘globally’ a risk of overcompensation, RES-E generators will remain motivated to become competitive. It also bases its assessment on the forthcoming establishment of a wide and very competitive European market for green certificates<sup>739</sup> that will motivate RES-E generators to remain competitive. It is relatively difficult to assess how much support a renewable electricity project can receive before a risk of anti-competitiveness arises. This challenge is partially answered by the criteria of overcompensation defined above and the rules on accumulation of state aids detailed below in Section 7.4. However, the balance seems difficult to keep and the rule of law sometimes unclear. In its decision in the UK

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<sup>735</sup> State aid case N 504/2000 of 28.11.2001 – Renewables Obligation and Capital Grants for Renewable Technologies, pp. 13-15, published in OJ 2002 C30, p. 14.

<sup>736</sup> See description in Section 7.2.5.6.

<sup>737</sup> State aid case N 504/2000 of 28.11.2001 – Renewables Obligation and Capital Grants for Renewable Technologies, pp. 13-15, published in OJ 2002 C30, p. 15.

<sup>738</sup> *Ibid.*, p. 15, where it is stated that: ‘The mechanism as described should be itself be an incentive to increase capacity. Once sufficient capacity is available to meet the obligation, competition between generators should increase.’

<sup>739</sup> The perspective of a European green certificates market is explicitly mentioned in the decision as follows: ‘On prévoit le développement, dans quelques années, d’un marché européen des certificats verts, qui s’annonce comme un grand marché très concurrentiel.’ (point 3.3); ‘Un encadrement des certificats verts est en cours d’élaboration dans le cadre de la future directive sur la promotion de l’électricité produite à partir de sources d’énergie renouvelables sur le marché intérieur de l’électricité.’ (footnote 9). State aid case N 550/2000, Belgium-Certificats verts dans le secteur de l’électricité, SG(2001) D/290545, 25.07.2001.

case, the Commission itself raises two opposite arguments on competitiveness reflecting the policy paradox defined earlier in this thesis: *‘Competitiveness of green electricity generators should also be ensured as the UK authorities opted for the same treatment for all eligible sources of green electricity and thus did not create “niches” by a banded approach. A certain protection is however introduced for some more expensive green technologies, which are at the current stage of development not yet competitive.’*<sup>740</sup> In a later state aid case, the UK notified the introduction of a banding mechanism introducing elements of discrimination between the different renewable energy sources. The Commission validated the banding mechanism.

Concerning the fourth and last criteria of the duration of the scheme, the Commission insisted on the necessary limitation of the scheme to a preliminary period of ten years. Any prolongation of the scheme will require re-notification. The delimitation in time is a simple but crucial requirement for avoiding overcompensation in favour of the beneficiaries. It also allows for adapting the level of support taking into account the stage of development of the technologies and sectors in time. The Commission estimates here that ten years is an adequate period of time. It can be noted that, in practice, the national legislations provide for a slightly longer period of time, between 15 to 20 years. When Member States have notified TGCs schemes that would last more than ten years, the Commission has usually required that the scheme is re-notified in between.<sup>741</sup>

The application of the four criteria of point 110.b of the Environmental Guidelines has illustrated the policy paradox and the rule of law in, on the one hand, promoting renewable energy sources and, on the other hand, avoiding distortions of competition. The length of the TGCs is actually a critical issue for the investment environment of renewable energy projects. RES-E projects need to be guaranteed sufficient incomes in time, not only for evaluating how much they will get from the sale of TGCs, but also to enable them to secure other sources of financing such as financial institutions like banks or private investors that will assess risk when they endorse loans.

### **7.3.2 Additional comment on the risk of circumvention of the State aid rules**

The above analysis reveals that Member States can avoid the application of state aid rules if they carefully design their green certificates scheme. It also reveals that, while three of the four criteria defined in Article 107.1 TFEU are automatically met, the decisive question will be whether the scheme involves at one stage or another the transfer of state resources. If not, the scheme will be deemed to be compatible with the internal market without further assessment or need for notification.

Such a line of thinking may lead to a situation of circumvention of state aid rules. The risk of circumvention has several times been raised by parties before the Court, including in the *PreussenElektra* case. In that case, the argument was raised by the German jurisdiction, the European Commission, PreussenElektra, Schleswig AG and the Finnish

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<sup>740</sup> State aid case N 504/2000 of 28.11.2001 – Renewables Obligation and Capital Grants for Renewable Technologies, pp. 13-15, published in OJ 2002 C30, p. 15.

<sup>741</sup> See recent state aid case re-notified to Commission N 259/2010.

government.<sup>742</sup> In particular, the Commission tried to argue in different cases that ‘measures equivalent to aid’ contravene the principle of loyalty expressed in Article 4.3 TEU (ex-Article 10 ECT).

The Court rejected such an interpretation. It stated in the landmark case 290/83 *Commission v France* that the Treaty provisions on state aids ‘leave no scope for a parallel concept of “measures equivalent to aid” which are subject to different rules from those which apply to aid properly so-called.’<sup>743</sup> A similar conclusion was reached in the *PreussenElektra* judgement.<sup>744</sup> This clear case law from the Court is in line with the Court’s desire to restrict the concept of state aid to a narrow interpretation (see above, Section 7.2.5.1). Allowing for an extensive interpretation of Article 107.1 TFEU by including measures financed by private resources would put an additional burden on national systems and relationships between private undertakings, the latter not being the addressees of Article 107’s TFEU provisions.

In other words, the risk of circumvention of state aids rules cannot be denied, but allowing an extensive interpretation of the concept of state aid would have worse consequences. This counterpart of the Court’s case law is also observed by the doctrine prevalent at the time of the *PreussenElektra* case. Some authors even argued that the circumventing effects will create ‘inequalities that seem difficult to justify.’ It was further argued that

*‘As PreussenElektra illustrates, the same effect can be achieved either through state subsidies or through the direct transfer of financial resources between private undertakings. Arguably, where the payor and beneficiary are competitors, a state-imposed transfer of resources between private undertakings will even have more serious effects on competition than state subsidies. The Court seems to assume that, in the case of mandated direct transfers, competition will be safeguarded by the affected undertakings, which are likely to contest such measures under national law.’<sup>745</sup>*

This critical interpretation, however, has not been followed by any practical examples. In the opinion of the present author, it is correct to say that the definition of a purchase obligation in certain categories by obligated parties is intended to reach a particular objective of public policy, but it is not true that the results achieved through state resources or through private financing are equal. The purpose of establishing a market-based instrument such as TGCs is to let the market decide where investments in RES-E should flow. Ideally, investments will flow where the market is the most cost efficient. The additional effects created by the purchase obligation (‘will even have more serious effects’) can be justified by, first, the application of the-polluter-pays principle to the activity of electricity supply, and, second, to the market failure that the additional financial support intends to correct and that has been accepted by the Commission as a valid argument.

The Court has apparently not stated otherwise as to the risk of circumvention of state aids in a similar factual context since the time these two cases were mentioned.

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<sup>742</sup> See AG Jacobs conclusions, Case C-379/98, *PreussenElektra*, points 145-146, and points 180 to 185.

<sup>743</sup> Case 290/83, *Commission v France* [1985] ECR p. 00439.

<sup>744</sup> Case C-379/98, *PreussenElektra AG v Schlesweg AG* [2001] ECR I-02099, para. 65.

<sup>745</sup> *Antitrust developments in Europe 2001*, R. Subiotto and R. Snelders (eds.), (Kluwer, 2002), p. 57.



## **7.4 Accumulation of aids under renewable energy projects: the risk of overcompensation**

Renewable energy technologies benefit under the current policy and regulatory frameworks of an extremely favourable environment. The law mandates their development, use and support; consumers are committed to green energy consumption, and the industrial sector oscillates between compliance with legal requirements and pursuit of business opportunities. In these particular circumstances, the sources of financial support are diversified, from public to private, from mandatory to voluntary, from state aids to other forms of support. It becomes necessary, also for reasons of sustainability, to raise the issue of the risk of accumulation of aids to renewable electricity generation projects. The present Section attempts to qualify and identify this risk under a national support scheme like green certificates that may not itself be qualified as state aid (7.4.1). It then assesses whether accumulation is caught by general EU rules on state aids, and under which circumstances (7.4.2). Finally, it analyses some sector specific EU legislation, which, in a less systematic way than the sectoral, addresses the issue of accumulation in its scope of application (7.4.3). The analysis will allow drawing some conclusions from the manner and the extent to which EU state aid law is addressing the issue of accumulation.

### **7.4.1 The risk of accumulation of aids to renewable energy projects under green certificates schemes**

While environmental protection is one of the objectives of the EU, overcompensation in favour of renewable electricity projects by the accumulation of aids will be contrary to the principles of the EU competition policy and in particular EU state aid rules defined above. TGCs schemes themselves aim only to cover the difference of generation costs between RES-E technologies and generation technologies that are already competitive. This risk of overcompensation by the accumulation of aids appears at different stages in the development of an RES-E project. Overcompensation appears when the support is higher than the extra cost implied by the production of RES-E.

Based on the objective of environmental protection, there has been an increase in the amount of environmental aids granted by Member States. As stated in the Autumn 2009 Scoreboard, and as far as notified aids are concerned, *‘[a]id earmarked for environmental protection amounted to roughly € 12.7 billion in 2008, of which € 2.9 million was granted through the GBER. In relative terms, it represents roughly 24% of total horizontal aid. For the European Union as a whole, the trend of aid for environment increased from 23% to 26% of total horizontal aid between the periods 2003-2005 and 2006-2008.’*<sup>746</sup> The ‘wide range of objectives’ covered by the environmental aids involves an increased number of activities and sectors as beneficiaries. In addition, aid can be granted to renewable energy projects under objectives other than environmental protection, such as regional development or research & development (& innovation). This makes the application of accumulation rules more complex on a day-to-day basis.

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<sup>746</sup> European Commission, Commission Staff Working Document Accompanying the State Aid Scoreboard – Autumn 2009 Update, Facts and Figures on State aid in the EU Member States, SEC(2009) 1638, 7.12.2009, pp. 24-25.

The objective of environmental protection has also been recognised as a sufficient ground for exempting from the general prohibition some of the RES-E support schemes and aids recognised to be state aids in the sense of Article 107.1 TFEU, as reported in section 7.3.1.

Finally, the obligation for Member States to reach the targets of share of energy from renewable sources in their gross final consumption of energy in 2020 as defined in Directive 2009/28/EC implies the adoption of additional national aid measures that will favour situations of accumulation.

As observed initially,<sup>747</sup> Member States usually operate several support instruments in favour of renewable energy simultaneously, the benefits of which are eventually combined in favour of the same project. There is a high probability that a project receiving operating aid in the form of energy certificates may also be receiving aids related to the construction of the RES-plant or other investment costs, or tax rebates. Some of these aids will not be caught by the EU rules on state aids because they fall under the notification ceilings or do not fulfil all the criteria of state aid as demonstrated above in the case of green certificates. Some of these aids will fall within the framework of state aid rules but will be exempted. Other aids may not fall at all within the state aid framework and may be difficult to quantify, such as priority access to the grid or priority in dispatching. This particular situation makes the evaluation of their accumulation difficult albeit crucial.

However, and in particular in the context of TGCs, it might be necessary to cumulate investment aids with operating aids. This is because the TGCs are only to be issued at the moment power is generated, and not before, meaning that the project must have received most of its financing beforehand, and that the additional costs of generation are covered by the TGCs. This is also why TGCs are defined as ‘operating aid.’

Although environmental aids in favour of renewable energy are necessary to ensure a level-playing field with cheaper conventional energy sources and correct market failure, they may also entail negative consequences for the whole system. In general terms, three main negative consequences can be identified. The first relates to overcompensation by the accumulation of aids. Overcompensation may entail a second major risk: market distortion. Finally, precise rules on accumulation are necessary to avoid a third risk: subsidy race at EU and/or Member States’ level.<sup>748</sup>

Within this general framework, precise risks of accumulation of aids for renewable electricity projects can be identified under green certificates schemes. Although very little is encompassed by the doctrine, the question has been raised by the European Commission in several recent decisions, such as in state aid cases N 259/2010,<sup>749</sup> and N65/2010.<sup>750</sup> In

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<sup>747</sup> See Introduction, Chapter 2.

<sup>748</sup> As noted by the European Commission: ‘*Countries also grant subsidies in order to attract Greenfield investments, often by foreign firms. Such competition between national or local governments sometimes give rise to subsidy races leading to the granting of considerable sums, both in developed and developing countries. Such subsidy race are particularly frequent in large federal countries.*’ ‘Competition, State Aids and Subsidies,’ Background Note, OECD Global Forum on Competition, DAF/COMP/GF(2010)3, January 2010, para. 17. The European Commission also referred to the risk of ‘*subsidy competition*’ between Member States in its Decision 2010/670/EU of 3 November 2010 (OJ L 290 of 06.11.2010, p. 39), Recital 6.

<sup>749</sup> State aid case N 259/2010 – United Kingdom, Amendment to the Renewables Obligation – Scotland (wave and tidal stream installations), C(2010)5095 of 22.07.2010.

state aid case N65/2010, the UK authorities noted that ‘*As regards cumulation, [...] some beneficiaries may receive both banded ROCs and other types of support such as grants.*’<sup>751</sup> National competent authorities are consequently aware of the risk of accumulation of aids under different schemes, and have enacted specific rules or drafted guidelines. The UK constitutes again a relevant example where the entry into force of the UK feed-in tariff on 1 April 2010, in addition to pre-existing support schemes, has been raising new concerns in terms of overcompensation of renewable energy projects. The new FIT scheme applies only to small scale projects. The UK energy regulator, Ofgem, has started drafting guidelines on the issue. A second direct risk of accumulation arises from the commercialisation of the environmental attributes of renewable electricity. As explained in Chapter 6, tracking instruments like guarantees of origin allow RES-E generators to market the green value – that is, the environmental attributes – associated to the electricity they produce. The double counting and sale of the environmental attributes for the same MWh may also lead to accumulation of aids to RES-E generators. A third direct risk of accumulation arises from the combination of aids with the grant of money originating from the re-distribution fund (based on the collection of compliance fees).

This final distinction between green certificates on the one hand and the direct grant of money on the other hand is crucial for the rest of the rationale. The green certificate in itself is not a state aid if it does not involve state resources. Not being a state aid, the green certificate will not fall under the EU state aid rules. When the TGCs scheme features a redistribution of collected compliance fees via a fund managed by the public authorities, then the resulting grant will qualify as state aid, subject to the exemptions reviewed above. This distinction must be kept in mind when looking at the application of accumulation rules.

Other aids and aid schemes contribute indirectly to the promotion of RES-E generation. Emissions trading is one of these schemes that favour investments in RES-E generation, including within the EU. The direct and indirect support granted to RES-E generation may lead to a situation of inconsistency in climate policies as noted by the European Commission itself: ‘*the combination of various environmental subsidies often amounts to an incoherent combination, with each mechanism assigning a different price to carbon dioxide emissions.*’<sup>752</sup> Rules on accumulation of aids can provide a remedy for these inconsistencies by avoiding overcompensation.

There also might be a risk that foreign-produced green electricity receives support in the import country where the energy is exported in addition to the support granted in the country of origin. This has been a constant source of worry for the European Commission, which has, as noted by authors, ‘*consistently expressed its concern that foreign produced*

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<sup>750</sup> State aid case No N 65/2010 – United Kingdom, amendments to the Renewables Obligation Certificates (ROCs) scheme, C(2010)2211 of 30.03.2010.

<sup>751</sup> State aid case No N 65/2010 of 30.03.2010 – United Kingdom, amendments to the Renewables Obligation Certificates (ROCs) scheme, point (18).

<sup>752</sup> ‘Competition, State Aids and Subsidies,’ Background Note, OECD Global Forum on Competition, DAF/COMP/GF(2010)3, January 2010, para. 142. See also para. 143: ‘*As the Stern report highlighted, the least costly way to curb emissions is to provide a uniform price signal (through a tax or a cap-and-trade permit system), including all economic agents to make all emissions-reducing decisions whose cost falls below a certain threshold, without deciding arbitrarily how emissions should be reduced. Direct subsidies to specific ways of reducing emissions may in the end increase the cost of the emissions reduction effort, and make this effort less effective.*’

*green electricity (and gas) will also be eligible for such support schemes, irrespective of whether they have been subsidised or otherwise promoted in their land of origin.*<sup>753</sup> It is a fact that the conditions of eligibility of imported green electricity to the national support scheme of Member States vary. The extent to which EU law intends to avoid unnecessary barriers to trade renewable electricity based on green certificates schemes is analysed in detail in Chapter 9. The question can also be raised in an international perspective where EU countries will import green electricity from third countries. This has already been envisaged by, for example, the Trans-Mediterranean Renewable Energy Cooperation (TREC) featuring a future electric power transmission grid connecting Europe, the Middle East and North Africa; and the Mediterranean Solar Plan that includes *inter alia* the development of electricity interconnections in the Euro-Mediterranean region and the possible establishment of a ‘*green electricity import and export framework, as well as, where necessary, within the EU in order to allow for renewable electricity trade in the whole region.*’<sup>754</sup> The green certificates trade around the Mediterranean has also been envisaged since the early 2000s.<sup>755</sup> The manner in which RES-E imported from outside the EU in the framework of a joint project can be accounted for in the mandatory targets of Member States is covered by Directive 2009/28/EC.<sup>756</sup>

These very facts make the question of the possible accumulation of aids to RES-E projects – whether state aids or not – of particular relevance. The legal question raised here is how to identify the rules applicable to the accumulation of aids for RES-E projects under a green certificates scheme. To do so, the conclusion from the previous section 7.2 should be kept in mind, namely that: when green certificates schemes do not involve state resources they cannot be qualified as state aids, even if the other criteria are met; they will most certainly qualify as state aids when they involve the transfer of state resources through, in particular, the re-distribution of the compliance fees via a fund managed by public authorities.

#### **7.4.2 General framework for accumulation of aids and of relevance for RES-E projects**

There is no provision on the accumulation of aids and state aids in the TFEU itself. The Treaty leaves the competence to the Council to adopt regulations for the application of Articles 107 and 108, by, in particular, laying down the conditions – including accumulation - for exempting certain categories of aid from the notification requirement defined in Article 108.3. On this legal basis, the Council adopted Council Regulation (EC)

<sup>753</sup> L. Hancher, 'Trade-Neutral Policies for the Promotion of Electricity from Renewables,' in J. Bielecki and M. Geboye Desta (eds.), *Electricity Trade in Europe – Review of the Economic and Regulatory Challenges* (Kluwer Law International, 2004), p. 294.

<sup>754</sup> Mediterranean Solar Plan (MSP), Strategy Paper examined by the MSP experts' group on 10 February 2010. Available at: [http://ec.europa.eu/energy/international/international\\_cooperation/doc/2010\\_02\\_10\\_mediterranean\\_solar\\_plan\\_strategy\\_paper.pdf](http://ec.europa.eu/energy/international/international_cooperation/doc/2010_02_10_mediterranean_solar_plan_strategy_paper.pdf)

<sup>755</sup> See sub-project 'Prospects for green electricity trade and analysis of potential role of CDM and green certificates in the Mediterranean region,' Observatoire Méditerranéen de l'Énergie, 2003. Overall project: 'Large scale integration of pv and wind power in Mediterranean countries (MED2010).'

[http://cordis.europa.eu/search/index.cfm?fuseaction=proj.document&PJ\\_RCN=4938431](http://cordis.europa.eu/search/index.cfm?fuseaction=proj.document&PJ_RCN=4938431)

<sup>756</sup> See in particular Articles 9 and 10 of Directive 2009/28/EC on joint projects between Member States and third countries.

No 994/98 of 7 May 1998, so-called ‘Enabling Regulation.’<sup>757</sup> The Enabling Regulation is itself the legal basis on which the Commission can adopt Exemption Regulations.

It should be mentioned initially that the accumulation issue was raised relatively early by the Commission. In 1985 the latter published a Communication in which it proposed that the Member States should follow certain notification rules in the case of accumulation of aids for an investment project.<sup>758</sup> The communication defines ‘cumulation of aids’ as being the ‘*application of more than one aid scheme to a given investment project*’ (para. 2). While the communication applies to aids for different purposes, it is limited to investment projects. An ‘investment programme’ is defined in the Communication as being ‘*all investments in fixed assets (whether or not in the same place) necessary to carry out the project*’ (para. 2). At that time, the rules on accumulation contained in paragraph 3.8 of the 1994 Environmental Guidelines were much vaguer.<sup>759</sup> For their application they required combination with the 1985 Commission’s decision. Such combined reading of these rules was applied most recently by the Court in Case C-351/98, *Spain v European Commission*,<sup>760</sup> a case that raised the question of the possible accumulation of national aids with aids previously authorised by the Commission. The 1994 Environmental Guidelines addressed the issue of ‘cumulation of aid from different sources’ for the same purpose of environmental protection but not for different purposes for the benefit of the same recipient.<sup>761</sup> The notification of accumulation of aids for different purposes to one and the same investment project was the purpose of the 1985 Communication. However, as noted by the Court, ‘*it in no way follows from that communication that an aid scheme might not be declared compatible with the common market on the ground that some of the beneficiaries have already received aid authorised under another head.*’<sup>762</sup> In that case and under the rules in force at that time, the Court concluded that ‘*if it fulfils the criteria laid down by the guidelines applicable to it and, where appropriate, by certain sectoral rules, an aid scheme intended to reduce pollution and nuisances cannot be declared incompatible as a whole with the common market on the ground that some of the recipients have already received State aid authorised under another head. The Member State concerned has only, where appropriate, to notify the Commission of significant instances of cumulation of aid for different purposes awarded to a single undertaking, as*

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<sup>757</sup> Council Regulation (EC) No 994/98 of 7 May 1998 on the application of Articles 92 and 93 of the Treaty establishing the European Community to certain categories of horizontal State aid, OJ L142 of 14.05.1998, p. 1.

<sup>758</sup> Commission Communication on the cumulation of aids for different purposes No. 85/C 3/03, OJ C003 of 05.01.1985, p.2-3. The 1985 Communication refers itself to the intention expressed by the Commission in its Communication of 21 December 1978 (*Communication de la Commission sur les régimes d’aides à finalité régionale*, OJ C031 of 03.02.1978, p. 9, which expired on 01.01.1982) to examine with experts from Member States the issue if the accumulation of regional aids with other aids.

<sup>759</sup> ‘3.8. *Cumulation of aid from different sources - The limits set above on the level of aid that may be granted for various environmental purposes apply to aid from all sources, including Community aid when this is combined with national aid.*’ 1994 Community guidelines on State aid for environmental protection (94/C 72/03), OJ C72 of 10.03.1994, p. 3.

<sup>760</sup> Case C-351/98, *Spain v European Commission*, [2002] ECR I- 8031, adopted on 26 September 2002.

<sup>761</sup> Case C-351/98, *Spain v European Commission*, [2002] ECR I- 8031, adopted on 26 September 2002, para. 88.

<sup>762</sup> Case C-351/98, *Spain v European Commission*, [2002] ECR I- 8031, adopted on 26 September 2002, para. 89.

*provided by the communication on cumulation.*<sup>763</sup> Since then, the rules on accumulation of aids granted for different purposes and from different sources have been reinforced. The extent to which these reinforced rules are able to catch the accumulation of aids under green certificates schemes is the subject of the following paragraphs.

#### **7.4.2.1 Accumulation rules under the General Block Exemption Regulation**

Pursuant to the Enabling Regulation, the Commission is required to adopt some precise, practical rules in each group exemption regulation. Aids in favour of environmental protection are one of the aid categories that the Commission may declare as compatible with the common market, and may be subject to particular exemptions (Article 1.1 of the Enabling Regulation). The Commission did not adopt a proper exemption regulation for aid in favour of environmental protection besides the General Block Exemption Regulation (GBER)<sup>764</sup> based on the competence to do so (pursuant to Article 1.1 (a) (iii) of the Enabling Regulation). The GBER contains general provisions on ‘cumulation’ of aids application to all categories of aid defined in its Article 1.1, including for environmental protection (Article 1.1 (d)).<sup>765</sup> To complete the GBER, the Commission has adopted guidelines on state aid for environmental protection. The Environmental Guidelines define the terms for implementation of such aids as required by the Enabling Regulation. The list of mandatory terms for implementation includes the ‘*conditions governing the cumulation of aid.*’<sup>766</sup>

One should note that a Commission Regulation is a legally binding act<sup>767</sup> while the purpose of the Environmental Guidelines is to increase transparency in the manner by which the Commission applies the state aid control rules in related cases. This corresponds to common sense and, as noted by authors, ‘good practice’ since ‘*there would be considerable waste of public resources if the Commission rejected aid schemes which took months to design simply because the officials responsible were not aware of the criteria that would be used by the Commission to evaluate those schemes.*’<sup>768</sup> The Commission is obliged to follow the rules it has adopted in the areas of state aids where it has competence, such as guidelines or notices, and with the conditions that they do not depart from the rules of the Treaty and that the guidelines and notices are accepted by the

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<sup>763</sup> Case C-351/98, *Spain v European Commission*, [2002] ECR I- 8031, adopted on 26 September 2002, para. 90.

<sup>764</sup> Commission Regulation (EC) No. 8000/2008 of 6 August 2008 declaring certain categories of aid compatible with the common market in application of Articles 87 and 88 of the Treaty (General block exemption Regulation), OJ L 214 of 09.08.2008, p. 3.

<sup>765</sup> While the regulations and guidelines refers to ‘cumulation’ the term ‘accumulation’ will be preferred in the following paragraphs for grammatical reasons.

<sup>766</sup> Council Regulation (EC) No 994/98 of 7 May 1998 on the application of Articles 92 and 93 of the Treaty establishing the European Community to certain categories of horizontal State aid, OJ L142 of 14.05.1998, p.1, Recital (6), Article 1.2 (d).

<sup>767</sup> Pursuant to Article 288 TFEU.

<sup>768</sup> *State Aid Policy in the European Communities: a guide for practitioners*, P. Nicolaidis, M. Kekelekis, P. Buyskes, International Competition Law Series, (Kluwer Law International, 2<sup>nd</sup> Edition, 2005), p. 36.

Member States.<sup>769</sup> This also goes together with the principle of legal certainty and legitimate expectations. The Court has also affirmed that Member States are bound by the principle and the expectations if they have agreed to their content.<sup>770</sup>

This means that the provisions of the General Block Exemption Regulation are binding, and that the content of the Guidelines is for information purposes. However, the scope of application of the Guidelines is wider than the measures exempted from notification under Section 4 of the GBER concerning environmental protection, since the Guidelines cover all or most of the cases involving aids granted for the protection of the environment. This corresponds to the logic underlying the revision of the guidelines as underlined by Commissioner for competition policy N. Kroes: *'If the aid is well-targeted the guidelines are actually very generous. Compared to the previous guidelines they generally allow for higher amounts of aid.'*<sup>771</sup>

The General Block Exemption Regulation is consequently the first legal act to apply in terms of accumulation of aids in favour of environmental protection. But the scope of application of the GBER should be immediately recalled. Most of the individual aids or aid schemes addressed in the GBER cover investment aids. Operating aid schemes, such as green certificates schemes when they are state aids, are excluded from the scope of application of the GBER. No operating aid is included in Section 4 of the GBER. The reason for that has been enounced in Section 7.1.1 and can be recalled here: operating aids are deemed to be more distortive to competition than investment aids, and are therefore excluded from general exemption regimes. Consequently, the GBER Regulation provisions on 'cumulation of aids' do not directly address operating aids like green certificates schemes. What the GBER indicates is the specific aids under the GBER - mostly investment aids - that can or cannot be cumulated with operating aids such as green certificates. This is done in two ways.

First, Articles 7.1 and 7.2 of the GBER address the notification thresholds to be respected in case of cumulated investment aids. All public investment aids must be taken into account in the calculation, i.e. local, regional, national or European (Article 7.1). Then aids exempted by the GBER may be cumulated as long as they concern different identifiable eligible costs (Article 7.2; to be read in coordination with Article 7.5). More relevant to operating aids like green certificates is Article 7.3 of the GBER, which provides that:

*'Aid exempted by this Regulation shall not be cumulated with any other aid exempted under this Regulation or de minimis aid fulfilling the conditions laid down in Commission Regulation (EC) No 1998/2006 or with other Community funding in relation to the same - partly or fully overlapping -*

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<sup>769</sup> Case C-351/98 *Spain v Commission* [2002] ECR I- 8031, para. 53; Case 310/85 *Deufil v Commission* [1987] ECR 901, para. 22; Case C-313/90 *CIRFS and Others v Commission* [1993] ECR I-1125, para. 36; and Case C-311/94 *IJssel-Vliet* [1996] ECR I-5023, para. 43.

<sup>770</sup> Case C-313/90, *CIRFS and Others v Commission* [1993] ECR I-1125; Case C-242/00, *Germany v Commission* [2002] ECR I-5603, paras. 27-28. See discussion on the legality of the Commission state aids Guidelines in *State Aid Policy in the European Communities: a guide for practitioners*, P. Nicolaides, M. Kekelekis, P. Buyskes, International Competition Law Series, 2<sup>nd</sup> Edition, (Kluwer Law International, 2005), p. 36.

<sup>771</sup> Speech held by Neelie Kroes, European Commissioner for Competition Policy, 'State Aid and climate change - creating the right incentives for business,' Address at Round Table on Environmental Protection and Climate Change, Brussels, 27 May 2008, SPEECH/08/273.

*eligible costs if such cumulation would result in exceeding the highest aid intensity or aid amount applicable to this aid under this Regulation.’*

This situation could apply to a situation where the investment aid is cumulated with green certificates. But this situation, although worth mentioning, remains hypothetical due to the probable different nature of the eligible costs (investment v. operating), with little or no overlapping, and then the fact that the green certificates scheme will probably not qualify for exemption under the *de minimis* Regulation as analysed in Section 7.1.5.

Second, Section 4 of the GBER defines the ceilings value calculation methods for environmental investment aids exempted from notification. These ceilings must take into account operating aids in the form of operating costs and operating benefits. Article 23 of the GBER provides for the ceilings value as regards environmental investment aids for the promotion of energy from renewable energy sources. Article 23.3 defines the manner the eligible costs must be calculated, eligible costs on which the aid intensity calculation is based.<sup>772</sup> The article requires that the calculation of eligible costs excludes operating benefits and operating costs. It follows that any operating aid received by a RES-E project through the sale of green certificates must be excluded from the calculation of the eligible costs. The exclusion of operating costs from the eligible costs is a first way by which to reduce overcompensation. At the same time, where the threshold of 45 percent of aid intensity is not attained, the investment aid will benefit from the notification exemption, even if the aid was cumulated with an operating aid like green certificates. This corresponds to the objective of the European Commission in its State Aid Action plan of a ‘less and better state aid control’ focussing on the most problematic cases.<sup>773</sup> This also corresponds to the logic on which the *de minimis* Regulation is based.

In the preparation of their notification in case N 259/2010 (UK – Amendment to the Renewables Obligation – Scotland, wave and tidal stream installations), the UK authorities applied this calculation of eligible costs to the possible ‘combination’ of operating aids with investment aid falling within the scope of the GBER and in addition to the investments aids falling within the scope of the Environmental guidelines (see below). In the calculation, the UK authorities deducted the State aid element of the green certificate value (termed Renewables Obligation Certificate ROC in the UK; the ‘ROC recycle value’) from the eligible costs.<sup>774</sup> The UK authorities also made clear that any investment grants given to the RES-E projects in question (wave and tidal stream) will first need to take into account the quantity of ROCs attributed for this energy source. As reported in point 8 of the case: ‘*After the announcement of the levels at which the wave and tidal stream [ROCs] bands would be set, any investment grants given will take into account the income available from banded ROCs*’ (emphasis added).<sup>775</sup> Since the price of ROCs is fixed on the ROCs market, this requires that the investment aids must integrate *ex post* the

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<sup>772</sup> Pursuant to Article 23.2 of the GBER, the aid intensity for exempted environmental investment aid for the promotion of RES-energy ‘shall not exceed 45% of the eligible costs’ with a 20% additional increase possible for small enterprises and a 10% increase for medium-sized enterprises.

<sup>773</sup> ‘State aid action plan – Less and better targeted state aid: a roadmap for state aid reform 2005-2009,’ COM(2005)0107 final, 07.06.2005.

<sup>774</sup> State aid case N 259/2010, United Kingdom – Amendment to the Renewables Obligation – Scotland (wave and tidal stream installations), C(2010)5095, 22.07.2010, footnote 7.

<sup>775</sup> ‘Bands’ refer here to the quantity of ROCs that are attributed to each type of RES-E technology, entailing different levels of support per technology type.



financial support granted to the project through ROCs. Any *ex ante* evaluation of the financial support granted through ROCs would consequently be approximate for the purpose of ceiling calculation. Such *ex ante* evaluation might be necessary as Member States are required to notify planned state aids before their implementation in accordance with Article 108.3 TFEU.

#### 7.4.2.2 Accumulation rules under the *de minimis* Regulation

Another general piece of legislation that provides for accumulation rules for state aids is the *de minimis* Regulation.<sup>776</sup> The application of the *de minimis* Regulation to green certificates schemes in terms of notification requirements has already been reviewed in 7.1.5.

The following paragraph focuses solely on accumulation rules. The *de minimis* Regulation envisages two possible accumulation situations: accumulation of several *de minimis* aids; accumulation of a *de minimis* aid with another type of state aid.

Concerning the accumulation of several *de minimis* aids, the *de minimis* Regulation fixes a first rule by defining a ceiling of EUR 200 000 for the total amount of *de minimis* aids that a single company can receive over a period of three fiscal years (Article 2.2). This ceiling is the starting point for assessing the combined effects of cumulated aids to the same undertaking of *de minimis* aids or of aids for the same eligible costs. This rule is announced in Recital 17 of the Regulation which already provides that Member States ‘*should facilitate*’ respect of the *de minimis* rules in particular by ‘*establishing the necessary machinery in order to ensure that the total amount of de minimis aid, granted to the same undertaking under the de minimis rule, does not exceed the ceiling of EUR 200 000 over a period of three fiscal years. [...]*’ This rule is defined in Article 2.2 of the Regulation itself that provides that: ‘*The total de minimis aid granted to any one undertaking shall not exceed EUR 200 000 over any period of three fiscal years. [...] These ceilings shall apply irrespective of the form of the de minimis aid or the objective pursued and regardless of whether the aid granted by the Member State is financed entirely or partly by resources of Community origin.*’

Such accumulation rule will only apply when the green certificate scheme is to be a state aid, and when it qualifies as *de minimis* aid under the *de minimis* Regulation. In that case, the form or objective pursued by the different *de minimis* aids does not matter. All *de minimis* aids must be taken into account.

Under the Monitoring rules of Article 3, Member States are required to monitor the attribution of *de minimis* aids, including respect of the threshold ceiling. They shall ‘*only grant the new de minimis aid after having checked that this will not raise the total amount of de minimis aid received by the undertaking during the period covering the fiscal year concerned, as well as the previous two fiscal years in that Member State, to a level above the ceiling laid down in Article 2(2)*’ (Article 3.1, second paragraph). The implementation alternatives - the ‘*necessary machinery*’<sup>777</sup> - for monitoring the grant of *de minimis* aids

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<sup>776</sup> Council Regulation (EC) No 994/98 of 7 May 1998 on the application of Articles 92 and 93 of the Treaty establishing the European Community to certain categories of horizontal State aid, OJ L 142 of 14.05.1998, p.1.

<sup>777</sup> As termed in Recital 17 of the *de minimis* Regulation.

are further details in Article 3. In this respect, the public authority granting the aid bears the burden of the control and a duty of information, which reduces risks of accumulation of unlawful aid for the recipient.

Accumulation rules with other instruments than *de minimis* aid are found in Article 2 of the Regulation. Article 2.5 of the *de minimis* Regulation provides that '*de minimis aid shall not be cumulated with State aid in respect of the same eligible costs if such cumulation would result in an aid intensity exceeding that fixed in the specific circumstances of each case by a block exemption Regulation or Decision adopted by the Commission.*'<sup>778</sup>

To fall under the scope of Article 2.5, the green certificates scheme must first qualify as state aid and then relate to the same eligible costs as the *de minimis* aids received by the undertaking. Contrary to investment aids, there is no aid intensity ceiling defined for operating aids like green certificates. Article 2.5 primarily targets aids the acceptance of which is assessed towards a percentage of intensity level. This concerns mainly investment aids, as the ones defined in the GBER. This means that a RES-E generator can legally receive simultaneously a financial aid through the sale of green certificates, whether or not it is state aid, and any other *de minimis* state aid, as long as the latter complies with the other accumulation rules.

Where the provisions might be applicable is, once again, when the financial support is granted by the public authorities through the re-distribution fund. If the direct grant from the fund aims to cover investment costs, the rules on accumulation will be applicable.

Finally, the time period of three fiscal years will also be important in the assessment of the total volume of aid received.

#### **7.4.2.3 Accumulation rules under the Community Guidelines on state aid for environmental protection**

The principles specifically applicable to the accumulation of all types of aid for environmental protection that are not covered by Section 4 of the GBER - including operating aids like green certificates - are found in the Environmental Guidelines. Point 6 of the Environmental Guidelines (paragraphs 189 to 191) provides for three sets of principles and the manner in which the Commission intends to apply them in its decisions.

First, paragraph 189 stipulates that the ceiling values defined in the Guidelines apply to the added amounts of the different supports granted to a particular project; the support being for national state or European resources, it should be totalized under the cumulation rule. This principle might be particularly difficult to apply to RES-E projects receiving, in

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On the implementation of these measures, see Report on the application of Council Regulation (EC) No 994/98 of 7 May 1998 regarding the application of Articles 97 and 88 of the EC Treaty to certain categories of horizontal State aid, COM(2006) 831 final, 21.12.2006, p.10.

<sup>778</sup> Recital 11 of the Regulation mirrors Article 2.5 by requiring that: '*In order to avoid circumvention of maximum aid intensities provided in different Community instruments, de minimis aid should not be cumulated with State aid in respect of the same eligible costs if such cumulation would result in an aid intensity exceeding that fixed in the specific circumstances of each case by a block exemption Regulation or Decision adopted by the Commission.*'

addition to a national or European financial aid, an operating aid in the form of green certificates. The very design of the TGCs scheme does not enable a precise calculation *ex ante* of the total amount of aid collected by the sale of green certificates, and therefore does not enable a calculation of the ceilings. The volume of RES-E production may vary as may the price of the TGCs. An evaluation *ex post* of the amount of aid allocated is more precise, but the aid will have already been received, which, if recognized to be state aid, would be in contravention of the principles of pre-notification, in particular in the case of the redistribution of collected compliance fees via a public fund.

Secondly, paragraph 190 states that:

*‘Aid authorized under these Guidelines may not be combined with other State aid within the meaning of Article 87(1) of the EC Treaty or with other forms of Community financing if such overlapping results in an aid intensity higher than that laid down in these Guidelines. However, where the expenditure eligible for aid for environmental protection is eligible in whole or in part for aid for other purposes, the common portion will be subject to the most favourable aid ceiling under the applicable rules.’*

The calculation of the aid intensity, all aid cumulated, is a crucial criterion in this respect. But, once again, one can wonder how this will apply to green certificates schemes and to the obligation of pre-notification.

Third and last, paragraph 191 targets the issue of ceiling calculation for the same eligible costs. It defines the basic rule according to which *‘aid for environmental protection must not be cumulated with de minimis aid in respect of the same eligible costs if such cumulation would result in an aid intensity exceeding that fixed in these Guidelines.’* The Guidelines do not fix any ceiling for aid intensity for operating aids as it does for investment aids. This represents a first barrier to the evaluation of the accumulation effect. However, the calculation of ceilings defined for investment aids must include operating aids (operating costs or operating benefits) granted to the same project. Second, it is most probable that the financial support obtained from the sale of green certificate will be cumulated with aids of different nature related to different eligible costs at another level of the project. In the preparation of the notification in case N 259/2010 (UK – Amendment to the Renewables Obligation – Scotland, wave and tidal stream installations), the UK authorities applied such calculation to the possible ‘combination’ of operating aids with investment aid falling within the scope of the Environmental Guidelines. Since the investment aids envisaged fell within the constraints of the Environmental Guidelines – and not the GBER-, the UK authorities applied the Guidelines’ accumulation rules and *‘deducted from the eligible costs for investment aid the full value of ROCs granted to the installation at hand (as part of the operating benefits).’*<sup>779</sup> In addition, the UK authorities applied the ‘cumulation rules’ defined in the GBER in case of ‘combination’ of the operating aids consisting of the green certificates (ROCs in the UK) with investment aids for renewable energy sources falling within the scope of the GBER. The Commission’s decision in case N259/2010 reveals that the level playing field between renewable energy sources and conventional energy sources is a crucial element that justifies accumulation of aids within the ceiling limits. In that case, the UK authorities succeeded in demonstrating

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<sup>779</sup> As reported in point 9 in state aid case N 259/2010.

by calculation ‘*the presence of remaining financial gap*’ justifying the combination of aids.<sup>780</sup>

In all these three situations, rules on ‘cumulation’ relate to constituted ‘state aids’. Where green certificates schemes do not qualify as state aids for the reasons outlined above and in particular the criterion of state resources, none of these rules will apply. Consequently, the accumulation effects will not be caught by EU state aid rules. Where the TGCs scheme is qualified as state aid, in particular where it involves a public redistribution fund, the rules mentioned above will be applicable, under the limits they entail.

The practice from the Commission provides a more precise appreciation of the applicable principles in the particular case of green certificates schemes, and the evolution of the Commission’s practice itself. As mentioned above, the possible combination of investment and operating aids is of particular relevance, but other additional aids – not necessarily state aids – cannot be excluded.

In state aid case N 504/2000, the Commission has assessed two types of aid schemes in favour of renewable energy sources in the UK: the Renewables Obligations with ROCs as compliance mechanism (part A of the case); and a capital grants for investment in the more expensive longer term technologies for renewable energy and only for demonstration plants offering new capacity (part B of the case). Also in this case, the UK authorities made a pre-calculation in order to assess the combination effect in order to avoid overcompensation even in a situation of combined operating aid (green certificates) and investment aid (capital grants).<sup>781</sup> The Commission approved the combination of the operating aid in the form of green certificates with other public support such as capital grants, subject to the respect of aid intensity level. The combination of operating aids like green certificates with other grant measures (in particular capital grants as approved by the Commission in N 504/2000 – part B) was already approved by the Commission for the general Renewables Obligation in N 504/2000 and its subsequent modifications/variations, namely N 414/2008.

In state aid case N 590/2008, the Commission took note that the UK authorities excluded the possible accumulation and that no other public support such as investment aids (e.g., capital grants) would be given to the concerned RES projects (wave and tidal stream generators) that already receive ROCs. As accumulation was not envisaged, the Commission did not further pursue the issue of overcompensation in relation to combined investment and operating aids. Less than two years later the UK authorities changed their

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<sup>780</sup> Point 16 of Commission’s decision in case N259/2010. See also point (9) where the Commission states that ‘*The UK authorities submitted calculation examples for one wave and one tidal installation which demonstrate the presence of a remaining financing gap between investment in a wave or tidal installation and a convention electricity production installation, even after operating aid in the form of ROCs has been granted.*’

<sup>781</sup> The argumentation put forward by the UK authorities was as follows:

‘*Whilst there are no current comparable offshore wind farms to base an assessment on, they believe that offshore wind will require a price of about 5.5-6p/kWh in order to be viable, with the costs of the additional capital investment accounting for 4p/kWh of that sum. Current prices for intermittent generation such as wind power are around 4p/kWh for long-term contracts, including the value of the Renewables Obligation Certificates. There is therefore a shortfall of around 2p/kWh for offshore wind. The maximum 40% investment aid would be worth around 1.6p/kWh, based on the above 4p/kWh cost of capital. As a result the UK authorities do not believe that the combination of operating and investment aid would lead to overcompensation.*’ P.10, state aid case N 504/2000.

views and notified a modification of the support scheme aiming at allowing for accumulation.

The very fact that ‘*certain projects will continue to need additional grant support*’ (point 5) motivated the UK authorities to notify the Commission of their plans to allow for the combination of operating aids already approved in state aid case N 590/2008 with other public grants to wave and tidal stream installations specifically. The case was classified as state aid case N 259/2010 - United Kingdom, Amendment to the Renewables Obligation – Scotland (wave and tidal stream installations).<sup>782</sup> It must be underlined that the case concerns only wave and tidal stream installations as a less developed renewable energy technology and applies only to Scotland as a separate administrative region. In these particular circumstances, the UK envisaged the possible ‘combination’ of operating aids in the form of green certificates (as approved in N 590/2008) with three types of aids: capital grants, as approved by the Commission in state aid case N 504/2000 – part B; investment aids as defined in Article 23 of the GBER (Environmental investment aid for the promotion of energy from renewable energy sources); and other types of investment aids for renewable energy sources following within the scope of the Environmental Guidelines.

The argument put forward by the UK authorities for justifying the accumulation of aids was that ‘*Allowing the possibility to combine the operating aid with grant support will align the (examples mentioned in point 6) cumulation regime applied to the wave and tidal stream installations in Scotland covered by N 590/2008 with the general Renewables Obligation scheme as originally approved by the Commission in N 504/20006*’ (point 7).

On the particular issue of accumulation of aids to renewable energy projects under green certificates schemes, the European Commission (State Aid Case No. N65/2010) concluded that:

*‘The UK authorities have committed that where a grant is awarded, the granting authority will have to ensure that any grant given takes into account the income available from banded ROCs when calculating the level of the grant and to respect cumulation rules set in the EAG.*<sup>783</sup>

In the same case decision N65/2010, the Commission assesses the proposal made by the UK to increase the level of headroom to 10% (instead of 8% before). The Commission concludes that:

*‘As regards the increase of the headroom to 10%, the Commission considers that it is not modifying the compatibility of the approved scheme N 414/2008 as it does not result in particular in overcompensation in the aggregate and pursues the environmental objective by increasing investor’s confidence.’*<sup>784</sup>

During the course of the investigative procedure, the European Commission can ask Member States for details on any accumulation of aid, including amounts of aids, eligible expenditures, any aid schemes applied, and the like. The Commission can also require Member States to inform the Commission regularly on the monitoring of the level of

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<sup>782</sup> State aid case N 259/2010 - United Kingdom, Amendment to the Renewables Obligation – Scotland (wave and tidal stream installations), C(2010)5095, 22.07.2010.

<sup>783</sup> Case No N 65/2010 of 30.03.2010 – United Kingdom, amendments to the Renewables Obligation Certificates (ROCs) scheme, point (18).

<sup>784</sup> Case No N 65/2010 of 30.03.2010 – United Kingdom, amendments to the Renewables Obligation Certificates (ROCs) scheme, point (15).

compensation granted to renewable energies, including accumulation, as part of its settlement in state aid cases.<sup>785</sup>

#### 7.4.2.4 Conclusion

The application of accumulation rules for state aids to green certificates scheme requires distinctions to be made between different situations, and in particular when the financial aid to RES-E producers originates from the sale of green certificates and when the aid results in a direct grant via a redistribution fund managed by the state and based on the collection of compliance fees. In the first situation, the green certificates will rarely qualify as state aids and the rules on accumulation will consequently not apply except for the calculation of the eligible costs in relation to investment aids (operating benefits). Accumulation is consequently possible and very few legal rules are applicable. Where there are elements of state aid in the green certificates scheme, the nature of the state aid will be determinant. More precisely, if the state aid elements, such as the direct grant, are intended to cover eligible costs that already receive support, the rules on accumulation will apply fully. The Member State and the beneficiary will need to look at the GBER, the *de minimis* Regulation and the Environmental Guidelines to assess whether there is accumulation of state aids beyond the ceilings defined.

If the ceilings are exceeded, the state aid will become unlawful and will be subject to recuperation.

The nature of the rules on accumulation of state aids reveals that a determining element remains the possible overcompensation effect in the attribution of state aids.<sup>786</sup> State aids control is a fine-mesh net but it is subject to some limitations. First, the rules on accumulation of state aids are subject to prioritisation as regards the state aids targeted. This is also why the calculation of ceilings is a central element in the evaluation of the impact of the accumulation on competition. The principles of time limit and progressive decrease for the grant of the state aid are among the most common measures. Second, the rules on accumulation may be subjected to some circumvention when the financial support does not represent state aid. The latter situation makes the assessment of situations of accumulation of aids and supports of a different nature extremely difficult, without any particular obligation imposed on the beneficiary. This might well be one of the biggest limitations on state aid control rules that allows this concluding truism: state aid rules only apply to state aids.

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<sup>785</sup> E.g. in state aid case N 599/2004 – Ireland, Excise tax reduction on biofuels (C(2005)433 fin, 02.03.2005). The issue of overcompensation in favour of biofuels has primarily been addressed by the comparing the price for production of the biofuels and the market price of competing conventional fuels. This approach has been endorsed by the European Commission in its decisions, by the previous directive 2003/30/EC. Article 16.3 of Directive 2003/30/EC defines an ‘upper limit’ and requires that only the additional costs of biofuels be compensated for. Overcompensation is therefore not permitted.

<sup>786</sup> See, on the application of the overcompensation criteria, the analysis of state aid cases in section 7.3.1.

### 7.4.3 Other accumulation rules applicable to RES-E projects under sector-specific legislation

Some separate pieces of legislation also contain provisions on the possible or incompatible accumulation of aids to the benefit of the same renewable electricity project.

Directive 2009/28/EC contains two particular provisions that stress the possible accumulation of aids. First, Article 15.6 (d) requires that the guarantee of origin associated with green electricity generation specifies *inter alia* ‘whether and to what extent the installation has benefited from investment support, whether and to what extent the unit of energy has benefited in any other way from a national support scheme, and the type of support scheme.’ Such information disclosure allows for a better identification of the risk of accumulation of aids. Second, Article 15.2, third paragraph, provides that: ‘Member States may provide that no support be granted to a producer when that producer receives a guarantee of origin for the same production of energy from renewable sources.’ This discretion left to Member States to refuse accumulation of aids in the form of a GO and of any kind of aid underlines the fact that a RES-E project can also receive financial support from the sale of the GO (even if the directive limits its use to disclosure). This provision is meant to avoid the double counting of the environmental attributes of the green electricity. However, Member States remain free to decide whether or not they will allow these practices. When Member States decide to accept to allow GO for RES-E generation that received support, it is recommended to avoid overcompensation by the sale of the GO. This risk of overcompensation in favour of RES-E producers can be avoided or at least balanced by a requirement to invest in additional RES-E generation or the obligation to inform consumers that support has already been given.<sup>787</sup> Article 15.2 of Directive 2009/28/EC gives therefore the legal ground for diverging approaches within Member States, which goes against the effect of harmonisation in the use of GOs and of avoiding double counting.

Other pieces of legislation aim indirectly at the promotion of renewable electricity generation. This is particularly the case of climate change-related legislation, such as those concerning emissions trading schemes. At EU level, Directive 2003/87/EC envisages that the revenues from auctioning can be used for the support of measures in favour of renewable electricity, within or outside the EU.<sup>788</sup> For example, Article 10.3 of Directive 2003/87/EC concerning the utilization of funds obtained from the auctioning of allowances requires that at least 50 per cent of the revenues generated from the auctioning of allowances referred to in paragraph 2 of Article 10 of the Directive are used for reducing greenhouse gases emissions by participating, *inter alia*, in initiatives within the framework of the European Strategic Energy Technology Plan and the European Technology Platforms (Article 10.3 (a)), or ‘to develop renewable energies to meet the commitment of the Community to using 20 % renewable energies by 2020, as well as to

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<sup>787</sup> ‘Best Practice for the Tracking of Electricity,’ Recommendations from the E-TRACK II project, Deliverable 10, Intelligent Energy Europe, November 2009, p. 73. Concerning the obligation to disclose information to final consumers on the electricity purchase, Directive 2009/72/EC contains the central provisions.

<sup>788</sup> See also Article 3 d (4) of Directive 2003/87/EC concerning the utilization of revenues from the auctioning of allowances for aviation (‘It shall be for Member States to determine the use to be made of revenues generated from the auctioning of allowances. Those revenues should be used to tackle climate change in the EU and third countries, *inter alia*, to ...’).

*develop other technologies contributing to the transition to a safe and sustainable low-carbon economy and to help meet the commitment of the Community to increase energy efficiency by 20 % by 2020*' (Article 10.3 (b)). Article 10.a.8 of Directive 2003/87/EC also provides that up to 300 million allowances in the new entrants' reserve (so-called NER 300 funding) shall be available until 31 December 2015 for the financing of the construction and operation of up to twelve commercial demonstration projects relating to innovative renewable energy technologies and environmentally safe capture and geological storage (CCS) of CO<sub>2</sub>, in the territory of the Union. In this particular case, the possible cumulated effects of the aids received by the project will need to be assessed under the general principles on accumulation of state aids referred to above. Where the RES-E project primarily concerns research & development, the Community Framework for State aid for Research and Development and Innovation<sup>789</sup> might also be applicable. Any financing of RES-E demonstration project under the NER 300 reserve will be subject to the financing rules defined in the Commission's decision on NER 300. Commission Decision 2010/670/EU of 3 November 2010 lays down criteria and measures for the financing of, *inter alia*, demonstration projects of innovative renewable energy technologies under the EU ETS.<sup>790</sup> Recital 4 Decision 2010/670/EU refers to the general notification obligation of state aid measures under Article 108.3 TFEU. Recital 6 of Decision 2010/670/EU provides for threshold values in the volume of support in order to limit the risk of subsidy competition between Member States. The event of accumulation of NER300 funding with green certificates will depend on the scope of application of the national TGCs scheme. It is not common to render demonstration projects eligible to TGCs, but this could nevertheless happen. For example, a 2003 study estimated that 15 per cent of the demonstration phase costs of very large scale photovoltaic power generation (VLS-PV) could be covered by the revenues from the TGCs re-distribution mechanism.<sup>791</sup>

At national level, in application of Article 15 of Directive 2009/28/EC, Member States have the obligation to disclose information related to support schemes or any other aid received by a RES-E project. For that reason, Member States' legislation normally requires that the data registered within the GCs registry include reference to all other support schemes that the RES-E project may receive (mention of any state aid received for the generation unit). In the UK, several energy certificates can be issued for the same unit of renewable electricity generated, i.e.: Renewable Obligation Certificate (ROC), Levy Exemption Certificate (LEC) and Renewable Energy Guarantees of Origin (REGOs). The UK legislation tries to avoid overlap by limiting the eligibility of RES-E generator to these different mechanisms according to their generation capacity. In France, the Environment and Energy Management Agency (ADEME) has adopted rules prohibiting the accumulation of the different aids they grant with legislative and regulatory measures such

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<sup>789</sup> OJ C 323 of 30.12.2006, p. 1.

<sup>790</sup> Commission Decision 2010/670/EU of 3 November 2010 laying down criteria and measures for the financing of commercial demonstration projects that aim at the environmentally safe capture and geological storage of CO<sub>2</sub> as well as demonstration projects of innovative renewable energy technologies under the scheme for greenhouse gas emission allowance trading within the Community established by Directive 2003/87/EC of the European Parliament and of the Council, OJ L 290 of 06.11.2010, p. 39.

<sup>791</sup> K. Kurokawa, *Energy from the desert: feasibility of very large scale photovoltaic power generation (VLS-PV)*, (Earthscan, 2003), Table 12.14 – Example of contribution towards investment by various sources of co-funding in the different stages of the introduction of VLS-PV, P.185. The same study estimated that TGCs re-distribution mechanism could cover 10 per cent of the deployment/commercialisation costs.



as: energy savings certificates, domestic project financing, tax exemption measures, RES-E tenders (*installations sélectionnées dans le cadre d'un appel d'offres électricité EnR*), feed-in tariffs (*installations bénéficiant de tarif régulé dans le cadre de l'obligation d'achat d'électricité EnR*).<sup>792</sup>

In the framework of the establishment of a joint market for TGCs between two or more Member States, the question of cumulation may be identified as a separate issue that needs to be regulated. For example, the bilateral agreement signed on 29 June 2011 between Norway and Sweden concerning the establishment of a joint TGCs market as of 1 January 2012 includes a set of provisions on possible cumulation of aids.<sup>793</sup>

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<sup>792</sup> ADEME, example in France of the rules of non-accumulation of aids.

<sup>793</sup> *Avtale om felles elsertifikatmarked undertegnet*, Norwegian Ministry of Petroleum and Energy, press release Nr. 63/11, 29.06.2011. Text of the agreement, *Avtale mellom Kongeriket Norges Regjering og Kongeriket Sveriges Regjering om et felles marked for elsertifikater*, 29.06.2011, available at: <[http://www.regjeringen.no/upload/OED/pdf%20filer/EV/063-2011-Avtale\\_elsertifikater.pdf](http://www.regjeringen.no/upload/OED/pdf%20filer/EV/063-2011-Avtale_elsertifikater.pdf)>. See Article 5 on supplementary aid (*tilleggsstøtte*).



## 8 Green certificates schemes under EU electricity law rules

This chapter analyses how EU electricity law influences the design of TGCs schemes. The literature on TGCs, which primarily addresses economic issues, has dealt extensively with the effects of the certificates on the electricity market, in particular on electricity price. For its part, the legal literature has paid much attention to the effects of liberalisation on environmental protection and the promotion of renewable energy sources. Much less attention has been paid to the nature of EU regulation of the electricity sector and its consequences for national RES-E support schemes. This chapter aims to fill this gap, focusing on TGCs scheme and to some extent on TGCs market.

The intrinsic idea of a TGCs scheme is to enable separate trading in the support element (the TGCs) and in the actual commodity of electricity. Under this system, the compliance TGCs market and the electricity market function in parallel without any direct interaction. Meanwhile, the relationship between the electricity market and the TGCs market is close, not only in terms of effects on pricing but also in terms of regulation. The regulation of both the physical and financial components of the electricity market has two distinct effects on the design and functioning of the certificates scheme. First, the structure of the electricity market affects many components of the TGCs scheme, and ultimately the functioning of the TGCs market. Many participants in the physical and financial electricity markets also participate in the green certificates market. Second, the two commodities are issued concomitantly and can be re-bundled after redemption of the TGCs at supply level. It is clear that the TGCs and electricity markets are interlinked both before (at generation level) and after (at supply level) trading takes place in the TGCs compliance market.

The analysis proposed below is based on a selective review of the core provisions of EU law as regards the regulation of the electricity sector. The term ‘EU electricity law’ is used here to refer to those requirements of EU law that apply specifically to the electricity industry, *i.e.*, sector-specific legislation.<sup>794</sup> For the purposes of this chapter, ‘EU electricity law’ is deemed to be a more accurate term than ‘EU energy law.’ This is partly because of the specific characteristics of the electricity sector compared to gas or oil, and partly because TGCs schemes concern electricity. The analysis is necessarily selective because not all of the instruments used to regulate the electricity sector impact TGCs schemes to the same extent. Of particular importance are the rules intended to introduce competition within the sector. Other non-sector-specific rules are referred to when they prevail for the regulation of the sector.

At wholesale level, the regulation of generation (8.1) and supply (8.2) sectors is of obvious importance for the regulatory design and operation of TGCs schemes, because both sectors are encompassed by the scheme and actors on the TGCs compliance market. The regulation of the retail electricity sector (8.3), while usually not part of the TGCs compliance market, is equally important because it is ultimately the retail sector that supports the costs of the TGCs. For this reason, equal importance is given in this chapter to the regulation of wholesale and retail sectors. Finally, the level of cooperation between

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<sup>794</sup> EU electricity law is also identified in the literature as a holistic area of law, while coming within the scope of the broader concept of EU energy law. See comments in section 3.1 (Methodology) of the Introduction.

national TGCs schemes may also be influenced by the level of integration of the regional electricity markets (8.4). Market integration through regional cooperation has been more recently enshrined in secondary law as an objective of EU energy policy. It may encourage Member States to ‘*join or partly coordinate their national support schemes.*’<sup>795</sup>

## **8.1 EU regulation of the electricity generation segment: effects on TGCs schemes**

This section will demonstrate the extent to which the EU regulation of the generation segment of the electric industry has direct implications for the design and operation of national TGCs schemes. EU law has primarily, but not solely, focused on the introduction of competition into the generation segment as an essential element in the completion of the internal market in electricity. Making the generation segment competitive is an important pre-condition for the establishment of a TGCs scheme (8.1.1). While it is reasonable to state that all EU law provisions that aim to secure this goal are equally important for TGCs schemes, it is true that certain provisions will have a more direct effect than others on scheme designs, as well as on trading in the certificates. The provisions that have the most direct impact are those that implement the unbundling regime (8.1.2) and those that lay down procedures for the authorisation and tendering of new generation capacity (8.1.3).

### **8.1.1 Making the generation sector competitive: impacts on TGCs scheme of increased competition in the generation sector**

Under all TGCs schemes, it is new RES-E generators that are authorised to receive green certificates. This means that new RES-E generators constitute the original supply side of TGCs. Consequently, the supply of green certificates on the compliance market is determined by: (i) the category of RES-E generators entitled to issue TGCs (determined by the design of the TGCs scheme); and (ii) the rules allowing new RES-E generators to enter the generation market (determined by the way the generation market is regulated).

The existence of a competitive electricity generation market is here of primary importance. If the generation segment is too concentrated, or if barriers to enter the generation market are too high, there will not be enough new and competitive RES-E generation. One or a few large RES-E generators dominating a concentrated generation segment will be able to abuse their position and control the market for generation. Such market distortions have consequences for the competitiveness and effectiveness of the TGCs market. A competitive generation segment will diversify the offering of green certificates through the entry of new RES-E generators and may increase the supply of green certificates. More certificates will be issued, of varying natures and at varying prices, potentially lowering the compliance costs of quota-obligated parties and the price for customers. It will enable the delivery of targeted RES-E generation at the lowest possible cost, which is the *raison d’être* of market-based regulation. A competitive generation market also avoids abuses of dominant positions or collusion on the TGCs market. The new RES-E generators that have access to the competitive generation market will need to compete both with conventional energy generators and renewables generators. The competition between RES-E generators

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<sup>795</sup> Article 11.1, Directive 2009/28/EC.

that is played out on the electricity generation market as a whole will benefit the TGCs market, causing competition between the suppliers of TGCs and also bringing fluidity to the TGCs market. Whether it will diversify the types of RES supported is, *inter alia*, a matter of regulatory design (technological differentiation) and market response (confrontation of supply and demand).

While competition on electricity markets is an essential background requirement for the establishment of a TGCs scheme, assessing the effects on a TGCs scheme of market power at electricity-generation level requires closer scrutiny of the situation of RES-E generators. Indeed, RES-E generators represent only one sub-category of the wider category of electricity generators, with those RES-E generators eligible to issue TGCs representing an even smaller sub-sub-category. In order to evaluate the effects of market power on electricity markets operating TGCs schemes, it would be necessary to look at the competition conditions between RES-E generators eligible to issue TGCs. Such an exercise would require the application of the same EU competition rules for electricity generation referred to above. Both horizontal market power and vertical market power abuses may be an issue.

As regards competitiveness at the level of electricity generation and effects on the effectiveness of TGCs schemes, it would be even more important to ensure a sufficient level of competition between the renewable electricity generators on the electricity market, if the latter were to correspond exactly to the generators entitled to issue TGCs. Since RES-E generators have not yet been involved in cases of abuse of dominant position or in contentious mergers, the issue remains hypothetical.

The purpose of this section is to analyse to what extent and under what circumstances the regulation of the electricity generation segment impacts the supply side of the national TGCs schemes, based on an analysis of the relevant EU law provisions. Several provisions of the Electricity Directive aim to restructure the generation sector with the objective of increasing competition. Among these, certain provisions will have a more direct impact on the design and functioning of TGCs schemes, according to the level of restructuring and competition they impose. The following two sections examine the effects on TGCs schemes of the provisions of EU law regarding the unbundling of generation and supply from transmission and distribution (8.1.2), and the authorisation and tendering procedures (8.1.3).

## **8.1.2 The unbundling regime and effects on TGCs scheme and markets**

### **8.1.2.1 Unbundling of transmission/distribution from generation and TSO's independence**

Unbundling consists of the vertical separation of competitive segments from regulated segments either structurally or functionally.<sup>796</sup> Unbundling leads to the separation of

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<sup>796</sup> P. L. Joskow, 'US vs. EU electricity reforms achievement,' in J.-M. Glachant and F. Lévêque (eds), *Electricity Reform in Europe* (Edward Elgar, 2009), pp. xvi-xviii. See also B. Barton, 'Electricity Market Liberalization and Energy Sustainability', in Bradbrook A. J., Lyster R., Ottinger R. L. and Xi W. (eds), *The Law of Energy for Sustainable Development*, IUCN Academy of Environmental Law Research Studies (Cambridge University Press, 2005), p. 454.

formerly vertically integrated utilities into independent entities. This is expected to allow new entrants into the market, to foster competition between the different segments by restraining integrated undertakings from discrimination or any abuse of vertical market power, and to avoid collusion of interests and cross-subsidising of competitive segments by regulated ones.<sup>797</sup> For these reasons, unbundling allows increased competition in the generation segment and contributes to a level playing field between generators. Depending on the model chosen for unbundling, new generators have access to the transmission and distribution networks on the basis of non-discriminatory and transparent criteria, and can thus compete with incumbents. The unbundling rules contribute to the provision of ‘fair access’ to the transmission and distribution markets. In that respect, unbundling completes the provisions on third party access that are also of direct benefit for RES-E generators.<sup>798</sup> As regards infrastructure development, unbundling and TSO’s independence enable making investment decisions in network development based on objective and non-discriminatory criteria independently from the interests of vertically integrated undertakings.

Different types of unbundling may be implemented: accounting, management, legal, and ownership unbundling.<sup>799</sup> *Accounting or financial unbundling* requires the establishment of separate accounts for transmission and distribution activities carried out by electricity undertakings. *Management or functional unbundling* requires the establishment of a separate organisational and decision-making structure for network activities.<sup>800</sup> *Legal unbundling* increases the level of separation by requiring the separation in organisational, decision-making and legal form of network operations from the activities of generation or supply. While legal and functional unbundling do not require the network company to have separate ownership of the grid assets, they do require the network company to have ‘effective decision-making rights’ over the operation, maintenance and development of the grid.<sup>801</sup> A final and more radical alternative is *ownership unbundling*, which, as its name

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<sup>797</sup> For a review of the possible distortive effects of vertically integrated undertakings on competition, see: P. L. Joskow, 'US vs. EU electricity reforms achievement,' in J.-M. Glachant and F. Lévêque (eds), *Electricity Reform in Europe* (Edward Elgar, 2009), pp. xvi-xviii; P. Cameron, *Competition in Energy Markets*, 2<sup>nd</sup> edition (Oxford University Press, 2007), p. 32; W. Geldhof and F. Vandendriessche, 'European Electricity and Gas Market Liberalisation. Background, Status, Developments', in B. Delvaux, M. Hunt and K. Talus (eds), *EU Energy Law and Policy*, ELRF Collection (Euroconfidentiel, 2008), p. 41; E. Cabau, 'Unbundling of Transmission System Operators,' in C. Jones (ed.), *EU Energy Law*, Vol. I – The Internal Energy Market – The Third Liberalisation Package (Claeys & Casteels, 2010), pp. 87-88.

See also Recitals 9 and 12 of Directive 2009/72/EC on the benefits of ‘effective unbundling.’

<sup>798</sup> R. Haas and H. Auer, 'The prerequisites for effective competition in restructured wholesale electricity markets,' *Energy* 31 (2006) 859.

<sup>799</sup> For a description of the different options for unbundling, see: W. Geldhof and F. Vandendriessche, 'European Electricity and Gas Market Liberalisation. Background, Status, Developments', in B. Delvaux, M. Hunt and K. Talus (eds), *EU Energy Law and Policy*, ELRF Collection (Euroconfidentiel, 2008), p. 41; and C. Jones (ed.), *EU Energy Law*, Vol. I – The Internal Energy Market – The Third Liberalisation Package (Claeys & Casteels, 2010), pp. 10-11.

<sup>800</sup> W. Geldhof and F. Vandendriessche, 'European Electricity and Gas Market Liberalisation. Background, Status, Developments', in B. Delvaux, M. Hunt and K. Talus (eds), *EU Energy Law and Policy*, ELRF Collection (Euroconfidentiel, 2008), p. 42.

<sup>801</sup> *The Unbundling Regime*, Interpretative Note on Directive 2009/72/EC concerning common rules for the internal market in electricity and Directive 2009/73/EC concerning common rules for the internal market in natural gas, Commission Staff Working Paper, 22.01.2010, p. 25.

indicates, requires generation and supply assets to be owned separately from transmission and distribution assets.<sup>802</sup> Alongside these different forms of unbundling, the maintenance of some forms of technical cooperation is allowed because these are seen as necessary to the proper functioning of the electricity market as a whole and to prevent malfunctions such as blackouts.<sup>803</sup>

The rules on vertical unbundling have been progressively reinforced alongside the adoption of the three electricity directives. The unbundling of accounts was already a requirement of the first Electricity Directive,<sup>804</sup> and had since been repeated.<sup>805</sup> Directive 2003/54/EC required the implementation of a reinforced regime for the legal and functional separation of transmission or distribution operations from generation or supply.<sup>806</sup> However, the 2007 Energy Sector Inquiry identified some important shortcomings to the regime of legal unbundling that the Commission intended to address in its proposal for a third electricity directive. Achieving ‘effective unbundling’ was one of the core objectives of the third liberalisation package. The proposal for a third electricity directive suggested ownership unbundling as the favoured option. Without going as far as the Commission proposed, Directive 2009/72/EC provides for a reinforced regime of vertical unbundling, in particular at transmission level.<sup>807</sup> Directive 2009/72/EC reinforces the transmission unbundling requirements in order to make sure that a TSO owned by a vertically-integrated undertaking will act independently and in a non-discriminatory manner. The directive leaves Member States with the discretion to choose between three models of unbundling for TSOs, *i.e.*: ownership unbundling, the independent system operator (ISO) model, or the independent transmission operator (ITO) model.<sup>808</sup> The European Commission also used its powers to regulate competition to ensure the separation of supply and network operation interests.<sup>809</sup> Prior to designation, a TSO must

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<sup>802</sup> For a discussion of ownership unbundling, see: J.-C. Pielow, G. Brunekreeft, and E. Ehlers, ‘Legal and economic aspects of ownership unbundling in the EU,’ *Journal of World Energy Law & Business*, 2009, Vol.2, No.2, p. 96; K. Talus and A. Johnston, ‘Comment on Pielow, Brunekreeft and Ehlers on ‘ownership unbundling’,’ *Journal of World Energy Law & Business*, 2009, Vol.2, No.2, p. 149.

<sup>803</sup> R. Haas and H. Auer, ‘The prerequisites for effective competition in restructured wholesale electricity markets,’ *Energy* 31 (2006) 859.

<sup>804</sup> Article 14.3, Directive 96/92/EC.

<sup>805</sup> See Article 31 Directive 2009/72/EC. This basic unbundling requirement was already contained in the two first electricity directives.

<sup>806</sup> Directive 96/92/EC also contained some requirements such as (in Article 7.6) functional unbundling at TSO level, but only in general terms. See also comment by E. Cabau, ‘Unbundling of Transmission System Operators,’ in C. Jones (ed.), *EU Energy Law*, Vol. I – The Internal Energy Market – The Third Liberalisation Package (Clays & Casteels, 2010), p. 89.

<sup>807</sup> Note that the deadlines for implementation of the provisions for TSOs and DSOs differ.

On the unbundling regime defined in Directive 2009/72/EC, see the non-legally-binding interpretative note from the European Commission services: ‘The unbundling regime’, Interpretative note on Directive 2009/72/EC concerning common rules for the internal market in electricity and Directive 2009/73/EC concerning common rules for the internal market in natural gas, Commission Staff Working Paper, 22 January 2010.

<sup>808</sup> The discretion of the Member States is, however, subject to the conditions contained in Article 9.8 and 9.9 of Directive 2009/72/EC.

<sup>809</sup> See cases reported by E. Cabau, ‘Unbundling of Transmission System Operators,’ in C. Jones (ed.), *EU Energy Law*, Vol. I – The Internal Energy Market – The Third Liberalisation Package (Clays & Casteels, 2010), pp. 94-95.

be certified as corresponding to one of these three models by the regulator. The draft decision in this respect has to be submitted for an opinion to the Commission. As regards DSOs, the directive contains lesser changes than the legal unbundling requirements adopted in Directive 2003/54/EC, generally because the previous framework was assessed as sufficient.<sup>810</sup> The directive requires accounting,<sup>811</sup> functional, and legal unbundling.<sup>812</sup> The three main additions brought in by Directive 2009/72/EC concern: the availability of human, technical, physical and financial resources; the establishment of an independent compliance officer to monitor the compliance programmes; and, in cases where the DSO belongs to a vertically-integrated undertaking, a requirement that communication and branding materials must clearly distinguish the different branches of activity (this may lead to changes in company names, logos and commercial brands).<sup>813</sup>

The unbundling regime is part of the set of measures that increase competition within the generation segment, and that, as a whole, benefit the TGCs market by ensuring competition at the level of supply of certificates. A more distinctive benefit of the unbundling of transmission/distribution from generation and supply is to ensure the independence of the system operators. The level of independence of the system operator is of direct consequence for the design of TGCs schemes, as it enables the system operator to be nominated as the issuing body for TGCs and/or as the body responsible for the management of the TGCs registry. TSOs are often involved in the management of TGCs schemes at one stage or another. As put by the Commission itself, *‘For the good functioning of all RES-E support systems, truly independent TSO and DSOs are an essential factor.’*<sup>814</sup>

Under national TGCs schemes, the TSO is often designated as the issuing body and/or is put in charge of the TGCs registry.<sup>815</sup> In Romania, the TSO Transelectrica is the issuing body for TGCs and also administers the registry. In Sweden, the TSO Svenska Kraftnät is designated as the issuing body for the certificates and is also responsible for managing the registry. Similarly, the Norwegian government has been proposing the designation of the national TSO, Statnett, as issuing body and registry administrator. The accumulation of the two functions has clear advantages according to the Norwegian government. Having the national TSOs responsible for the issuance of TGCs as well as the administration of the respective registries in Sweden and Norway would also have practical advantages from the perspective of a common market between the two countries, as a level playing field would exist between the two parties. The issuing body can also be another entity, either public or private. This is particularly relevant when the TSO is involved in trading in TGCs.

There are clear benefits to having the TSO as the issuing body and/or the registry administrator. National schemes have usually preferred to designate the TSO because of

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<sup>810</sup> Proposal for a directive of the European Parliament and of the Council amending Directive 2003/54/EC concerning common rules for the internal market in electricity, COM(2007) 528 final, 19.09.2007, p.19.

<sup>811</sup> Article 31.3, Directive 2009/72/EC.

<sup>812</sup> Article 26.1, Directive 2009/72/EC.

<sup>813</sup> Article 26, Directive 2009/72/EC.

<sup>814</sup> Original underlining. *The support of electricity from renewable energy sources*, Communication from the Commission, COM(2005) 627 final, p. 9.

<sup>815</sup> As it is usually the TSO (and not the DSO) to which these tasks are allocated, the following paragraphs deal primarily with the TSO.



its role in the management of the grid. Due to its involvement in system operations, the TSO is able to track physical electricity operations from the point of entry into its system (usually generation) until the end point, which is usually the wholesale or retail market. The TSO also has precise and instant knowledge of the volume of electricity that is being effectively generated and delivered into the grid.<sup>816</sup> In addition it has experience in the processing of complex data and operations, based on objective, transparent and non-discriminatory criteria. This also means that TSOs and DSOs are the bodies best suited to track electricity generation attributes and to relate them to the generation unit.<sup>817</sup> The requirements for independence imposed on TSOs by the Electricity Directive reinforce their suitability as issuing bodies and registry administrators in TGCs schemes. A similar line of argument was developed by the former ETSO as regards the designation of TSOs as the issuing bodies for guarantees of origin (GOs), the requirement of independence being very similar.<sup>818</sup> Another parallel with GOs is that TSOs usually have experience with the issuance and the management of the registries for GOs. Accordingly, the TSOs can duplicate the mechanisms used for GOs for TGCs.

The issuing body for the TGCs and the body responsible for the registry must be independent of the parties to the scheme. As in the case of the physical or financial electricity markets,<sup>819</sup> a TSO's lack of independence can be a source of distortion of competition regarding the issuance of the certificates and the TGCs market due to access to market information. As emphasised by American authors, with regard to the financial interest of issuing bodies in the TREC market, '*one question that needs to be resolved in early next steps is whether Issuing Bodies can have any financial stake in certificate trading.*'<sup>820</sup> Different solutions have been adopted in the United States to avoid conflicts of interest and market distortion, such as making market information available to all parties (in the case of APX in New England).<sup>821</sup> The system operator is usually not a party to the TGCs market, but this may occur in some instances. This is, for example, the case when TSOs/DSOs are required to purchase the TGCs that they can sell forward on the

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<sup>816</sup> See the tasks attributed to the TSOs in Article 12 (d), Directive 2009/72/EC.

<sup>817</sup> A similar point of view has been developed in the United States, with respect to Renewable Energy Certificates (RECs). See on that point: *Renewable Energy Certificates and the California Renewables Portfolio Standard Program*, Staff White Paper, Division of Strategic Planning, California Public Utilities Commission, 2006, p. 43; and J. Hamrin and M. Wingate, *Regulator's Handbook on Tradable Renewable Certificates*, Center for Resource Solutions, June 2004, p. 71

<sup>818</sup> European Transmission System Operators (ETSO), *Report on Renewable Energy Sources (RES)*, Brussels, 18.12.2003, p. 8.

The requirement of independence of the issuing body for GOs is defined in Article 15.4 of Directive 2009/28/EC as follows: '*Member States or designated competent bodies shall supervise the issuance, transfer and cancellation of guarantees of origin. The designated competent bodies shall have non-overlapping geographical responsibilities, and be independent of production, trade and supply activities.*'

<sup>819</sup> P. L. Joskow, 'US vs. EU electricity reforms achievement,' in J.-M. Glachant and F. Lévêque (eds), *Electricity Reform in Europe* (Edward Elgar, 2009), pp. xvi-xviii.

<sup>820</sup> J. Hamrin and M. Wingate, *Developing a Framework for Renewables Energy Certificates*, Final Report, Center for Resources Solutions, 2002, Version 2.4, p. 52.

<sup>821</sup> The example of Texas should also be mentioned, where APX has been required only to develop the software and is restrained from running the system. J. Hamrin and M. Wingate, *Developing a Framework for Renewables Energy Certificates*, Final Report, Center for Resources Solutions, 2002, Version 2.4, p. 52.

certificates' market.<sup>822</sup> Grid system operators (TSOs and/or DSOs) have been made subject to such a purchase obligation in Belgium (both in Flanders, Wallonia and at federal level). The TSO may also be involved in TGCs trading under the Italian green certificates scheme. Any involvement of the system operators in certificates trading would obviously disqualify them to act as either issuing bodies or registry administrators.

In conclusion, the implementation of the provisions of Directive 2009/72/EC as regards unbundling favours the designation of the TSO as an independent issuing body and as responsible for the TGCs registry. When assessing the requirements for independence of the TSO/DSO as regards generation and supply, other EU rules might enter into the equation, but unbundling is undoubtedly the most important. The unbundling regime and the independence of the TSO ensure that there is no collusion of interest and exchange of information with RES-E generators and suppliers, at the levels both of the electricity market and the TGCs market. One can only wonder which of the three unbundling models defined in Directive 2009/72/EC most facilitates the nomination of the TSO as issuing body and registry administrator for TGCs.

### **8.1.2.2 The unnecessary unbundling of generation and supply**

EU law does not prescribe the separation of electricity generation and supply activities. Accordingly the generation and supply of RES-E can be undertaken by the same company. Indeed, numerous electricity undertakings are simultaneously generators and suppliers, especially those that are incumbents.<sup>823</sup> This means that a RES-E generator can supply its customers directly from its own generation and in doing so avoid buying electricity on the wholesale market.

The accumulation of generation and supply activities has a series of advantages. In particular, it enables suppliers and generators to adopt strategies to hedge their risks. Commentators have observed that: *'From a supplier's perspective, owning generation capacity provides a physical hedge against the risk of a spot-market price spike, one that is similar to the financial hedge offered by a futures contract. [...] From a generator's perspective, the wholesale market option may offer the opportunity to fulfil its customers' demands with electricity that it purchases at a price, i.e. less than its own marginal cost of generation.'*<sup>824</sup> In the United States, the Californian electricity crisis was, among other reasons, a consequence of a lack of control in the unbundling of generation and supply as part of restructuring.<sup>825</sup> Some experiences with the unbundling of generation and supply in Europe also support this line of argument.<sup>826</sup>

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<sup>822</sup> See Section 8.3.2.2 on the mandatory purchase of TGCs defined as a public service obligation (PSO).

<sup>823</sup> Including, e.g., GDF Suez, EnBW, E.ON, Electrabel, Hafslund, Statkraft, etc. This is also the case at local level, e.g., Narvik Energi in Norway.

<sup>824</sup> R. Haas and H. Auer, 'The prerequisites for effective competition in restructured wholesale electricity markets,' *Energy* 31 (2006) 859.

<sup>825</sup> See on the diverse causes of the electricity crisis in California: J. P. Tomain and R. D. Cudahy, *Energy Law*, (Thomson West, 2004), pp. 285-289; R. D. Cudahy, *Electricity Deregulation After California: Down But Not Out*, 54 Admin. L. Rev. 333 (2002); J. L. Sweeney, 'California Electricity Restructuring, The Crisis, and Its Aftermath,' in F. P. Sioshansi and W. Pfaffenberger, *Electricity Market Reform – An International Perspective*, (Elsevier, 2006), p. 326. See also the reticence caused by the California crisis on unbundling in Japan: M. Goto and M. Yajima, 'A New Stage of Electricity Liberalization in

The possibility that a supplier may also be involved in generation activities is envisaged under TGCs schemes as, in order to comply with its quota obligation, an electricity supplier can either buy certificates on the market or redeem the certificates it obtains from its own generation assets. Consequently an electricity supplier can be engaged in RES-E generation and be eligible to receive TGCs, while at the same time being an obligated party under the quota obligation. This is why some suppliers may themselves already own green certificates. This situation may lead to conflicts of interests and possible collusion at the level of the TGCs market. In particular, sellers and buyers of TGCs may exchange information and coordinate market activities. The risks of vertical market power abuse on TGCs markets have not been addressed at EU level, but would require the application of the general regime of competition law.

The reverse is also true, as the financial advantage given to RES-E generators in the form of TGCs will reinforce their position on the electricity market. This is in fact the ultimate objective of the TGCs schemes, as long as there is no overcompensation as pointed out in Chapter 7. Commentators identify the quota obligation as the direct link between the electricity and the TGCs markets that enables a generator to exercise market power first in the TGCs market, and then back in the electricity market:

*‘... a generator that is able to exercise market power in the TGC market can, in effect, exercise market power in the electricity market. Moreover, it is in many cases easier to gain a dominating position in the TGC market than in the electricity market. For instance, suitable locations for wind power plants, that is, locations with suitable wind conditions and situated a reasonably short distance away from the transmission network, may be a scarce resource. This means that unless a TGC scheme is carefully designed it may become a vehicle for exercising market power in the electricity market.’<sup>827</sup>*

### **8.1.3 Authorisation and tendering procedures for the construction of new generation capacity**

The provisions of the Electricity Directive that aim to define a level playing field at the level of generation include the authorisation rules for new generation capacity. The authorisation procedure contributes to reinforcing competition between generators by defining transparent rules for the construction of new generation capacity. In addition to the authorisation procedure, the Electricity Directive gives Member States the possibility to adjust their needs for generation capacity by means of a tendering procedure. Both the authorisation and tendering procedures allow new entrants into the market for generation capacity on the basis of identical minimum requirements, whether they are nationals or from other Member States.<sup>828</sup>

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Japan: Issues and Expectations,’ in F. P. Sioshansi and W. Pfaffenberger, *Electricity Market Reform – An International Perspective*, (Elsevier, 2006), p. 629.

<sup>826</sup> E.g., in England and Wales.

<sup>827</sup> L. Bergman, ‘Addressing market power and industry restructuring,’ in J.-M. Glachant and F. Lévêque, *Electricity Reform in Europe* (Edward Elgar, 2009), p. 84.

<sup>828</sup> E. Pijnacker Hordijk and J. J. Callaghan, ‘Liberalisation of the Electricity Sector at the Level of the European Union,’ in T. Lauriol (ed.), *Electricity Liberalisation in The European Union*, Law & Commentary, *Oil & Gas Law and Taxation Review*, Special Issue (Sweet & Maxwell, 1998).

An authorisation regime and a tendering procedure for new generation capacity were provided for already in the first Electricity Directive. Directive 2003/54/EC contained a more stringent regime, repeated in Directive 2009/72/EC, obliging Member States to implement an authorisation procedure. The tendering procedure should be seen as a supplementary tool, or, as stated by the Commission itself, a ‘*safety net, should the market not provide for sufficient generation capacity on the basis of the authorisation procedure.*’<sup>829</sup> The supplementary nature of the tendering procedure is underlined in Directive 2009/72/EC itself.<sup>830</sup> The tendering procedure is defined in the directive as ‘*the procedure through which planned additional requirements and replacement capacity are covered by supplies from new or existing generating capacity.*’<sup>831</sup> Whether the objective is promoting security of supply, providing new capacity, improving energy efficiency/demand-side management measures (Article 8.1) or environmental protection and the promotion of infant new technologies (Article 8.2), ‘[a] tendering procedure may [...] be launched only where, on the basis of the authorisation procedure, the generating capacity to be built or the measures to be taken, are insufficient to achieve those objectives.’ While both procedures aim to ensure competition, the fact that the tendering procedure is supplementary to the authorisation procedure reflects differences in approach, namely a ‘*market facilitating approach represented by the authorisation procedure*’ and a ‘*market intervention approach represented by the tendering procedure.*’<sup>832</sup>

Alongside the authorisation and tendering procedures, Member States are to address the question of the quantity of renewable electricity generation planned compared to the RES-E generation gap to be filled. The criteria applied to the procedures will affect the volume of new renewable electricity generated and consequently the number of TGCs put on the market. A key criterion for these procedures is that they must be conducted in accordance with objective, transparent and non-discriminatory criteria, putting both RES-E generators and conventional energy generators on a level playing field. Another key criterion is that renewable energy generation should be encouraged, although the extent of the encouragement may depend on the level of the quota obligation. The following paragraphs analyse the margin of appreciation left to Member States under Directive 2009/72/EC in the application of the authorisation (8.1.3.1) and tendering procedures (8.1.3.2) as regards renewable energy generation projects that will fulfil a quota obligation under a TGCs scheme.

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<sup>829</sup> Communication from the Commission to the European Parliament pursuant to the second subparagraph of Article 251 (2) of the EC Treaty concerning the common position of the Council on the adoption of a Directive of the European Parliament and of the Council concerning common rules for the internal market in electricity and repealing Directive 96/92/EC, SEC(2003) 161final, 07.02.2003, p. 6.

<sup>830</sup> Taking into account the fact that the tendering procedure is a supplementary tool to the authorisation procedure, it is surprising that tendering is mentioned before authorisation in the list of matters covered by the Directive in Article 1: ‘*This Directive ... lays down the rules relating to the organisation and functioning of the electricity sector, open access to the market, the criteria and procedures applicable to calls for tenders and the granting of authorisations and the operation of systems.*’

<sup>831</sup> Article 2.24, Directive 2009/72/EC.

<sup>832</sup> H. Bjørnebye, *Investing in EU energy security – Exploring the regulatory approach to tomorrow’s electricity production* (University of Oslo, 2009), e.g. p. 269.

### 8.1.3.1 Authorisation procedure, RES-E generation and TGCs scheme

In all TGCs schemes, the issuance of certificates is conditional on the obtaining of authorisation for the construction of the new generation plant. Where the plant already exists, expansion of generation capacity may also qualify. Directive 2009/72/EC requires all Member States to adopt an authorisation procedure, which shall be conducted in accordance with objective, transparent and non-discriminatory criteria.<sup>833</sup> Member States 'shall' consider when determining the appropriate authorisation criteria a series of elements defined in the directive. Some of these elements refer directly to renewable energy sources, including considerations such as: the nature of the primary sources; compliance with the measures adopted under Article 3 on public service requirements (which can include goals for the generation of energy from renewable sources); the contribution of the generating capacity to meeting the EU target for the EU's gross final consumption of energy by 2020 to be made up of at least 20 per cent renewable energy in accordance with Directive 2009/28/EC; and the contribution of the generating capacity to reducing emissions.<sup>834</sup> Small, decentralised and/or distributed generation shall also be taken into account by the Member States, subject to 'specific authorisation procedures.'<sup>835</sup> It is important to note here that the Electricity Directive requires Member States to take into account as a mandatory criterion for the authorisation of new capacity the extent to which the new capacity will contribute to reaching the targets of Directive 2009/28/EC.<sup>836</sup> It allows for the possibility of discrimination in favour of RES-E generation projects alongside the authorisation procedure, in particular from the perspective of complying with the mandatory targets laid down in Directive 2009/28/EC. This implies that, pursuant to the Electricity Directive, the quota obligation under a TGCs scheme, which is a national reference point for meeting the targets, can be taken into account during the authorisation procedure in respect of several of these identified elements.

It is also important to note that the authorisation procedure must integrate into its criteria the possible effects of the new generation plant on the environment, as well as land use and siting.<sup>837</sup> This requirement derives from the integration of the objective of environmental protection, as defined in Article 11 TFEU. The evaluation of the environmental effects of the construction of a RES-E generation plant will require in particular the application of the Environmental Impact Assessment (EIA) procedure defined in Directive 85/337/EEC. It is not the purpose of the TGCs scheme to deal with the negative effects on the environment of renewable energy plants, apart from the possibility of giving preference to certain RES-E technologies. National authorisation procedures for the construction of RES-E generation plants lay down the rules of reference

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<sup>833</sup> Article 7.1, Directive 2009/72/EC.

<sup>834</sup> See respectively paras (g), (i), (j) and (k), Article 7.2, Directive 2009/72/EC. The list of criteria defined in the Directive is non-exhaustive.

<sup>835</sup> Article 7.3, Directive 2009/72/EC.

<sup>836</sup> The new provision in the Electricity Directive was originally proposed by the European Parliament, which justified this addition as follows: '*Member states must take into account their obligations vis-à-vis the 20% renewable energy target set out in the Council conclusions of 8th and 9th March 2007 when assessing new generating capacity. These targets could be subject to change through the legislative process.*' Amendment 57, Report of the Committee on Industry, Research and Energy on the proposal for a directive of the European Parliament and the Council amending Directive 2003/54/EC concerning common rules for the internal market in electricity, 19 May 2008, Doc. A6-0191/2008.

<sup>837</sup> See paras (c) and (d), Article 7.2, Directive 2009/72/EC.

as regards the environmental impacts of the plants, along with rules concerning construction, operation and eventual dismantling. As mentioned previously, the issuance of green certificates is always conditional on permission having been granted for the plant, which includes satisfaction of the general concession rules. In conclusion, the environmental consequences of additional generation capacity resulting from RES-E support are evaluated as part of the authorisation procedures for the power plant, not as part of the TGCs scheme.

As regards RES-E generation, Directive 2009/28/EC lays down additional requirements regarding the authorisation procedure, but only of a general nature: the national rules on authorisation, certification and licensing procedures must be ‘proportionate and necessary’, based on a clear coordination and definition of the tasks of responsible administrative bodies; there must be a streamlined administrative procedure; assistance and information must be provided to the applicants; and there must be simplified and less burdensome authorisation procedures for smaller projects and decentralised devices.<sup>838</sup>

### 8.1.3.2 Tendering procedure, RES-E generation and TGCs schemes

Directive 2009/72/EC leaves to Member States the discretion to introduce a tendering procedure for new capacity where they deem it necessary and, in particular, in relation to environmental protection and the promotion of new technologies (Article 8.2). The construction of new generation capacity from renewable energy sources corresponds to at least one, and ultimately both, of these two objectives. The fact that Article 8.2 covers renewable energy is explicitly mentioned in Recital 43 of the directive.<sup>839</sup> Transparency and non-discrimination in the selection procedure are ensured by the publication of contract specifications, the selection procedure itself, and the list of criteria in the Official Journal of the EU.<sup>840</sup> Consequently, promotion of renewable energy sources is one of the reasons that may justify the launch of a tendering procedure in accordance with Directive 2009/72/EC. Other reasons stated in the directive may also justify the launch of a tendering procedure, but these will not be addressed here, since the promotion of renewable energy is stated as a separate objective for tenders.<sup>841</sup>

One of the objectives of the directive is to lay down rules relating to the criteria and procedures applicable to calls for tenders.<sup>842</sup> More than just a detailed list, the directive defines some core criteria that must be satisfied to justify the launch of a tender procedure. These are supplemented by formal requirements concerning the tendering procedure, in order to ensure that the tendering process will be transparent and non-discriminatory, and to enable all interested undertakings to respond to the call, even if located in another

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<sup>838</sup> Article 13.1, Directive 2009/72/EC.

<sup>839</sup> Recital 43, Directive 2009/72/EC: ‘... Member States should have the possibility, in the interests of environmental protection and the promotion of new infant technologies, of tendering for new capacity on the basis of published criteria. Such new capacity includes, inter alia, electricity from renewable energy sources and combined heat and power.’

<sup>840</sup> Article 8.3, Directive 2009/72/EC.

<sup>841</sup> E.g., security of energy supply. See, in that respect, H. Bjørnebye, *Electricity Generation Capacity Tenders in the Security of Supply Interest: It's All Wrong, but It's All Right*, EUI Working Paper RSCAS No. 2007/06, Florence School of Regulation.

<sup>842</sup> Article 1, Directive 2009/72/EC.

Member State.<sup>843</sup> These formal requirements also ensure that the tender will be conducted in a competitive way, although the tender procedure constitutes in itself an intervention by the public authorities on the market, capable of distorting competition and investment signals.<sup>844</sup> Such an act of public intervention, undertaken to make up for the incapacity of private investors to secure the necessary investments in new RES-E generation capacity, is here clearly legitimised in the directive.

Article 8.2 of Directive 2009/72/EC leaves a wide margin of appreciation to Member States as regards the necessity of launching a tendering procedure aimed at ensuring new RES-E generation capacity. While the only condition provided for by the directive regarding the use of tendering concerns an insufficiency of the authorisation procedure to achieve the objectives of environmental protection and the promotion of infant new technologies, ‘those objectives’ are not defined any further, either by reference to the EU RES commitments or national strategies. The tendering procedure could consequently aim to ensure that the Member State meets its requirements under Directive 2009/28/EC, or that it exceeds them, by following a more ambitious RES policy. Both arguments would be acceptable justifications. The wide margin of appreciation left to Member States in these circumstances has induced commentators to conclude that the directive makes it ‘*de facto easier for Member States to rely on tender in the environmental interest than in the security of supply interest.*’<sup>845</sup>

Tender procedures are themselves a variety of support scheme and are used as the main support scheme for the development of RES-E generation in some Member States.<sup>846</sup> Tendering can operate as an independent support mechanism, but it can also be used as part of, or in parallel to, a national support scheme. It is indeed used to supplement both price-based and quantity-based schemes, in order either to introduce an additional element of competition between the projects or to provide additional support in favour of a particular type of RES-E technology.<sup>847</sup> In the latter case, the call for tenders can be oriented towards a specific RES-E technology.

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<sup>843</sup> Those different formal requirements as to the conduct of the tendering procedure are defined in paragraphs 3, 4 and 5 of Article 8 of Directive 2009/72/EC.

<sup>844</sup> M. Roggenkamp, C. Redgwell, A. Rønne, and I. Del Guayo, *Energy Law in Europe*, 2<sup>nd</sup> edition, (Oxford University Press, 2007), p. 349.

<sup>845</sup> H. Bjørnebye, *Investing in EU energy security – Exploring the regulatory approach to tomorrow’s electricity production* (University of Oslo, 2009), e.g., p. 275.

<sup>846</sup> E.g., France, Ireland and the United Kingdom have previously promoted renewable electricity generation purely through the use of tendering procedures: France operated the EOLE programme from 1996 to 2001; Ireland operated the Alternative Energy Requirement (AER) from 1995 to 2003; and the UK had from 1990 to 1998 a Non-Fossil Fuel Obligation (NFFO) scheme. In the United States, tendering procedures have been used as part of the compliance strategy of the obligated suppliers with Renewable Portfolio Standards, where suppliers tender the amount of RES-E generation they need to acquire.

<sup>847</sup> See the review of the use of tendering procedures in combination with price-based support schemes and quantity-based support schemes in: GreenStream, *Opportunities to utilise tendering as a part of a feed-in tariff system*, Final Report, January 2010, Doc. JR-100115-P7320-007, pp. 7-9. As this report notes, ‘*tender procedures utilised within different support mechanisms are increasingly technology specific and tenders are a common tool to supplement the predominant support mechanism*’ (p. 9).

Two recent examples can be added to this report. First, the launch of the first call for tenders for offshore wind in France in May 2011, in addition to the national FITs. Second, Norway is using tendering as part of its investment support system, under the supervision and control of ENOVA. Tendering is here used as a tool to promote competition tool in the granting of investment support. The Norwegian

Where other incentives may be granted to the tendered projects, Directive 2009/72/EC requires that these, including subsidies, must be indicated in the call.<sup>848</sup> In accordance, the call for tenders must specify whether the tendered projects will benefit from a TGCs scheme. This is done for information purposes and because it may raise issues of accumulation of aid between tendering procedures and support schemes, and ultimately of overcompensation.<sup>849</sup> Where the call for tenders is intended to support RES-E generation plants that are entitled to receive TGCs, the volume of tendered generation capacity will increase the supply of green certificates. Ultimately the effect will be greater at the level of the market than on the regulation of the scheme, since the call will increase the volume of TGCs issued within the category of eligible generators. Tendering procedures can also operate as supplementary support instruments in addition to a TGCs scheme under a quota obligation, where the scheme is not able to deliver the necessary financial support to allow the take off of different types of RES-E generation plants, in particular those employing emerging and costly technologies. An example is the use by the United Kingdom of tendering procedures for offshore wind, even though offshore wind farms are eligible to receive certificates under the Renewable Obligation. Here the intervention by the public authorities will directly increase the number of TGCs in favour of one type of technology. This diverges from the authorisation procedure whereby all RES-E technologies compete on equal terms. Finally, one could envisage a country wanting to avoid an excessive increase in TGCs price and deciding to issue a call for tenders for additional new RES-E generation capacity eligible to receive TGCs. The increase in RES-E generation could then increase the supply of TGCs and reduce the price of certificates. This would represent another form of market intervention, on both the electricity and the certificates markets.

The combination of tender procedures with quota-based support scheme has been widely used in the United States under the Renewables Portfolio Standards (RPS). The main difference is that in this case it is the obligated supplier who is launching the call for tenders, under the close scrutiny of the public authorities. In the State of California, obligated suppliers (investor-owned utilities/utilities) that bear the quota obligation (RPS) are required to issue calls for tenders in order to fulfil their requirements. The obligated suppliers are issuing the calls for tenders in order to acquire competitively renewable electricity in accordance with their RPS obligations.<sup>850</sup>

Finally, the effects that a tendering procedure for new generation capacity can have on a TGCs scheme must be distinguished from the situation where tenders are launched ‘on’

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investment support system is expected to be replaced by a green certificates scheme as already referred to in this thesis.

<sup>848</sup> Article 8.3, third sub-paragraph, Directive 2009/72/EC.

<sup>849</sup> The rules on accumulation of aids and risks of overcompensation have been reviewed in Chapter 7.

<sup>850</sup> The tendering procedure involves a multiplicity of actors: the utilities themselves; the bidders; the public authorities, *i.e.*, the CPUC and the California Energy Commission; an ‘Independent Evaluator’ for each RPS solicitation; and a Procurement Review Group, to name but some of the parties involved. The CPUC closely follows up the tendering procedure by, *inter alia*, defining the criteria for the ‘bid’ according to the ‘least-cost best-fit’ principle, and approving the RPS contracts finally concluded between the suppliers and the bidders in the form of a resolution or a decision. As regards the outcomes of tendering procedure for RPS compliance, it has been observed that ‘the California RPS is designed and targeted for large scale RES projects and for this purpose it works well. For smaller scale projects a feed-in tariff is applied.’ Source: GreenStream, *Opportunities to utilise tendering as a part of a feed-in tariff system*, Final Report, January 2010, Doc. JR-100115-P7320-007, p. 36.



TGCs. As mentioned in the introduction, a demand for TGCs can also be created by a call for tenders for TGCs.<sup>851</sup>

### **8.1.3.3 Conclusion: physical electricity market regulation and TGCs schemes**

Directive 2009/72/EC enables Member States to take into account the RES-E targets defined in Directive 2009/28/EC and to give priority to corresponding new RES-E generation projects as part of the authorisation procedure. Similarly, Member States can launch calls for tenders for new RES-E generation, which can be more specific as to the types of projects envisaged. Both procedures will result in new generation capacity, which will mean additional supply on the TGCs market from eligible generators. The financial support provided by the TGCs is intended to incentivise the construction of new RES-E generation, within the framework of the rules of the authorisation procedure.

The fact that priority can be given to RES-E generation, in the particular perspective of fulfilling or surpassing the mandatory targets laid down by Directive 2009/28/EC, requires a minimum of coordination, even indirectly, between the procedure for authorisation, tendering and the support schemes. The RES-E target may in practice serve as an indicator in the treatment of the authorisation procedure and the launch of tenders. As stated in the proposed legislation regarding green certificates in Norway, the level of ambition of the scheme depends on how much new RES-E generation the TGCs scheme must finance.<sup>852</sup>

Putting into operation the additional generation capacity resulting from efforts to meet the quota obligation presupposes coordination not only with generation capacity instruments such as authorisation and tendering, but also with the regime for connection and access to the grid. The additional capacity will have consequences for generation capacity planning and grid capacity planning. The establishment of an internal market in renewable electricity requires a holistic appraisal of multiple elements, ranging from planning, construction, connection, trading, supply and support.<sup>853</sup>

Finally, it should be noted that while almost all the procedures related to the physical electricity market aim primarily at ensuring competition, several criteria defined in EU electricity law allow discrimination in favour of new RES-E generation. This illustrates the manner by which EU electricity law deals with the policy paradox and legal equilibrium in the area of RES-E generation promotion.

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<sup>851</sup> For an analysis of the implementation option for a tender-based green certificates system, see: *Options for Design of Tradable Green Certificate Systems*, by the Netherlands Energy Research Foundation (ECN), the Science and Technology Policy Research Unit (SPRU), and Oeko-Institut, Doc. ECN-C--00-032, April 2000, pp. 28-33.

<sup>852</sup> Hearing note, Norwegian Ministry for Petroleum and Energy (OED), 08.12.2010, para. 4.3.2.

<sup>853</sup> This issue, which cannot be treated in this thesis because outside the scope of research, is again identified in section 11.2 of the Conclusion.

## 8.2 EU regulation of the electricity supply segment: effects on TGCs schemes

The size and outcomes of a TGCs market very much depend on the level of the quota obligation and the nature of the obligated parties. Both these factors are starting points for defining the demand for green certificates. Electricity suppliers generally bear the quota obligation under national TGCs schemes, and thus represent the core of the demand side of the certificates market. This means that the regulation of and the level of competition on the electricity supply market have direct consequences for the design and operation of a TGCs scheme. One of the central provisions of Directive 2009/72/EC in relation to electricity supply concerns liberalisation by the full opening of the retail market to competition. Full retail competition enables the establishment of ‘*a true European end-user market*’, which has been described by the Commission as ‘*the ultimate goal of the internal electricity and gas markets*.’<sup>854</sup> As for generation, the purpose of this section is to identify those supply-related provisions of the Electricity Directive that have the most influence on TGCs schemes. In general, it appears that TGCs scheme are most directly influenced by the total opening of the supply market to competition. Other provisions relating to the regulation of supply activities in the area of retail customers’ protection are addressed in section 8.3.

As for generation, supply is considered to be a potentially competitive segment of the electricity industry. Retail competition is as important for the completion of the internal market in electricity as wholesale competition.<sup>855</sup> The introduction of competition at supply level does not face the same types of barriers as those encountered at wholesale level. For example, entry barriers into the retail market are perceived as less harmful to competition than either customer immobility, caused by lack of information, or the enforcement of rights that ultimately favour incumbent suppliers.<sup>856</sup> Meanwhile, some of the EU legal requirements imposed on suppliers are the same as those imposed on generators. These include the unbundling requirement with regard to transmission/distribution activities.<sup>857</sup> The conclusions of the analysis in section 8.1.2 apply equally to generation and supply and will not be repeated here. Other legal requirements are specific to the supply segment. A core requirement for liberalisation is the full opening of the supply market to competition.

The Electricity Directive provides for a total opening of the electricity supply market as from 1 July 2007, following a gradual approach.<sup>858</sup> Since that date, ‘all customers’ have become ‘eligible customers’ and have been given the right to choose their suppliers

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<sup>854</sup> See proposal for a Directive of the European Parliament and of the Council amending Directive 2003/52/EC concerning common rules for the internal market in electricity, COM(2007)528 final, 19.09.2007, para. 5.6.

<sup>855</sup> *The Role of Retail Competition in Developing the European Electricity Market*, Eurelectric, 2006.

<sup>856</sup> L. Bergman, ‘Addressing market power and industry restructuring,’ in J.-M. Glachant and F. Lévêque, *Electricity Reform in Europe* (Edward Elgar, 2009), p. 85 and p. 79.

<sup>857</sup> Add provisions from Directive 2009/72/EC.

<sup>858</sup> Article 33.1, Directive 2009/72/EC. See also the definition of ‘eligible customer’, Article 2.12, Directive 2009/72/EC.

freely.<sup>859</sup> Some Member States, mainly the most recently acceding countries, are still in the process of liberalising their markets and benefit from transitional arrangements.<sup>860</sup> The progressive opening of the market was accompanied by a reciprocity requirement. While the latter ceased to apply with total market opening, it may still be relevant where a Member State has obtained an exemption under Article 33, in particular in the case of new Member States or an ‘emergent market’, and consequently continues to appear in the text of the Directive. The full opening of the supply market is intended to benefit both customers and suppliers. If all customers have a free choice of supplier, suppliers must also be able to conduct freely their activities to sell electricity to customers. This is a direct application of the guarantees provided for in the Treaty as regards the free movement of goods, the freedom of establishment and the free movement of services.<sup>861</sup> Freedom in the exercise of supply activities means that foreign suppliers obtain access to national customers.<sup>862</sup> The conditions applying to the exercise of supply activities may differ between Member States, but must be applied identically to national and foreign suppliers. This is an essential requirement for the establishment of an internal market in electricity. In particular, the national definition of electricity suppliers must conform to the provisions of Directive 2009/72/EC. The directive does not directly define the concept of ‘supplier’, instead defining the activity of supply, which is the ‘*sale, including resale, of electricity to customers.*’<sup>863</sup> A supplier should consequently be defined as the ‘electricity undertaking’, represented by a natural or legal person, that carries out the function of ‘supply’ and that is responsible for the commercial, technical or maintenance tasks related to this function.<sup>864</sup>

The requirement for a level playing field between national and foreign suppliers also applies to the quota obligation under a national TGCs scheme. It is important that the same quota obligation applies equally to national and foreign suppliers. If only domestic suppliers were quota obligated, this would impose an economic disadvantage on national suppliers that needed to buy certificates.<sup>865</sup> Where a quota obligation is imposed on suppliers, a foreign supplier will become quota-obligated as soon as it qualifies as a supplier in that Member State. While liberalisation and the application of the free movement rules give foreign suppliers equal access to supply activities, such suppliers are also subject to the same obligations as national suppliers. The license procedure is the key element for determining access to the activity of supply. To obtain a supply license, the foreign supplier will need to comply with all the requirements related to the exercise of the supply activity, including those related to the support of RES-E generation. In becoming quota-obligated, the foreign licensed supplier will support RES-E generation under the same national TGCs scheme as all other suppliers. In some Member States, the quota

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<sup>859</sup> The provisions on supplier switch and market opening are to be found in the articles on consumer protection: Article 3.5 (a), requiring the effective change of supplier by the operator(s) concerned within three weeks following the demand from a customer; Article 3.7, requiring Member States to ensure that eligible customers are ‘*in fact able easily to switch to a new supplier.*’

<sup>860</sup> For example, Estonia has until 01.01.2013.

<sup>861</sup> Recital 3, Directive 2009/72/EC.

<sup>862</sup> Recital 8, Directive 2009/72/EC.

<sup>863</sup> Article 2.19, Directive 2009/72/EC.

<sup>864</sup> Article 2.35, Directive 2009/72/EC.

<sup>865</sup> *Options for Design of Tradable Green Certificate Systems*, by the Netherlands Energy Research Foundation (ECN), the Science and Technology Policy Research Unit (SPRU), and Oeko-Institut, Doc. ECN-C--00-032, April 2000, p. 17.

obligation is integrated into the licensing procedure. This is the case in the United Kingdom, where compliance with the quota obligation forms part of the conditions for obtaining an Electricity Supply License. Non-compliance with the quota obligation will constitute a breach of the license.

The central outcome of liberalisation of supply is to allow new entrants onto the supply market. The consequence for a TGCs scheme will be to increase the number of quota-obligated parties and accordingly the demand for TGCs. There will be increased liquidity on the demand side of the TGCs market, with a better repartition of the quota obligation between obligated parties. The compliance costs for obligated suppliers will potentially be reduced as they will be shared between more suppliers (although the price of certificates also depends on demand). This means lower costs for customers, who ultimately bear the costs of compliance. For all these reasons, a competitive liberalised electricity supply market is of primary importance for the effectiveness of a TGCs market. The level of competition in the supply segment affects both the size of the supply market and the number of parties on the TGCs compliance market, as well as the liquidity of the latter, making compliance potentially easier and cheaper.

However, the opening of the market may not automatically result in increased competition and liquidity. It may result in a consolidation of the sector at the supply level, which entails, *inter alia*, the risks of abuse of a dominant position and market distortion. Equally, a concentrated supply market may cause a lack of liquidity on the demand side of the certificates market. This would have negative effects on the scheme as a whole, including its ability to reach the RES-E generation target at the lowest possible cost, which is the objective of a market-based instrument. Additional, non-sector-specific provisions of EU law are relevant here for avoiding anti-competitive behaviours on the retail market. These provisions include, in particular, Articles 101 TFEU prohibiting anti-competitive agreements and Article 102 TFEU prohibiting abuse of dominant position. Directive 2009/72/EC refers explicitly to Article 102 TFEU.<sup>866</sup> These non-sector-specific provisions of competition law have been applied consistently and are equally significant for the regulation of the supply sector.

While the category of electricity undertakings falling within the definition of ‘electricity suppliers’ is relatively easy to identify, the inclusion within or exclusion from the scope of the quota obligation of other categories of electricity undertakings has been the subject of debate. National TGCs schemes still vary on this point. In addition to suppliers, certain national TGCs schemes define the following as quota-obligated: electricity undertakings that generate themselves the electricity they consume (auto-producers); and undertakings that purchase electricity either on power pools for their own consumption or directly from a producer (wholesale consumers).<sup>867</sup> Energy-intensive industry is often excluded from the quota obligation, however. The Swedish legislation was amended with effect from 2007 in order to exclude energy-intensive industry from the quota obligation, which has been

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<sup>866</sup> E.g., Article 37.13 Directive 2009/72/EC: ‘Member States shall create appropriate and efficient mechanisms for regulation, control and transparency so as to avoid any abuse of a dominant position, in particular to the detriment of consumers, and any predatory behaviour. Those mechanisms shall take account of the provisions of the Treaty, and in particular Article 82 [ECT].’

<sup>867</sup> *Options for Design of Tradable Green Certificate Systems*, by the Netherlands Energy Research Foundation (ECN), the Science and Technology Policy Research Unit (SPRU), and Oeko-Institut, Doc. ECN-C--00-032, April 2000, p. 17.

reallocated from customers to electricity suppliers. The Norwegian government adopted a similar approach in its Electricity Certificate Act of 24 June 2011. These variations in scheme design may cause the same undertaking to become both quota-obligated and entitled to issue TGCs. Once again, this may raise competition concerns on the TGCs market, as these undertakings will be able buy and sell certificates between themselves, bilaterally, outside the market.

Market opening counts as one of its main benefits the ability given to customers to choose and switch suppliers. Customers' decisions will be motivated primarily by comparisons of the various offers available. To secure the benefits of the free choice of supplier, both Directive 2009/72/EC and EU consumer law define rights that benefit customers and impose obligations on suppliers. Those obligations concern in particular: disclosure; transparency in billing; metering; the removal of certain restrictive contractual provisions; protection against exclusivity clauses for large non-household customers; and dispute settlement. In that context, market opening motivates the tracking of electricity generation attributes which allows differentiating the products and competing.<sup>868</sup> Again, the use of this information would have little application in a non-competitive environment. The relationship between the customer's right to switch suppliers and TGCs is mainly important with regard to customer choice. The right to switch supplies does not directly affect the design or functioning of TGCs schemes. Customers base their decisions on keeping or switching suppliers primarily on information disclosed to them, in particular in electricity bills. The information a customer is likely to take into account includes the price of electricity, the sources of electricity generation, and the contractual conditions. In this context, it is important to recall the fundamental distinction between the use of generation attributes in order to comply with a quota obligation and their use for environmental disclosure, *i.e.*, green power marketing.<sup>869</sup> A supplier of renewable electricity that owns RES-E generation assets will normally comply with the quota obligation at little or no cost. This does not mean that it can sell its electricity as green. In order to do so, it will need guarantees of origin in an equivalent proportion to the electricity sold. The fact that it is a green supplier means that no additional costs will be incurred by its customers in relation to the purchase of TGCs. Costs relating to the purchase of expensive TGCs may play a part in a customer's decision to switch supplier. The ability to compare offers from different suppliers may influence the customer's decision, in particular when the price of the TGCs is disclosed in the bill. This effect is counter-balanced by two facts. First, national legislation does not always require the price of TGCs to be disclosed on the bill. This issue is discussed in detail in the next section. Second, if the price of the certificate is relatively low per unit of electricity, it may not be decisive for a customer who is considering a switch of supplier.

The importance of liberalisation of the supply sector for the design of TGCs schemes is challenged by the experience of the United States, where certain states operate green

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<sup>868</sup> P. A. Bradford, 'Some Environmental Lessons from Electricity Restructuring,' in Bradbrook A. J., Lyster R., Ottinger R. L. and Xi W. (eds.), *The Law of Energy for Sustainable Development*, IUCN Academy of Environmental Law Research Studies, (Cambridge University Press, 2005), p. 408.

On the link between electricity tracking and market opening, see: 'Framework conditions for tracking electricity in Europe,' E-TRACK WP2 report, IEE project 'A European Tracking System for Electricity (E-TRACK),' ECN-C—06-014, March 2006, p. 15.

<sup>869</sup> See section 1.2.2 and Chapter 6.

certificates schemes (so-called Renewable Energy Certificates, RECs) in a non-liberalised retail market.

### 8.3 Retail electricity prices and the integration of TGCs related costs'

Another key question in relation to the design of green certificates schemes concerns the additional costs of RES-E generation. Who will pay them? The answer to this question is relatively simple. Ultimately, electricity customers will bear the costs. The 'TGCs costs' referred to below are those resulting either from the purchase of TGCs on the compliance market or from the payment of the compliance fee. If the supplier is the quota-obligated party, it will integrate these costs into the retail electricity price. This raises a follow-up question of legal interest. How do suppliers pass on the TGCs costs to their customers? Addressing the consequences for end-users of TGCs schemes necessitates dealing with topics downstream of the compliance market. The TGCs compliance market has been and remains the core topic of this thesis, but it is not beyond the scope of this thesis to cover the retail sector too for a number of reasons. First, TGCs schemes make the end-user – the point at which electricity and the TGCs are re-bundled – the ultimate source of financing for RES-E generation. This fact reveals the close links between the TGCs and the electricity markets, the combination of which does not ultimately result in a green power offer for customers. Second, the manner in which the costs of supporting RES-E generation through a TGC scheme may be passed on to customers, as well as the information that must be provided to customers regarding this, is framed by EU law through both the Electricity Directive and consumer protection legislation. An analysis of the nature and scope of application of the EU rules is the central topic of this section.

The section starts with a review of the different alternatives and regulatory models for the integration of the costs of RES-E generation support schemes into supply electricity prices (8.3.1). Similarly there are various alternatives for the integration of TGCs costs into supply prices and these are categorised below (8.3.2). Finally, the discretion left to Member States to regulate the passing on of TGCs costs to customers is framed by EU law at two levels: retail price setting (8.3.3), and transparency in billing (8.3.4).

Before commencing the actual analysis, a final clarification is needed regarding the concepts of customers and consumers, as referred to in the following discussion. Electricity law refers primarily to customers, because the relationship between suppliers and their 'customers' is a central concern.<sup>870</sup> While Directive 2009/72/EC uses 'customer' as a standalone concept, it makes a distinction between the different categories of customers: wholesale, final, household, non-household and eligible.<sup>871</sup> Because the person paying the TGCs costs at the end of the supply chain is the '*customer purchasing electricity for his own use*,' the present section will refer primarily to the concept of the 'final customer.' This notion encompasses both household and non-household customers, and is used to emphasise the fact that the discussion concerns the retail market. When applicable, the broader concept of the 'customer,' referring to either the wholesale or the final customer, will also be used. The 'consumer' is a broader concept used in consumer

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<sup>870</sup> Article 41, 1<sup>st</sup> sub-paragraph, Directive 2009/72/EC.

<sup>871</sup> See corresponding definitions in Article 2, paras 7 to 12, Directive 2009/72/EC.

protection law, but also extensively used in Directive 2009/72/EC, mainly in relation to consumer protection but also as an alternative to the term customer.

### 8.3.1 Integration of the costs of RES-E generation support into supply prices

#### 8.3.1.1 The different components of retail prices

The structure of retail electricity prices differs widely across the EU Member States. Despite this, the following components are always present: (i) the commodity price, *i.e.*, the price of generating electricity;<sup>872</sup> (ii) network costs, *i.e.*, costs related to transmission and distribution, although other specific costs may also be included;<sup>873</sup> (iii) the costs of supplying the customer, which include technical supply costs together with commercial activities and other associated supply services; (iv) taxes and levies, *e.g.*, VAT or local levies. The proportions of these different costs in end-user prices vary, depending on variations in costs and on national legislation. When average prices are defined taking into account varying national conditions, the Commission concludes that the divergences between Member States reveal the current absence of an internal market in retail electricity.<sup>874</sup> In addition, some of these costs, in particular network costs, will almost always be subject to regulation, because they relate to non-competitive segments,<sup>875</sup> while other costs may be subject to competition. The particular nature of RES-E generation may result in the increase of certain of these costs or in the addition of new ones. This is particularly true for production costs, network costs and costs relating to ancillary services, such as balancing.<sup>876</sup> Because it represents a financial burden on electricity undertakings,

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<sup>872</sup> The commodity price used for billing depends on the type of contract entered into by the customer. For example, the contract could be based on real-time pricing, following developments on the wholesale markets, or on a periodically set price. The commodity price used could also depend on whether the supplier is providing unique or peak/off-peak pricing. In 2010, the European Commission reported that 63 per cent of tariffs in the EU were based on unique pricing (*The functioning of the retail electricity markets for consumers in the European Union*, Commission Staff Working Paper, SEC(2010) 1409 final, 11.11.2010, p. 7). The customer's incentive to reduce electricity consumption is of course greater in the case of real-time and peak/off-peak pricing.

<sup>873</sup> Some other costs can be included in network costs, such as ancillary services, cost of losses, stranded costs, compensation to isolated systems, compensation to connection for renewable energy installations and grid expansion. As pointed out below, the costs of supporting RES-E generation may also be integrated into network costs.

<sup>874</sup> As reported by the European Commission in 2010, prices vary widely among Member States, but depend very much on the inclusion of taxes and levies, as well as on differences in general price levels and the cost of living. In this respect, the report notes that '*The ranking of Member States in terms of the level of retail electricity prices changes markedly when prices are measured in [purchasing power standards, PPS].*' *The functioning of the retail electricity markets for consumers in the European Union*, Commission Staff Working Paper, SEC(2010) 1409 final, 11.11.2010, p. 31.

<sup>875</sup> See Article 32, Directive 2009/72/EC, which requires the Member States to implement a regulated system of third-party access to transmission and distribution systems.

<sup>876</sup> Among other things, the difference in costs may derive from decentralised generation, intermittent generation, more expensive energy source materials or expensive transformation technologies. Balancing costs due to the intermittent nature of RES-E generation is, for example, addressed in: *The support of electricity from renewable energy sources*, Communication from the Commission, COM(2005) 627 final, p.9; see also Annex 5 of the same document.

the support granted to RES-E generation needs to be integrated into the retail price. The manner of integration will vary according to the support scheme chosen, as detailed below.

Variations in one or more of these components may increase considerably the electricity price for final customers. For example, Denmark and Germany have traditionally imposed high levels of taxation on household electricity supplies.<sup>877</sup> Conversely, the UK imposes relatively low taxes on retail prices, but the commodity and network costs are higher.<sup>878</sup> Once taxes, levies and network costs are excluded, it appears to be the mix of input factors used to generate electricity that most influences retail prices.<sup>879</sup>

As further explained below in section 8.3.3, there are only a few remaining provisions of a general nature in EU legislation concerning the distinctions between the different costs, as defined above, that make up the price that appears on an electricity bill. The extent to which the Member States regulate such aspects of supply prices has been increasingly subject to scrutiny by the European Commission. The unbundling of the competitive and regulated components of retail prices, also termed the ‘unbundling of retail tariffs’, is one of the central elements in the process of liberalisation and the establishment of competitive electricity markets and has gained increasing attention.<sup>880</sup> Unbundling retail tariffs allows for two things. First, it offers customers the opportunity to distinguish between the different costs and compare supply offers. As a 2005 ERGEG report put it, ‘*Without easy verification of energy prices, separated from other components such as network prices or taxes, it is impossible to make a useful price comparison.*’<sup>881</sup> Second, it gives customers the opportunity to purchase the services separately where national legislation allows this, *i.e.*, the energy customer may choose to pay either a single bill combining grid and supply costs, or a separate bill for each of these costs. As concerns competitive retail prices (*prix de marché*) in France,<sup>882</sup> for example, the final customer can choose to conclude either a single contract with its supplier covering all costs or separate contracts for network costs and supply costs.<sup>883</sup> Norway is a frontrunner in the liberalisation of its retail market and

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<sup>877</sup> See, as regards Denmark, A. Rønne, ‘Energy law in Denmark,’ in M. Roggenkamp, C. Redgwell, A. Rønne, and I. Del Guayo (eds), *Energy Law in Europe*, 2<sup>nd</sup> Edition, (Oxford University Press, 2007), para. 7.338, p. 522. For a brief comparison of price levels in Member States, see data published on the Eurostat website at <[http://epp.eurostat.ec.europa.eu/portal/page/portal/energy/data/main\\_tables](http://epp.eurostat.ec.europa.eu/portal/page/portal/energy/data/main_tables)>.

<sup>878</sup> ECME Consortium, *The functioning of retail electricity markets for consumers in the European Union*, Final Report, November 2010, p. 319.

<sup>879</sup> ECME Consortium, *The functioning of retail electricity markets for consumers in the European Union*, Final Report, November 2010, p. xvii.

<sup>880</sup> Unbundling of retail tariffs is identified as one of the 10 components of the ‘textbook architecture’ for restructuring and competition by S. Littlechild, ‘Foreword: The Market versus Regulation,’ in F. P. Sioshansi and W. Pfaffenberger (eds), *Electricity market reform: an international perspective*, (Elsevier, 2006), p. xviii. See also P. L. Joskow, ‘US vs. EU electricity reforms achievement,’ in J.-M. Glachant and F. Lévêque (eds), *Electricity Reform in Europe* (Edward Elgar, 2009), pp. xvi-xviii.

<sup>881</sup> *Report on Transparency of Energy Prices, Bills and Contracts*, ERGEG, Doc. E05-CFG-02-07, 30 September 2005, p. 6.

<sup>882</sup> Regulated tariffs and competitive prices co-exist at the retail level on the French electricity market.

<sup>883</sup> In the first case, the customer has concluded a so-called ‘unique contract’ (*contrat unique*). In the second case, the customer has concluded a contract for network access (*contrat d'accès aux réseaux*), CARD or CART. *Loi n°2000-108 du 10 février 2000 relative à la modernisation et au développement du service public de l'électricité* (JORF No.35, 11.03.2000, p. 2143), as amended.



also offers several choices in terms of retail contracts.<sup>884</sup> In general, Norwegian customers that have switched supplier following the opening of the market will receive two bills.<sup>885</sup> In 2010, the ERGEG reported that in a majority of countries, the network and supply components were still bundled into one customer bill. This practice of bundling network and supply bills may be anti-competitive and discriminatory towards alternative suppliers. It may raise concerns as to the ability of competitors to enter the supplier market. While these concerns have already been noticed,<sup>886</sup> the issue does not appear to have been taken up by the competition authorities either at EU or national level. The maintenance of regulated retail tariffs has attracted more attention so far.

### 8.3.1.2 Alternatives for integrating RES-E costs into retail prices: focus on RES-E generation support instruments

There are three main reasons why the various costs of supporting RES-E generation are reflected differently in electricity bills across the EU. First, the extra costs involved in RES-E generation appear at different levels in the electricity value chain (*e.g.*, investment, generation, connection and grid expansion), and as a result are integrated according to different modalities. Second, the RES-E support policies vary between the Member States and their costs are necessarily integrated differently. Third, the details of rate design regulation remain within the competence of the Member States, subject to a requirement to respect the general principles of EU law, as reviewed in this section.<sup>887</sup> It is consequently difficult to estimate precisely the proportion of the end-user price that is dedicated to supporting renewable electricity generation. In 2005, the European Commission reported that support for renewables represented between 4 and 5 per cent of electricity tariffs in Spain, the United Kingdom and Germany, while it represented 15 per cent in Denmark. It has already called upon governments to improve ‘*consumer information on how the cost of a renewable energy support is transferred to the user.*’<sup>888</sup> The integration of costs related to support schemes is in the rest of this section examined separately from the integration of other costs related to RES-E generation. Meanwhile, any consistent system of RES-E regulation for a competitive sector must take into account the different sources of support in order to avoid overcompensation.

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<sup>884</sup> The three model contracts used in Norway for retail household customers are: the standard variable contract, *i.e.*, a spot-led contract whereby the supplier must inform customers about price modifications two weeks before they occur (these accounted for 42 per cent of the household market in 2009); the market contract, based on the average monthly area spot price with a mark-up; and the fixed-priced contract. Source: *Report on regulation and the electricity market – Norway*, National report to the European Energy Regulators (CEER & ERGEG), Norwegian Water Resources and Energy Directorate (NVE), 2010, p. 17. See also NVE, *Energistatus*, 2011, p. 71.

<sup>885</sup> See I. A. Fredriksen, *Strømvavtaler*, (Energi Forlag AS, 2007), p. 141.

<sup>886</sup> The question is raised succinctly by the ERGEG in *Implementation of EC Good Practice Guidance for Billing – ERGEG Status Review*, ERGEG, Doc. E-10-CEM-36-03, 8 September 2010, p. 7.

<sup>887</sup> See *The support of electricity from renewable energy sources*, Communication from the Commission, COM(2005) 627 final, p. 45. In its communication, the Commission also reports that: ‘*The majority of countries in the EU do not give the explicit cost of renewable energies in electricity bills. The transfer of the cost of renewable electricity depends on national regulation aspects and the tariff structure.*’

<sup>888</sup> *The support of electricity from renewable energy sources*, Communication from the Commission, COM(2005) 627 final, p. 9.

Different support schemes will involve different modalities for passing on the costs of the support to customers. Three main alternatives are identifiable. The first is where the financing derives from green taxes and levies, and is integrated into the tax/levy component of the electricity bill. A second is where the additional costs are integrated into the network costs, pursuant to an obligation imposed on network actors, as happens under certain FITs and TGCs schemes. A third is where the financing costs are primarily borne by the supplier, who passes the costs on to customers as part of the competitive component of the bill. Of course, these alternatives are often combined in practice, and are all reflected in the end-user price.<sup>889</sup>

The opening of the supply sector to competition provides opportunities and challenges regarding the passing on of costs to customers. The main gain for the customer lies in being better informed about the different price components and being able to make an informed choice regarding its supplier. On the other hand, unbundling the different components of the price including, in particular, the competitive and non-competitive components, may make it difficult to cover the extra costs related to RES-E generation.<sup>890</sup> In that context, suppliers pay particular attention to the types of contractual arrangements (e.g., fixed rate or variable rate) they make with customers in order to cover all the extra costs.

A relevant question here is whether the need to display the level of support is greater under a TGCs scheme than under, e.g., a FITs scheme. Disclosure of the costs of support is inherent to the opening of the retail market to competition, where customers can freely choose their suppliers on the basis of, in particular, price. The comparison between supply offers is here worth for any type of support scheme that involves a direct cost for customers.<sup>891</sup> On the other hand, the disclosure of the cost of support is an additional incentive in the case of TGCs support schemes. By making apparent the TGCs costs to customers, suppliers will compete to comply with the quota obligation at the lowest possible price, as price and compliance become increasingly important factors in the customer's choice of supplier. This is in line with the logic of the market-based instrument to ensure compliance at the lowest possible cost.

Several studies have examined the impact of renewable energy support schemes on electricity prices.<sup>892</sup> Very few studies, however, have looked at how the integration of

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<sup>889</sup> Eurelectric, *Report on Tariff Structure Issues – System Tariff Issues Working Group*, February 2000, Ref. 2000-220-0002, pp. 6-7.

<sup>890</sup> As summed up by Eurelectric in a 2000 paper on tariff structure: 'When the supply is liberalised, and the consumer acquires energy on his own, obviously at the best price, the problem arises of how to recover the extra costs as a result of the production with renewable energies.' Eurelectric, *Report on Tariff Structure Issues – System Tariff Issues Working Group*, February 2000, Ref. 2000-220-0002, pp. 6-7.

<sup>891</sup> Support granted through a direct aid from the state to a renewable energy project (e.g., direct investment aid or R&D) is financed by the state budget and the costs cannot 'directly' be identified in the electricity bill.

<sup>892</sup> See, for example, the following economics studies: S. Bode, *On the impact of renewable energy support schemes on power prices*, Hamburg Institute of International Economics (HWWI), Paper 4-7, 2006; G. Sáenz de Miera, P. del Río González, I. Vizcaíno, 'Analysing the impact of renewable electricity support schemes on power prices: The case of wind electricity in Spain,' *Energy Policy* 36(2008), pp. 3345-3359; T. Traber and C. Kemfert, *Impacts of the German Support for Renewable Energy on Electricity Prices, Emissions and Profits: An Analysis Based on a European Electricity Market Model*, German Institute for Economic Research (DIW Berlin), Discussion Papers 712, July 2007.

these costs is regulated. The following paragraphs aim to fill this gap by taking the precise example of the passing on to the final customer of the costs of compliance with green certificates schemes.

### **8.3.2 The integration of TGCs price into electricity supply prices: alternatives**

Depending on the party bearing the quota or purchase obligation, there are basically two alternatives for integrating TGCs costs into the electricity price charged to the end-user: integrating the extra costs into the commodity price, which is subject to competition (8.3.2.1); or integrating the extra costs into the grid system costs, where grid operators are required to purchase TGCs as a public service obligation (8.3.2.2).

#### **8.3.2.1 Integration of TGCs costs into the competitive component of the retail price**

In this case, the costs to be allocated will relate either to the price of the certificates purchased on the TGCs compliance market or to the level of the compliance fee in the event that the obligated party was unable to submit enough certificates. Here the integration of the TGCs costs into the retail electricity price occurs downstream of the compliance market for TGCs. This means that the RES-E generation plant has already received support and the obligated party has paid for it, but the costs of the support (the price of the TGCs or the compliance fee) have not yet been passed on to the customer, and this is done by the supplier. This explains why, in the situation where the quota obligation is defined on suppliers, the TGCs costs will form part of the competitive component of the retail price charged to the end-user. The cost of the TGC (or the compliance fee) is integrated into the energy commodity costs and the supply margin of the supplier. This is also why the tracking system inherent to TGCs schemes must be reliable in order to follow successive transactions on the TGCs market and changes in ownership.

#### **8.3.2.2 Mandatory TGCs purchase defined as a public service obligation (PSO): integration of TGCs costs into network costs**

Although it is less common, certain national schemes provide for the integration of TGC costs into the regulated component of the supply price, *i.e.*, the network costs. This is the case, for example, in Flanders, Belgium, for photovoltaic (PV) installations. The reason for this is that the grid system operator, the TSO or DSO, is required by law to buy the TGCs. In the case of Flanders, the TSO (Elia) is required to buy the TGCs from photovoltaic generators (PV-TGCs) at a set minimum price when a PV-E producer demands it to do so. The TGCs purchase obligation is itself defined as a public service obligation (PSO) in accordance with the regime defined in Directive 2009/72/EC, as the system operator would presumably not consider the purchase of the TGCs to be in its commercial interest and accordingly would not purchase them if it were not obliged to do so.<sup>893</sup> This means that the final customers will still pay the TGCs costs of the PV plant, but

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<sup>893</sup> The definition of PSOs, by reference to Article 2 of Council Regulation No. 1191/69 of 26 June 1969 (OJ L 156 of 28.06.1969) concerning PSOs in inland transport, stipulates that PSOs are ‘*obligations which the undertaking ..., if it were considering its own commercial interests, would not assume or would not assume to the same extent or under the same conditions.*’ See also *Public Service Obligation*,

these will be integrated into the network costs of the electricity bill. This section analyses the conditions under which the mandatory purchase of TGCs can be defined as a PSO under Directive 2009/72/EC. The EU regime applied to the passing on of TGCs costs resulting from a PSO imposed on network operators is reviewed in next section.

While the definition, implementation and financing of PSOs in relation to renewable energy is left to the discretion of the Member States, these matters remain subject to the conditions laid down in two provisions of EU law: first, the sector-specific regulation contained in Article 3.2 of Directive 2009/72/EC; and second, the general rule contained in Article 106.2 TFEU (formerly Article 86 EC). Article 3.2 of Directive 2009/72/EC requires the PSOs to be ‘*clearly defined, transparent, non discriminatory, verifiable,*’ and to guarantee equal access for EU electricity undertakings to consumers of that Member State.<sup>894</sup> Article 106.2 TFEU requires that when an undertaking is entrusted with the operation of services of general economic interest (SGEI), the measure must be proportional *stricto sensu*, i.e., ‘*the development of trade must not be affected to such an extent as would be contrary to the interests of the Union.*’ The European Commission must be notified of the adoption of PSOs and will evaluate their validity. The Commission also published a non-legally binding interpretative note in 2004 in which it ‘*indicates*’ how it intends to assess PSOs defined under the Electricity and Gas Directives in order to avoid such PSOs distorting competition and hampering the opening of the market. In the same note, the Commission announces that it will require that the PSOs imposed ‘*must be related to the supply of the service of general economic interest in question,*’ must contribute directly to satisfying this general economic interest, and must be proportional *stricto sensu*.<sup>895</sup>

This list of criteria is another illustration of way in which EU law addresses the policy paradox entailed in balancing the interests of competition and environmental protection. Although the Electricity Directive states in its preamble that the ‘*respect of the public service requirements is a fundamental requirement of [the] directive,*’<sup>896</sup> the legality of the adoption of a PSO will depend on respecting EU competition rules (in particular state aid rules) and proportionality. More precisely, since electricity is defined as an essential goods, and the promotion of RES-E is an objective of general EU interest, it will be necessary to assess whether the mandatory purchase of TGCs through the definition of a PSO is an appropriate instrument. The following analysis of the criteria will follow the provisions of the Electricity Directive, as interpreted by the Court, supplemented by the criteria referred to in the Commission’s interpretative note. Some of these criteria can be considered to overlap those of Article 106.2 TFEU, while others are complementary. It may not be necessary to apply all these criteria concomitantly to conclude on the legality of a PSO, and the Court itself does not apply all of them. It should also be noted that while

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Note of DG Energy & Transport on Directives 2003/54/EC and 2003/55/EC on the internal market in electricity and natural gas, European Commission, 16.01.2004, p. 2.

<sup>894</sup> C-265/08, *Federutility and Others*, [2010] ECR.

<sup>895</sup> *Public Service Obligation*, Note of DG Energy & Transport on Directives 2003/54/EC and 2003/55/EC on the internal market in electricity and natural gas, European Commission, 16.01.2004. See also the criteria enunciated in an earlier note from the European Commission, of 29 April 1999 on PSOs in the gas sector, which also applies to electricity.

<sup>896</sup> Recital 46, Directive 2009/72/EC: ‘*Respect of the public service requirements is a fundamental requirement of this Directive. [...] It is important that the public service requirements can be interpreted on a national basis, taking into account national circumstances and subject to the respect of Community law.*’

there is extensive jurisprudence on the assessment of PSOs in relation to, *e.g.*, security of supply, there have been few judgments in the field of renewable energy.

First, the objective of the PSO must be ‘*clearly defined.*’ Assessing the definition of the PSO’s objective allows an assessment of the legitimacy and conformity of the PSO with the directive’s objectives, which also relates to the first element of the proportionality test. Directive 2009/72/EC explicitly allows Member States to impose PSOs on electricity undertakings in relation to environmental protection, ‘*including energy from renewable sources.*’<sup>897</sup> The reference to ‘energy from renewable sources’ as an example of environmental protection measures, and as a reason for introducing the implementation of long-term planning, was added to the text of Directive 2009/72/EC by the European Parliament in its first reading. By explicitly including renewable energy in the list of environmental protection objectives, the directive clarifies the basis for imposing PSOs in that field – although one can argue that both environmental protection and security of supply could justify the adoption of PSOs in relation to renewable energy. In any event, the addition makes the legal basis for adopting PSOs for renewable energy explicit and ‘legitimises’ PSOs adopted to support RES-E generation. It can also be concluded from a combined reading of Article 194.1 TFEU, Article 3.2 of Directive 2009/72/EC and Articles 1 and 3 of Directive 2009/28/EC that the promotion of renewable energy is an interest for the whole EU. The last part of Article 3.2 takes the different objectives and sub-objectives separately, and makes renewable energy a separate goal justifying the adoption by Member States of long-term planning. The Parliament found this addition necessary as at the time the EU was negotiating a new binding 20 per cent target for the use of renewable energy in a separate piece of legislation – Directive 2009/28/EC – and this particular goal would ‘*require specific action in the electricity sector, which may be different from those relating to environmental protection.*’<sup>898</sup> As a result, the promotion of energy from renewable sources appears twice in Article 3.2 in relation to PSOs, once as an implementing modality for the purpose of environmental protection, and a second time as a separate objective justifying the adoption by Member States of long-term planning. In the present case, the mandatory purchase of TGCs in the form of a PSO aims to ensure support for RES-E generation, which is a clear objective of the EU associated with mandatory targets for the Member States. In a competitive environment, and for technologies with higher generation costs, the price of the TGCs might be too high to be attractive on the TGCs market. Or, if the TGCs were sold too cheaply on the market, the difference in generation costs compared with competitive technologies might not be covered. For these reasons, some Member States have defined as a PSO on system operators the purchase of TGCs for particular RES-E technologies at a minimum price. The ‘public service’ here is embodied in the need to guarantee the promotion of less commercial RES-E generation technologies that might not occur through ‘*the simple operation of the market mechanism.*’<sup>899</sup>

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<sup>897</sup> Article 3.2, Directive 2009/72/EC.

<sup>898</sup> Amendment no. 36, Justification, Report for the Committee on Industry, Research and Energy, European Parliament, by Rapporteur Eluned Morgan, on the proposal for a directive of the European Parliament and of the Council amending Directive 2003/54/EC concerning common rules for the internal market in electricity, (COM(2007)0528 – C6-0316/2007 – 2007/0195(COD)), 19 May 2008. The amendment was adopted by the European Parliament in its legislative resolution of 18 June 2008 concerning the same proposal for directive, as well as by the Council.

<sup>899</sup> C. Jones, *The Internal Energy Market*, EU Energy Law, Volume 1 (Claeys & Casteels, 2004), p. 114.

Second, the PSO must be *transparent*. The Interpretative Note from the European Commission provides a full list of requirements to meet this criterion. The Commission considers that the PSO must be assigned by way of an official public instrument, such as ‘*a legislative or regulatory instrument or a contract or instruction.*’ In addition, the Commission considers that the official instrument defining the PSO must specify: ‘*the nature of the public service obligations; the undertakings and territory concerned; the responsibility for determining the undertaking’s selling process and the conditions for reviewing such prices; the nature of any exclusive or special rights assigned to the undertakings; the amount of any compensation granted to the undertakings and any revision clauses; the period covered by these obligations.*’<sup>900</sup>

Third, the PSO must be *non-discriminatory*. Member States must take the appropriate measures to ensure that the PSO is realised on non-discriminatory terms, as it may affect competition. This criterion goes together with the requirements imposed on Member States by Article 3.1 of Directive 2009/72/EC to ensure that electricity undertakings respect the provisions of the directive, and not to discriminate between these undertakings (as regards either rights or obligations). While tendering is the best solution for ensuring non-discrimination when imposing a PSO, it may not be feasible to impose the PSO of buying TGCs on another undertaking than the transmission or distribution system operator. TSOs and DSOs are indeed the undertakings best suited to carry out this PSO because of their role in grid management and metering. While it is possible to envisage the purchase obligation being imposed on an actor other than the system operators, the directive limits the imposition of PSOs to undertakings operating in the electricity sector (*i.e.*, an electricity undertaking).<sup>901</sup>

Fourth, the PSO must be ‘*verifiable*’. This criterion refers to the element of proof that the Commission requires in its control of PSOs. The interpretative note points out that the burden of proof lies with the public authority that imposes the measure (or, exceptionally, with the undertakings itself), and emphasises that the Commission must be provided with information about ‘*all measures adopted.*’ This obligation derives from the notification obligation imposed on Member States by Article 3.15 of Directive 2009/72/EC: any definition by a Member State of a PSO must be notified to the Commission, along with the ‘*possible effect on national and international competition*’ of the measure, and whether it requires a derogation from the directive.

This provides a procedural link to the two final criteria relating to PSOs, which form part of the proportionality test, *i.e.*, *necessity* and *proportionality stricto sensu*. The extent to which the definition of the purchase obligation is necessary depends on its appropriateness with regard to the objective of the obligation, which has already been referred to above. The proportionality test *stricto sensu* will require an assessment of whether the purchase obligation is the least restrictive possible option with respect to competition and trade. The effects of TGCs schemes on trade in electricity are assessed in detail in Part IV of the thesis.

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<sup>900</sup> *Public Service Obligation*, Note of DG Energy & Transport on Directives 2003/54/EC and 2003/55/EC on the internal market in electricity and natural gas, European Commission, 16.01.2004, point 2.2.

<sup>901</sup> An ‘electricity undertaking’ is defined in Article 2.35 of Directive 2009/72/EC as ‘*any natural or legal person carrying out at least one of the following functions : generation, transmission, distribution, supply, or purchase of electricity, which is responsible for the commercial, technical or maintenance tasks related to those functions, but does not include final customers.*’

The preceding analysis allows for two concluding remarks. First, the explicit reference to renewable energy promotion and the mandatory target of Directive 2009/28/EC in the text of Article 3.2 facilitates the definition of certain elements of support schemes as PSOs. The link between PSOs and support schemes has already been deduced from the provisions of Directive 2003/54/EC.<sup>902</sup> Several Member States, such as France, Luxembourg and Ireland, have defined parts of their support schemes as PSOs. However, the direct references added in Article 3.2 Directive 2009/72/EC reinforce the legal basis.

The second concluding remark concerns the case of Belgium, which allows for different methods of passing on TGCs costs. The Belgian federal energy regulator (*Commission de Régulation de l'Electricité et du Gaz*, CREG) pointed out that the costs borne by final customers for supporting green electricity generation in the three regions varied widely – in one region the cost was almost double – because of the differences in TGC purchase obligations, support levels and methods of passing on TGCs costs.<sup>903</sup> The regulator also pointed out that risk of high transport and distribution costs in Flanders due to the obligation to purchase TGCs at a fixed price.<sup>904</sup> This resulted in an extremely favourable level of support for PVs in Flanders, where PVs benefited *de facto* from a fixed level of financial support far removed from the logic of market-based support a green certificate ought to represent. The risk of integrating the price of TGCs into distribution costs is that it may jeopardise the objective of making RES-E technologies competitive, resulting in overcompensation in favour of certain technologies. This risk was underlined by the CREG itself, which stressed that the system as it was implemented in Belgium reflected only one price per region for green certificates, combined with a minimum TGC price, while in practice generation costs varied widely between technologies.<sup>905</sup> There is also another risk related to the burden borne by customers as regards the level of RES-E support when the quota obligation is imposed on more than one party. The final customer may end up paying two sets of TGCs costs – those encountered by the system operator and those of the supplier. The two sets of TGCs costs do not relate to the same unit of energy produced, but nevertheless represent a double financial burden for the customer. These elements constitute critical evolutions in the regulation of TGCs schemes. By using the exemptions based on environmental protection, justified under EU law, the TGCs schemes may result in an unjustified burden on consumers, overcompensation and lack of competition between RES-E generation technologies. Here there is a difficult balance to strike between a technology-neutral scheme, which may only result in the development of a few cost-effective technologies, and an extremely differentiated scheme, which more or less results in fixed tariff support.

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<sup>902</sup> The fact that the provisions of the Electricity Directive on PSOs could embrace elements of support schemes had already been noticed under Directive 2003/54/EC. See A. Gunst, 'Impact of European Law on the Validity and Tenure of National Support Schemes for Power Generation from Renewable Energy Sources,' *Journal of Energy & Natural Resources Law* (2005:23), No.2, p. 119. However, the additions made in Directive 2009/72/EC legitimise and facilitate such an approach.

<sup>903</sup> *Etude relative aux différents mécanismes de soutien de l'électricité verte en Belgique*, Commission de Régulation de l'Electricité et du Gaz (CREG), 20.05.2010, p. 26.

<sup>904</sup> *Etude relative aux différents mécanismes de soutien de l'électricité verte en Belgique*, Commission de Régulation de l'Electricité et du Gaz (CREG), 20.05.2010, p. 51.

<sup>905</sup> *Etude relative aux différents mécanismes de soutien de l'électricité verte en Belgique*, Commission de Régulation de l'Electricité et du Gaz (CREG), 20.05.2010, p. 60.

When reviewing the TGCs system operated in Belgium, the CREG underlined the lack of transparency of the regional pricing system as regards the passing on of TGCs costs, as well as the risk of imposing an excessive financial burden on certain customers. Both issues are addressed under EU law in two sets of provisions: retail price setting (8.3.3) and transparency in billing (8.3.4).

### **8.3.3 Retail price setting and the integration of TGCs costs**

This section identifies the provisions of EU law that apply to retail electricity price setting. This is the starting point for assessing how TGCs costs can be integrated by suppliers into their retail prices. Here a distinction needs to be made between competitive retail prices (8.3.3.1) and regulated retail prices (8.3.3.2). The passing on of TGCs costs following the imposition of a PSO on system operators is also regulated by EU law but is subject to other provisions (8.3.3.3).

#### **8.3.3.1 Integration of TGCs costs into competitive retail electricity prices**

To secure the objectives of competition and consumer protection, competitive retail prices must conform to a series of requirements defined in Directive 2009/72/EC. These criteria are equally applicable to a retail electricity price that includes integrated TGCs costs. They concern the general criteria for retail price setting (sub-section (a) below) and the monitoring role of the national regulatory authority (sub-section (b)). Alterations to the retail electricity price following the integration of TGCs costs will also be regulated by non-sector-specific consumer protection legislation (sub-section (c)).

*(a) The general criteria applicable to supply electricity price setting defined in Directive 2009/72/EC*

In accordance with the principles of subsidiarity, proportionality and the repartition of competences as provided for in the TFEU,<sup>906</sup> the details of retail price setting remain primarily within the competence of the Member States. This is for two reasons. First, their harmonisation is not necessary to the attainment of EU objectives and, second, prices should not be regulated in competitive retail markets.<sup>907</sup> Consequently, Directive 2009/72/EC contains only a few requirements as regards retail price setting, which are of a general nature. These requirements aim to secure certain objectives of EU law, both in terms of competition and consumer protection. As regards consumer protection, it is important to remember that, pursuant to Article 169 TFEU, the Union shall contribute to the promotion of consumers' interests and ensure a high level of consumer protection in all EU measures.<sup>908</sup> There are two comments to make in relation to the new provisions of the TFEU and consumer protection. First, Article 153.2 of the former EC Treaty provided for a stronger integration of consumer protection into the Union's policies, namely:

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<sup>906</sup> Pursuant to Article 4.2 TFEU, the areas where the Union and the Member States exercise shared competence include: (a) internal market; (f) consumer protection; (i) energy.

<sup>907</sup> As reviewed in sub-section (c) of this section.

<sup>908</sup> Pursuant to Article 169.2, the measures adopted by the Union for the attainment of the objectives of consumer protection defined in Article 169.3 are of two kinds: (a) 'measures adopted pursuant to Article 114 [approximation of laws] in the context of the completion of the internal market'; and (b) 'measures which support, supplement and monitor the policy pursued by the Member States.'



*‘Consumer protection requirements shall be taken into account in defining and implementing other Community policies and activities.’* This paragraph has been removed. This suggests that the requirements to integrate environmental protection into other EU policies are somewhat stronger than those concerning consumer protection.<sup>909</sup> Second, the objective of consumer protection is not mentioned in the Treaty provisions on energy, while that of environmental protection is (Article 194 TFEU).

Most of the requirements in Directive 2009/72/EC on retail price setting are contained in Article 3, which provides for a necessary balance between competitive prices and consumer protection. On the one hand, the directive defines *‘competitive prices’* as a general objective,<sup>910</sup> in line with the logic of a competitive electricity market.<sup>911</sup> On the other hand, public service requirements play an important role in the definition of customer rights as regards pricing. In particular, Directive 2009/72/EC calls for the *‘strengthening’* of public service requirements in order to ensure that *‘all customers’* can benefit from *‘competition and fair prices.’*<sup>912</sup>

The directive contains more detailed requirements regarding supply prices in relation to universal service in Article 3.3. According to the directive, Member States have an obligation to ensure that all households and, where the Member State deems it appropriate, all small enterprises,<sup>913</sup> benefit from universal service. Universal service is defined as *‘the right to be supplied with electricity of a specified quality within their territory at reasonable, easily and clearly comparable, transparent and non-discriminatory prices.’*<sup>914</sup> The requirement to provide customers with *‘transparent information on applicable prices and tariffs’* is also contained in Annex I to the directive, para. 1(c). Without explicitly mentioning supply prices, Article 3.7 may also be interpreted as defining some requirements for supply pricing in the context of Member States’ duties to protect final customers and, in particular, safeguards to protect *‘vulnerable customers.’* Here a *‘high level of consumer protection’* is required, *‘particularly’* as regards transparency in contractual terms and conditions, general information and dispute settlement mechanisms.

It follows from the above provisions that the four key criteria defined in Directive 2009/72/EC require retail price setting to be: reasonable; comparable; transparent; and non-discriminatory.

A fifth criterion regarding *‘fair prices’* can be added to the list and is mentioned in the preamble to Directive 2009/72/EC. Recital 50 of the directive provides that all consumers, especially vulnerable ones, must be able to benefit from *‘fair prices’* as part of the public services requirements, including that of universal service. The term is not repeated in the text of the directive, but is a common concept in the sphere of consumer protection law.

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<sup>909</sup> This had already been pointed out in relation to the provisions of the former EC Treaty. See *‘EU Energy Law,’* in M. Roggenkamp, C. Redgwell, A. Rønne, and I. Del Guayo (eds.), *Energy Law in Europe*, 2<sup>nd</sup> Edition, (Oxford University Press, 2007), para. 5.401, p. 388.

<sup>910</sup> Recitals 1 and 5 of Directive 2009/72/EC.

<sup>911</sup> Article 3.1, Directive 2009/72/EC.

<sup>912</sup> Recital 50 Directive 2009/72/EC.

<sup>913</sup> Small enterprises are defined in Article 3.3 of Directive 2009/72/EC as *‘enterprises with fewer than 50 occupied persons and an annual turnover or balance sheet not exceeding EUR 10 million.’*

<sup>914</sup> Article 3.3 of Directive 2009/72/EC. Emphasis added. See also Recital 45 of Directive 2009/72/EC.

The interpretation of the concept of ‘fair price’ has derived mainly from the provisions of Council Directive 93/13/EEC of 5 April 1993 on unfair terms in consumer contracts. The extent to which a supplier’s right to increase the retail electricity price following the integration of TGCs costs may constitute an ‘unfair term’ of the electricity delivery contract to the final customer is reviewed below.

*(b) The role of the national regulatory authority in retail electricity price monitoring under Directive 2009/72/EC*

Besides the criteria identified above, Directive 2009/72/EC addresses the issue of national retail prices as part of the general objectives (‘core duties’) to be attained by the national regulatory authority (NRA), as defined in Article 36 of the directive.<sup>915</sup> In order to attain these objectives, the directive imposes mandatory duties on the NRA in terms of supply price monitoring.<sup>916</sup> First, the NRA must monitor ‘*the level and effectiveness of market opening and competition at wholesale and retail levels, including on electricity exchanges, prices for household customers including prepayment systems, switching rates, disconnection rates, charges for and the execution of maintenance services, and complaints by household customers, as well as any distortion or restriction of competition, including providing any relevant information*’.<sup>917</sup> In the event of any concerns, the NRA must bring a case before the relevant competition authorities.<sup>918</sup> The NRA must also contribute to ensuring the effectiveness and enforcement of customer protection measures, as defined in Annex I to Directive 2009/72/EC,<sup>919</sup> which include, as mentioned above, some criteria with regard to supply prices. Finally, the regulatory authority shall publish recommendations, at least annually, in relation to the compliance of supply prices with Article 3 of Directive 2009/72/EC. These recommendations shall be provided to the competition authorities, where appropriate.<sup>920</sup> These monitoring tasks fall within the scope of responsibility of the authority with regard to both competitive and regulated retail prices (tariffs). In the case of regulated retail prices, the monitoring role of the regulatory authorities is often coupled with a control role that involves the drafting, approval or adoption of retail tariffs.

A reading of the directive’s provisions makes it clear that the role of the NRA in the monitoring of the retail electricity market has been reinforced and is now subject to precise

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<sup>915</sup> See in particular Article 36 (g) and Article 36 (h) of Directive 2009/72/EC. On the distinction between the ‘core duties’ and the ‘monitoring duties’ attributed to the NRA, see *The National Regulatory Authorities*, Commission Staff Working Paper, Interpretative Note on Directive 2009/72/EC concerning common rules for the internal market in electricity and Directive 2009/73/EC concerning common rules for the internal market in natural gas, 22.01.2010, pp. 12-16.

<sup>916</sup> The Member State may choose to designate other authorities than the NRA to carry out the monitoring duties defined in Article 37.1 of Directive 2009/72/EC, subject to the existence of satisfactory routines for the exchange of information between the NRA and the designated authority (Article 37.2 Directive 2009/72/EC).

<sup>917</sup> Article 37.1 (j) of Directive 2009/72/EC. Emphasis added. As regards the monitoring of the level and effectiveness of market opening and competition, the ERGEG has already made suggestions consisting of the definition of four areas of monitoring, covering 18 indicators. See *Final GGP on Indicators for Retail Market Monitoring*, ERGEG, Doc. E10-RMF-27-03, 2010.

<sup>918</sup> Article 37.1 (j), Directive 2009/72/EC.

<sup>919</sup> Article 37.1 (n), Directive 2009/72/EC.

<sup>920</sup> Article 37.1 (o), Directive 2009/72/EC.

requirements as to the monitoring of retail prices themselves. This is also underlined by the European Commission in its Interpretative Note:

*‘Part of the monitoring work that will have to be carried out by the national regulatory authority is in relation to its examination of supply prices to determine whether or not they are consistent with Article 3 of the Electricity and Gas Directives, i.e. whether they are the minimum necessary to protect consumers, vulnerable or otherwise, while not inhibiting effective competition in the market (Article 37.1 (o) of the Electricity Directive). Where supply prices are clearly anti-competitive, ... it should be reported to the appropriate national authority for remedial action. ... it will be for the regulator to determine whether prices are reasonable, easily and clearly comparable, transparent and non-discriminatory.’<sup>921</sup>*

The NRA plays a central role in the application of the criteria identified in the previous paragraph.

Concomitantly, the Agency for the Cooperation of Energy Regulators (ACER) undertakes a monitoring and reporting role as regards retail electricity prices. Pursuant to Regulation (EC) 713/2009, the Agency must monitor the internal market in electricity, *‘in particular the retail prices of electricity [...] and compliance with the consumer rights laid down in Directive 2009/72/EC [...]’*<sup>922</sup> The results of the monitoring are described in an annual public report that must identify *‘any barriers to the completion of the internal market in electricity,’*<sup>923</sup> and that can be accompanied by suggestions to the European Parliament and the Commission as regards the removal of these barriers.<sup>924</sup>

#### *(c) Non-sector specific rules applying to retail electricity prices*

While retail electricity prices are not subject to regulation, EU law requires Member States to protect customers against unfair practices as regards retail prices. Such practices will fall under the scope of application of Council Directive 93/13/EEC of 5 April 1993 on unfair terms in consumer contracts. This directive provides that ‘unfair terms’ are not binding on consumers.<sup>925</sup> As indicated above, the interpretation of the concept of a ‘fair price’ referred to in Directive 2009/72/EC has derived mainly from the provisions of Council Directive 93/13/EEC.

The concept of ‘unfair terms’ is defined in Article 3 of the directive and relates to contracts concluded at retail level.<sup>926</sup> The concept has been interpreted by the Court, but never in the context of retail electricity prices. An unexpected increase in the price of goods at the time of delivery, without any possibility for the consumer to cancel the

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<sup>921</sup> *Retail Markets*, Commission Staff Working Paper, Interpretative Note on Directive 2009/72/EC concerning common rules for the internal market in electricity, and Directive 2009/73/EC concerning common rules for the internal market in natural gas, 22.01.2010, p.4. Emphasis added.

<sup>922</sup> Article 11.1, Regulation (EC) 713/2009 of the European Parliament and of the Council of 13 July 2009 establishing an Agency for the Cooperation of Energy Regulators, OJ L 211, 14.08.2009, p. 1.

<sup>923</sup> Article 11.2, Regulation (EC) 713/2009.

<sup>924</sup> Article 11.3, Regulation (EC) 713/2009.

<sup>925</sup> OJ L 095 of 21/04/1993, pp. 29-34.

<sup>926</sup> The following are, however, outside the scope of application of the directive: *‘contractual terms which reflect mandatory statutory or regulatory provisions and the provisions or principles of international conventions to which the Member States or the Community are party...’* (Article 1.2).

contract, qualifies as ‘unfair’ under the directive.<sup>927</sup> There are two limitations on the scope of application of the directive. First, Council Directive 93/13/EEC does not apply to contractual terms reflecting mandatory provisions or regulations. As a consequence, an increase in TGCs costs that is required by law will not trigger the application of the directive. Second, the directive’s provisions do not apply to ‘*transactions in transferable securities, financial instruments and other products or services where the price is linked to fluctuations in a stock exchange quotation or index or a financial market rate that the seller or supplier does not control*’ (Annex, point 2 sub-para. (c)). Similarly, ‘*Subparagraph (l) is without hindrance to price-indexation clauses, where lawful, provided that the method by which prices vary is explicitly described*’ (Annex, point 2 sub-para. (d)). This means variations in the overall price of electricity, where the price is subject to fluctuations in power exchanges or is indexed, will not be qualify as ‘unfair’ by reference to Article 3 and the Annex to Directive 93/13/EEC. Prices of TGCs are not indexed, but are subject to fluctuations. This means that where excessive costs are passed on to the customer in relation to expensive TGCs, the resulting price increase may qualify as ‘unfair’ under Council Directive 93/13/EEC if the TGCs are the main reason for the increase. In practice, even in the case of expensive TGCs, the increase would be unlikely to affect the retail price to such an extent that it would be disproportionate, due to the repartition of the costs between all customers of the supplier.

The Unfair Commercial Practices Directive 2005/29/EC prohibits commercial practices that are deemed to be ‘unfair.’<sup>928</sup> Commercial practices shall qualify as unfair if they are ‘misleading,’ whether through action (Article 6) or omission (Article 7). A commercial practice may be ‘misleading’ if it involves the provision of false information and deceives or is likely to deceive the average consumer in, for example, ‘*the price or the manner in which the price is calculated...*’<sup>929</sup> A commercial practice that involved the provision of false information as regards either the electricity price or its calculation could therefore qualify as ‘misleading’ and fall within the prohibition of Directive 2005/29/EC.<sup>930</sup>

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<sup>927</sup> Annex to Directive 93/13/EEC (Terms referred to in Article 3.3).

The directive defines as unfair the terms of a contract between a seller/supplier and a consumer ‘*providing for the price of goods to be determined at the time of delivery or allowing a seller of goods or supplier of services to increase their price without in both cases giving the consumer the corresponding right to cancel the contract if the final price is too high in relation to the price agreed when the contract was concluded*’ (Annex, point 1 subpara. (l)).

<sup>928</sup> Directive 2005/29/EC of the European Parliament and of the Council of 11 May 2005 concerning unfair business-to-consumer commercial practices in the internal market and amending Council Directive 84/450/EEC, Directive 97/7/EC, 98/27/EC and 2002/65/EC of the European Parliament and of the Council and Regulation (EC) No 2006/2004 of the European Parliament and of the Council (‘Unfair Commercial Practices Directive’), OJ L 149 of 11.06.2005, p. 22.

The general prohibition of unfair commercial practices is enunciated in Article 5.1. The notion of a commercially unfair practice is defined in Article 5.2 as being a commercial practice that ‘(a) *contrary to the requirements of professional diligence, and (b) materially distorts or is likely to materially distort the economic behaviour with regard to the product of the average consumer whom it reaches or to whom it is addressed, or of the average member of the group when a commercial practice is directed to a particular group of consumers.*’

<sup>929</sup> Article 6.1 (d), Directive 2005/29/EC.

<sup>930</sup> See also Annex I to Directive 2005/29/EC on ‘Commercial Practices which are in all circumstances considered unfair’, and that are defined as ‘misleading commercial practices’: 5. *Making an invitation to purchase products at a specified price without disclosing the existence of any reasonable grounds*

Similarly, in the case of an invitation to purchase, a failure to indicate the price inclusive of taxes, a product price that cannot reasonably be calculated in advance, or a failure to indicate the manner in which the price is calculated, could all qualify as ‘misleading’ and fall under the same prohibition.

*(d) Conclusion*

In principle, competitive retail prices should not be regulated. This means that the integration of TGCs costs into a competitive retail price will not be regulated either. The resulting retail price must be reasonable, comparable, transparent, non-discriminatory and fair. Regulatory authorities will be involved in the monitoring of these prices, in order to ensure competition at retail level and the protection of consumers’ interests. As regards unfair terms and unexpected fluctuations in prices following the integration of TGCs costs, non-sector-specific EU legislation on consumer protection will apply.

### **8.3.3.2 Integration of TGCs costs into a regulated retail electricity price**

While competitive prices should be the norm (see sub-section (a) below), TGCs costs that derive from the TGCs market can also be integrated into the supply component of a regulated retail price (sub-section (b)).

*(a) Regulated retail prices and the requirement for competitive retail prices*

Since the retail sector comes within a potentially competitive segment of the electricity industry, the completion of liberalisation should result in a transition from regulated prices – where they exist – to ‘competitive prices.’<sup>931</sup> Ideally, the result will be that, in competitive retail markets, the competitive component of the electricity price will be determined solely by supply and demand. The regulation or control of end-user pricing is seen as a major obstacle to competition and to the achievement of the objective defined in the Electricity Directive of ‘*improving and integrating competitive electricity markets.*’<sup>932</sup> It should be noted that the regulation of retail prices can take various forms, such as price setting, price caps or approval procedures. The European Commission has raised concerns as regards regulated retail prices, which it fears may hamper competition on the retail market with potential consequences for the wholesale market and infrastructure investment. This is because price regulation prevents price signals from being used as the basis for competition, which is inherent to market opening.<sup>933</sup> These concerns are justified as follows. First, a regulated price is often kept artificially low compared to the price of the primary energy source. Although this may have short-term benefits for customer

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*the trader may have for believing that he will not be able to offer for supply or to procure another trader to supply, those products or equivalent products at that price ...’*

<sup>931</sup> Recital 1 of Directive 2009/72/EC lists ‘competitive prices’ as one of the objectives to be attained by the internal market in electricity.

<sup>932</sup> Article 1, Directive 2009/72/EC.

<sup>933</sup> DG Competition report on energy sector inquiry, Communication from the Commission Inquiry pursuant to Article 17 of Regulation (EC) No 1/2003 into the European gas and electricity sectors, Part II – Electricity, SEC(2006)1724, 10.01.2007, para. 506. See the answer provided by the European Commission to the question ‘Why does the Commission tackle regulated prices?’ in *Q&A: the infringement exercise concerning cross-border energy network access and regulated prices*, MEMO/09/297, European Commission, 25 June 2009.

protection, it will usually result in low switching rates and a lack of competition at retail level. Incumbents will benefit from their favourable – or dominant – positions on the market. The wholesale market will also fail to function competitively. Low regulated prices also have the potential to raise market barriers to new entrants on the supply segment that do not have access to low-cost generation capacity or long-term contracts and accordingly must purchase energy on the wholesale market at higher prices. Such new entrants will be unable to make competitive supply offers compared to the regulated supply price.<sup>934</sup> Second, low regulated prices, because they do not reflect real costs, may alter investment in new generation capacity and infrastructure development, with negative consequences for security of supply.<sup>935</sup> Finally, low retail tariffs discourage final customers from reducing their electricity consumption, as there is a lack of financial incentive for them to do so. This has negative impacts on attempts to reduce greenhouse gas emissions. In its 2010 Communication on competition in the retail sector, the Commission concludes definitively that *‘open markets with well-functioning competition cannot in the long-term coexist with regulated end-user energy prices.’*<sup>936</sup> Where regulated prices still exist, Member States should move towards competitive prices, subject to the adoption of *‘an individual road map to bring their regulation in line with open and competitive markets, in accordance with the case law of the Court of Justice.’*<sup>937</sup> The position of the Commission echoes the provisions of Directive 2009/72/EC that insist upon the role of Member States and national regulatory authorities in ensuring *‘competition and the supply of electricity at the most competitive price.’*<sup>938</sup>

Such an approach, which consists of regarding competitive retail prices as the norm in liberalised markets and regulated retail prices as the exception, has been confirmed by the Court. The latter was very explicit in affirming in Case C-265/08 *Federutility and Others* that the total opening of the supply segment to competition, as defined in the Third Gas Directive, entails the setting of retail prices on the basis solely of supply and demand:

*‘Although it is not explicitly stated in that provision, or indeed in any other provisions of that directive, that the price for the supply of natural gas must, as from 1 July 2007, be determined solely by the operation of supply and demand, that requirement follows from the very purpose and*

<sup>934</sup> DG Competition report on energy sector inquiry, Communication from the Commission Inquiry pursuant to Article 17 of Regulation (EC) No 1/2003 into the European gas and electricity sectors, Part II – Electricity, SEC(2006)1724, 10.01.2007, para. 610.

<sup>935</sup> DG Competition report on energy sector inquiry, Communication from the Commission Inquiry pursuant to Article 17 of Regulation (EC) No 1/2003 into the European gas and electricity sectors, Part II – Electricity, SEC(2006)1724, 10.01.2007, para. 611.

<sup>936</sup> *An Energy Policy for Consumers*, Commission staff working paper, European Commission, SEC(2010)1407 final, 11.11.2010, p. 11.

The ERGEG uses identical wording to characterise its position on regulated retail prices: *‘fully open markets with well-functioning competition cannot in the long-term coexist with regulated end-user energy prices.’* Source: European Regulators’ Group for Electricity & Gas (ERGEG), *Status Review of End-User Price Regulation as of 1 January 2010*, Ref. E10-CEM-34-03, 08.09.2010, p. 7. The ERGEG reiterates here its earlier position expressed in: *End-user energy price regulation – An ERGEG Position Paper*, Doc. E07-CPR-10-03, 18.07.2007.

<sup>937</sup> *An Energy Policy for Consumers*, Commission staff working paper, European Commission, SEC(2010)1407 final, 11.11.2010, p. 11. A similar position was adopted earlier by the ERGEG, which advocated in its 2007 Position Paper on end-user energy price regulation the adoption of a roadmap towards a competitive market without end-user price regulation.

<sup>938</sup> Recital 8, Directive 2009/72/EC.

*the general scheme of that directive, which, as its 3<sup>rd</sup>, 4<sup>th</sup> and 18<sup>th</sup> recitals state, is designed progressively to achieve a total liberalisation of the market for national gas in the context of which in particular, all suppliers may freely deliver their products to all consumers.*<sup>939</sup>

Building on similar provisions, the conclusions of the Court on the interpretation of the Gas Directive can be extended to the Electricity Directive. In the same judgment, the Court also describes state intervention through the determination of supply prices by means of a PSO as ‘*an obstacle to the realisation of an operational internal market*’ in energy.<sup>940</sup> Retail tariffs should consequently remain an exception to the general rule of competitive pricing, as characterised by Advocate General Colomer in the *Federutility* case.<sup>941</sup> EU law does not prohibit retail tariffs, but is paying increasing attention to their recourse or their maintenance on the grounds of public service requirements.

Indeed, supply price regulation still exists in many EU countries, in particular in the household segment, and even co-exists with competitive pricing.<sup>942</sup> The ERGEG reports that as of 1 January 2010, end-user regulated prices for electricity existed in 18 out of 30 EU/EEA countries in at least one of the various market segments (*i.e.*, households, small businesses, medium-sized to large businesses and energy-intensive industry).<sup>943</sup> It is also reported that the opening of the retail market to competition has not been followed by a large-scale switch from regulated to competitive prices.<sup>944</sup>

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<sup>939</sup> C-265/08, *Federutility and Others*, [2010] ECR p.0000, para. 18.

<sup>940</sup> C-265/08, *Federutility and Others*, [2010] ECR p.0000, para. 35.

<sup>941</sup> On the exceptional character of price regulation, A.G. Colomer notes in point 40 of his Opinion in Case C-265/08, *Federutility and Others* that : ‘*It is significant, ..., that the Community legislature contemplates the regulatory authorities approving gas transmission and distribution tariffs ..., and, when it comes to establishing the price of supplies, sees this merely as an exceptional power within the framework of public service obligations ...*’

<sup>942</sup> The coexistence of regulated and competitive retail prices within the same Member State can be a concern in relation to the level playing field that is to be ensured between suppliers at retail levels. Incumbent suppliers often benefit from regulated prices, while new suppliers will apply competitive prices. See in this respect Article 3.1 of Directive 2009/72/EC that requires Member States to ‘*ensure ... that ... electricity undertakings are operated in accordance with the principles of this Directive with a view to achieving a competitive, secure and environmentally sustainable market in electricity, and shall not discriminate between those undertakings as regards either rights or obligations*’ (emphasis added). The transition from regulated to competitive retail prices may entail such coexistence.

<sup>943</sup> European Regulators’ Group for Electricity & Gas (ERGEG), *Status Review of End-User Price Regulation as of 1 January 2010*, Ref. E10-CEM-34-03, 08.09.2010, p. 7.

<sup>944</sup> See the ERGEG’s *Status Review of End-User Price Regulation as of 1 January 2010*,’ 2010, which reports that: ‘*Where regulated prices are on offer, only a small proportion of consumers have moved to non-regulated tariffs in the liberalised market, although in some countries the share of consumers on regulated prices has fallen recently. [...] in three Member States in particular (Ireland, Italy and Portugal) the share of consumers supplied at regulated prices decreased noticeably (by at least 5 percentage points) between July 2008 and January 2010. However, in most countries where regulated prices are available, over 90%, and often around 100%, of household customers are supplied at regulated tariffs.*’

*(b) Integration of TGCs costs derived from the TGCs market or the compliance fee into a regulated retail price*

The question considered in the following paragraphs is whether the regulation of TGCs costs as part of a regulated retail price (tariff) is consistent with EU law. In other words, can the Member State or the regulatory authority ‘regulate’ how TGCs costs are integrated into the electricity tariff? To answer this question it is necessary to analyse as a whole the conditions set out in Directive 2009/72/EC regarding the regulation of retail tariffs.

EU law does not forbid Member States from regulating retail prices after the full opening of the market to competition, but it does impose restrictions on their ability to do so. The justification offered by the Member State for its regulation of retail prices will be decisive for the conformity of the PSO with these restrictions. The European Commission has previously launched infringement proceedings against several Member States on the basis of non-existent or inadequate justifications for the regulation of retail prices.<sup>945</sup>

State intervention through the regulation of retail prices may in particular have the purpose of protecting consumers from high prices and securing them ‘reasonable prices’. In the case of TGCs costs, one can envisage a Member State deciding to implement price capping as a means to protect customers from excessive price increases following the integration of TGCs costs. Indeed, several Member States do practise price capping on energy supply prices. The legislation enacting the Polish TGCs scheme explicitly limits the amount of TGCs costs that can be passed on to customers.<sup>946</sup> The State can in these circumstances, in the general economic interest<sup>947</sup> and subject to the conditions set out in Directive 2009/72/EC, impose PSOs on undertakings for the purpose of regulating prices, *i.e.*, in order to ‘ensure that the price of the supply of [energy] to final consumers is maintained at a reasonable level having regard to the reconciliation which Member States must make ... between the objective of liberalisation and that of the necessary protection of final consumers pursued ... by the Union legislature.’<sup>948</sup> Advocate General Colomer supports this interpretation in his conclusions in the *Federutility* case. He finds grounds in the directive for regulated supply prices to qualify as being in the general economic interest in relation to consumer protection.<sup>949</sup> Regulation of supply prices for the purpose

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<sup>945</sup> DG Competition report on energy sector inquiry, Communication from the Commission Inquiry pursuant to Article 17 of Regulation (EC) No 1/2003 into the European gas and electricity sectors, Part II – Electricity, SEC(2006)1724, 10.01.2007, para. 613. The Commission refers here to infringement proceedings launched in 2006. See also the comments of the Commission on infringement proceedings launched in 2009: *Q&A: the infringement exercise concerning cross-border energy network access and regulated prices*, MEMO/09/297, European Commission, 25 June 2009.

<sup>946</sup> § 15 par. 2, Order of the Polish Minister of Economy as of 14 August 2008.

<sup>947</sup> The Court has previously recognised electricity services as a general economic interest in Case C-393/92 *Municipality of Almelo and Others* [1994] ECR I-1477.

<sup>948</sup> C-265/08, *Federutility and Others*, [2010] ECR p.0000, para. 32.

<sup>949</sup> See point 56, Opinion of A.G. Colomer delivered on 20 October 2009 in Case C-265/08 *Federutility and Others*, [2010] ECR: ‘...it follows that the objective of preventing undesirable and disproportionate price rises which would be detrimental to consumers constitutes grounds for ‘general economic interest’ which, provided the directive’s other conditions are met, would justify public intervention in respect of prices for the supply of natural gas.’ See also point 45 and footnote 30, where A.G. Colomer insists on the fact that the price regulation must preserve the general economic interest.



of consumer protection may also be justified under Article 3.3 (universal service),<sup>950</sup> and Article 3.7 (protection of vulnerable customers).<sup>951</sup>

When a Member State decides to regulate retail price setting by adopting a PSO, the measure must respect the general conditions set out in Directive 2009/72/EC and Article 106.2 TFEU, as well as the notification requirements.<sup>952</sup> The criteria applicable to PSOs under Article 3.2 of Directive 2009/72/EC have already been reviewed and are equally applicable here. However, precise reasons must be given as to the application of the proportionality principle to regulated retail prices in the context of the PSO. Once again the decision of the Court in the *Federutility* case is relevant. Three conditions must be met in order for the measure to be recognised as proportional: (i) the measure must be limited in duration in order ‘*not to render permanent a measure which, by its very nature, constitutes an obstacle to the realisation of an operational internal market*’;<sup>953</sup> (ii) there must be a cause-and-effect relationship between the price element regulated and the intended objective (this is an important criterion for defining what can be regulated in the supply price);<sup>954</sup> and (iii) the scope *ratione personae* of the measure must be respected, *i.e.*, the obligation must not apply to different categories of persons or undertakings without distinction.<sup>955</sup> For example, in the case of TGCs costs, certain categories of retail consumers may more easily bear increases in costs than others.

### 8.3.3.3 Passing on of TGCs costs deriving from a PSO imposed on system operators

Where the purchase of TGCs is the result of a PSO imposed on system operators, questions concerning the passing on of the costs to customers and possible compensation for costs relating to carrying out the PSO must be appraised in relation to the regulation of network tariffs. The regulation of network tariffs is largely covered by the Electricity Directive.

Directive 2009/72/EC contains provisions concerning Member States’ duties as regards the regulation of network tariffs in relation to the mandatory regulated regime for access to the transmission and distribution systems. Member States must adopt and publish tariffs.<sup>956</sup> Those tariffs, or the methodologies underlying their calculation, must be approved before their entry into force according to the conditions set out in Article 37 of

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<sup>950</sup> Article 3.3 requires Member State to ensure universal service at retail level by, *inter alia*, the supply of electricity ‘*at reasonable ... and non-discriminatory prices.*’

<sup>951</sup> While price regulation is not mentioned in Article 3.7 of Directive 2009/72/EC, price regulation can be envisaged as being among the ‘*appropriate measures to protect final customers*’ and, in particular, ‘*the adequate safeguards to protect vulnerable customers*’ that Member States ‘shall’ take.

<sup>952</sup> Any adoption by a Member State of a PSO involving consumer protection and environmental protection, and in the context of Directive 2009/72/EC, must be notified to the Commission, along with the ‘possible effect on national and international competition’ of the measures, and whether they require a derogation from the directive (Article 3.15 Directive 2009/72/EC).

<sup>953</sup> C-265/08, *Federutility and Others*, [2010] ECR p.0000, paras. 33 and 35.

<sup>954</sup> C-265/08, *Federutility and Others*, [2010] ECR p.0000, paras. 36 and 38. In this case the measure was intended to protect customers from rising oil prices on the international markets, as well as from the consequences of an absence of competition in the retail gas market

<sup>955</sup> C-265/08, *Federutility and Others*, [2010] ECR p.0000, paras. 39 and 43.

<sup>956</sup> Article 32.1, Directive 2009/72/EC.

the directive and must be published. Accordingly, Article 32.1 establishes two conditions concerning tariffs and their underlying methodologies: they must be approved by the regulatory authority and they must be published.<sup>957</sup> The approved and published tariffs are to be applicable to ‘*all eligible customers and applied objectively and without discrimination between system users.*’<sup>958</sup>

Pursuant to Directive 2009/72/EC, the NRA has as ‘core duty’ (specific competence) regarding the fixing or approval of transmission or distribution tariffs or their underlying methodologies in accordance with transparent criteria.<sup>959</sup> The tasks of the authority as regards network tariffs or their underlying methodologies are set out in more detail in Article 37, paras 6, 7, 8, 10 and 12. These provisions establish that the NRA has a duty to fix or approve, among other issues concerning connection and access to networks, the transmission and distribution tariffs or methodologies. This should be done ‘in advance of their entry into force’<sup>960</sup> and should be published.<sup>961</sup> In the event of delay in the determination of tariffs, NRAs are empowered to fix and approve provisional tariffs or methodologies.<sup>962</sup>

Major aspects of tariff regulation are left to the discretion of the Member States, in accordance with the principle of subsidiarity. For example, the methodology used to calculate tariffs can differentiate between categories of system users, as long as the conditions are applied objectively and without discrimination within the same category.<sup>963</sup> The directive contains few requirements as regards either the regulation of tariffs or the methodology used to calculate them. The non-discriminatory criterion has been interpreted as requiring tariffs to be based on cost reflectivity as a ‘default preference,’ since a non-cost-reflective tariff may facilitate distortions of competition.<sup>964</sup> This interpretation is also in line with the requirements of Regulation (EC) 714/2009 on cross-border exchanges in electricity (Electricity Regulation)<sup>965</sup> and the 2004 Interpretative Note from the European Commission.<sup>966</sup> On the other hand, both the Electricity Directive and the Electricity

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<sup>957</sup> Where only the methodologies for the calculation of tariffs are approved, these must be published before their entry into force (Article 32.1, Directive 2009/72/EC).

<sup>958</sup> Article 32.1, Directive 2009/72/EC. This last requirement appeared already in Directive 2003/54/EC in relation to vertically integrated TSOs and the possible application of preferential conditions to their supply companies. Despite unbundling, this requirement was still deemed necessary under Directive 2009/72/EC, because of the persistence of the risk of collusion given the remaining level of integration. See F. Gräper and C. Schoser, ‘Third Party Access,’ in C. Jones (ed.), *EU Energy Law*, Vol. I – The Internal Energy Market – The Third Liberalisation Package (Claeys & Casteels, 2010), p. 45.

<sup>959</sup> Article 37.1 (a), Directive 2009/72/EC.

<sup>960</sup> Article 37.6, Directive 2009/72/EC.

<sup>961</sup> Article 37.7, Directive 2009/72/EC.

<sup>962</sup> Article 37.10, Directive 2009/72/EC.

<sup>963</sup> Article 32.1, Directive 2009/72/EC.

<sup>964</sup> See F. Gräper and C. Schoser, ‘Third Party Access,’ in C. Jones (ed.), *EU Energy Law*, Vol. I – The Internal Energy Market – The Third Liberalisation Package (Claeys & Casteels, 2010), pp. 48 and 51.

<sup>965</sup> Article 14.1, Regulation (EC) No. 714/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the network for cross-border exchanges in electricity and repealing Regulation (EC) No. 1228/2003, OJ L 211 of 14.08.2009, p. 15.

<sup>966</sup> *The Role of the Regulatory Authorities*, Note of DG Energy & Transport on Directives 2003/54/EC and 2003/55/EC on the internal market in electricity and natural gas, 14.01.2004, p. 6: ‘*Although network*

Regulation in several places allow for incentives at local level or investment costs to be taken into account.<sup>967</sup> Some issues of interpretation may arise regarding the application of these provisions to cross-border infrastructures.<sup>968</sup>

Where the TGCs purchase obligation is imposed on the network operator, the latter will integrate the related costs into the pricing of its network services (the network costs). Because network services are considered to be a natural monopoly, in a liberalised environment the pricing of network costs is traditionally regulated by the regulatory authority, as indicated in the Electricity Directive itself. This means that the manner in which TGCs costs are integrated into network costs will be assessed by the NRA in conjunction with the fixing or approving of transmission or distribution tariffs. Directive 2009/72/EC has reinforced the autonomy of NRAs in that respect.<sup>969</sup>

Such is the case in Belgium. There, the TSO, Elia, is subject to an obligation to purchase and sell TGCs. The TSO purchases the TGCs on demand at a fixed price and sells them forward to the market, via, for example, the Belgian power exchange Belpex.<sup>970</sup> The costs related to the purchases and re-sales of the TGCs are integrated into the network tariff as a so-called ‘green certificates surcharge’ (*surcharge certificats verts*). The criteria for imposing the surcharge are defined by law, and the amount is reviewed annually by the federal public authorities on the basis of a proposal from the federal energy regulatory authority, CREG. For the year 2011, the surcharge that the TSO can charge has been fixed at 0.7820 €/MWh.<sup>971</sup> As required by law, the CREG takes as the starting point of its calculation the real net costs related to the purchases and re-sales of the TGCs,<sup>972</sup> *i.e.*, the net difference between the fixed purchase price defined by the public authorities and the re-sale price on the market. Additional costs taken into account comprise the financial burden arising from the TGCs transactions and administrative costs.<sup>973</sup>

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*tariffs need to be cost reflective in a general sense, this does not necessarily mean that there should be a rigid and automatic correspondence between the costs of the regulated business and the revenues collected from network tariffs. [...]*. Emphasis added.

<sup>967</sup> Article 14.2, Regulation (EC) No. 714/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the network for cross-border exchanges in electricity and repealing Regulation (EC) No. 1228/2003, OJ L 211 of 14.08.2009, p. 15. See also Article 37.8, Directive 2009/72/EC as regards incentives to system operators.

<sup>968</sup> On the application of the general rule of tariff regulation to cross-border infrastructure, see F. Gräper and C. Schoser, ‘Third Party Access,’ in C. Jones (ed.), *EU Energy Law*, Vol. I – The Internal Energy Market – The Third Liberalisation Package (Claeys & Casteels, 2010), p. 47.

<sup>969</sup> *The Regulatory Authorities*, Commission Staff Working Paper, Interpretative Note on Directive 2009/72/EC concerning rules for the internal market in electricity and Directive 2009/73/EC concerning common rules for the internal market in natural gas, 22 January 2010, pp. 13-14.

<sup>970</sup> See Belpex website at <<http://www.belpex.be/>>.

<sup>971</sup> Article 1, *Arrêté ministériel du 21 décembre 2010 fixant la surcharge qui devra être appliquée par le gestionnaire de réseau, pour compenser le coût réel net résultant de l’obligation d’achat et de vente des certificats verts en 2011*, *Moniteur Belge* of 27.12.2010, p. 82151.

<sup>972</sup> See, for the year 2011, proposal to the CREG : *Proposition (C) 101208-CDC-1006 de la CREG du 8 décembre 2010 relative au calcul de la surcharge destinée à compenser le coût réel net supporté par le gestionnaire du réseau résultant de l’obligation d’achat et de vente des certificats verts en 2011*.

<sup>973</sup> Article 14ter., *Arrêté royal du 16 juillet 2002 relatif à l’établissement de mécanismes visant la promotion de l’électricité produite à partir des sources d’énergie renouvelables*, *Moniteur Belge*, 23.08.2003, as amended.

The Belgian ‘green certificates surcharge’ in effect provides compensation for the fulfilment of the PSO. The financial terms applicable to compensation for the accomplishment of a PSO are also addressed in the Electricity Directive, and previous regimes have been interpreted by the Court. Pursuant to Article 3.6 of Directive 2009/72/EC: ‘Where financial compensation, other forms of compensation and exclusive rights which a Member State grants for the fulfilment of the obligations set out in paragraphs 2 and 3 are provided, this shall be done in a non-discriminatory and transparent way.’

The two core criteria for the determination of the compensation will consequently be non-discrimination and transparency. Non-discrimination when determining compensation for TGCs purchase is facilitated by the regime for unbundling generation and supply from network activities.<sup>974</sup> This makes it possible to treat the RES-E generators selling the TGCs to the system operator on equal terms. Meanwhile, it is important to note that the compensation derives from the market and not from the state directly. Of course, public ownership of the system operators can be an issue with regard to state aids, because state resources may be involved this way. The criteria of the *Altmark* case are equally applicable here. Since the issue was addressed above in section 7.2.5, the discussion will not be repeated here. As far as transparency is concerned, publication of the criteria for the compensation is seen as a minimum requirement.

### **8.3.4 Price transparency in billing and integration of TGCs costs**

Price transparency has several meanings in the electricity sector, of which three are the most relevant here: (i) transparency in the formation of the energy price (energy commodity price transparency as such); (ii) transparency with respect to contracts; and (iii) transparency in billing. Transparency in pricing, contracting and billing becomes of critical importance in competitive markets,<sup>975</sup> as it contributes to enabling fair competition within the internal market, informed choices of supplier, and customer protection.<sup>976</sup>

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<sup>974</sup> See, by contrast, the challenges identified by the European Commission as regards compensation for PSOs under Directive 2003/54/EC, in particular as regards accounting unbundling, in the Interpretation note on *Public Service Obligation*, Note of DG Energy & Transport on Directives 2003/54/EC and 2003/55/EC on the internal market in electricity and natural gas, European Commission, 16.01.2004, para. 3.2.

<sup>975</sup> As noted by ERGEG: ‘The importance of price transparency is affected by the degree of market opening. In the pre-liberalised situation, the significance of price transparency is limited as the customers mainly need the price information to verify the correctness of their electricity and gas bills, and to some extent, to follow the price development of these energy commodities. The need for transparency increases radically as soon as the market opening takes place, there are alternative suppliers and the customers are able to choose their supplier.’ *Report on Transparency of Energy Prices, Bills and Contracts*, ERGEG, Doc. E05-CFG-02-07, 30 September 2005, Conclusion, p. 45. See the same line of reasoning in *Transparency of Prices – Best Practice Proposition*, ERGEG, Doc. E05-CFG-03-04, 21 July 2006, para. 9.

<sup>976</sup> See on the general objective of price transparency the formulation adopted in Directive 2008/92/EC of the European Parliament and of the Council of 22 October 2008 concerning a Community procedure to improve the transparency of gas and electricity prices charged to industrial end-users (recast) (OJ L 298, 7.11.2008, p. 9):

Recital (2): ‘Energy price transparency, to the extent that it reinforces the conditions ensuring that competition is not distorted in the common market, is essential to the achievement and smooth functioning of the internal energy market.’

Showing TGCs costs on the customer bill is a part of these efforts to make transparent the terms and conditions of electricity purchase. It enables customers to be informed about the situation of their supplier regarding the TGCs quota obligation, and may influence *in fine* and *inter alia* customers' choice of supplier. It also enables customers to be informed about any increase in costs resulting from the purchase of TGCs or the payment of the fee in case of default.

As the purpose of this section is to study the integration of TGCs costs into final electricity supply prices, rather than the formation of commodity prices at wholesale level, the issue of transparency in price formation on wholesale electricity markets will not be analysed. It does however pertain to the logic of making transparent the terms of competition and ensuring a 'fair' and competitive price for customers.<sup>977</sup> The ERGEG pledges indeed to favour a transparent price model '*that reflects the market price level.*'<sup>978</sup> The following paragraphs focus on the EU regulation of price transparency primarily in relation to billing, and, to a more limited extent, contracting.

EU law contains several requirements that promote transparency in billing, both in sector-specific legislation, *i.e.*, Directive 2009/72/EC (8.3.4.1), and in customer protection legislation (8.3.4.2). EU requirements on transparency in billing remain general in nature. They can be interpreted as requiring suppliers to show costs such as those related to TGCs in the bill, but leave a wide margin of appreciation to Member States (in accordance with the principle of subsidiarity). The extent to which customers will be informed of the passing on of these costs depends consequently on national implementation. This has resulted in divergent national implementation strategies and has brought about some

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Recital (3): '*Transparency can help to obviate discrimination against users by increasing their freedom to choose between different energy sources and different suppliers.*'

<sup>977</sup> Transparency in wholesale electricity markets is a corollary of transparency in retail markets and pricing to customers. It is already covered by a series of binding requirements, but additional legislative proposals have been tabled for 2011. The European Commission adopted on 8 December 2010 a proposal for a regulation on energy market integrity and transparency (COM(2010) 726 final). This followed up a Public Consultation exercise launched in May 2010 by the European Commission, Directorate General for Energy on measures to ensure the transparency and integrity of wholesale markets in electricity and gas. The proposal took into account the conclusions of a report drafted by the Committee of European Securities Regulators (CESR) and the European Regulators' Group for Electricity and Gas (ERGEG) and published in January 2009 (Doc. CESR/08-527, CESR/08-998, CESR/08-739). The December 2010 proposal for a regulation is intended to cover those products of the energy markets not encompassed by the Market Abuse Directive 2003/6/EC of 28 January 2003 on insider dealing and market manipulation (OJ L 96 of 12.04.2003, p. 16), which focuses on financial instruments. Increasing transparency on wholesale electricity markets by the adoption of standards and oversight mechanisms in relation to transactional data will prevent the occurrence of market abuse in the form of insider trading and market manipulation that could lead to higher prices. The Commission argues in its proposal that '*Unless effectively addressed, the potential for unfair trading practice undermines public trust, deters investment, increases volatility of energy prices and may lead to higher energy prices in general*' (COM(2010) 726 final, p. 2). Transparency on wholesale markets, in particular the publication of wholesale price information, is expected positively to affect the level of the retail electricity price. As Recital 1 of the proposal for a regulation puts it, prices set on wholesale energy markets should reflect '*a fair interplay between supply and demand.*' The regulation's provisions will complete those of Directive 2009/72/EC under which electricity undertakings and the NRA are subject to obligations concerning transparency, the so-called 'transparency requirements', which primarily concern record-keeping (see Article 37.1 (i) on duties and powers of the regulatory authority; Article 40 on record keeping that includes transaction prices).

<sup>978</sup> See the ERGEG's, *Status Review of End-User Price Regulation as of 1 January 2010*, 2010, p. 10.

voluntary initiatives and cooperation in best-practice sharing (8.3.4.3). The most explicit requirement as regards the disclosure of support costs in the bill is made in relation to guarantees of origin and support for renewable electricity, where customers are benefiting from a green power offer (8.3.4.4).

#### **8.3.4.1 Price transparency in billing requirements in Directive 2009/72/EC**

The third energy legislative package has as one of its focus areas the improvement of consumer rights.<sup>979</sup> This is reflected in the provisions on billing, access to consumption data, innovative pricing formulas, intelligent metering, the role of regulators, and protection of vulnerable consumers. These measures can be seen as having the dual objectives of consumer protection and promotion of energy efficiency.<sup>980</sup>

As regards the billing of electricity at the supply level, the directive sets out a few general requirements. Once again, reference should be made to Article 3.3 and the requirement for universal service that requires electricity prices to be, *inter alia*, ‘easily and clearly comparable’ and ‘transparent’. Referring to the provisions of Article 3 as a whole, para. 1(c) of Annex I to the directive emphasises the requirements to provide customers with ‘transparent information on applicable prices and tariffs ... in respect of access to and use of electricity services.’ The concept of transparency is not further defined in the Directive. In conclusion, and excluding the disclosure obligation,<sup>981</sup> Directive 2009/72/EC requires Member States to ensure that customers’ electricity bills are ‘easily and clearly comparable’ and transparent. These requirements are not new, as they were already contained in Directive 2003/54/EC. The requirements for transparency in billing as regards price components have therefore not been reinforced in Directive 2009/72/EC. Meanwhile, there has not been any judicial interpretation by the Court of these provisions.

There are consequently few indications as to how to interpret the requirements of ‘comparability’ and ‘transparency’. An ‘easily and clearly comparable’ price requires a certain level of detail in the bill, and suggests that the different price components should be listed to enable comparison. The requirement for ‘transparent information’ on prices and tariffs also suggests that the different costs should be disclosed, as well as terms and conditions applicable to pricing, such as payment and price or tariff conditions. A high level of accuracy in billing is also required. While the first criterion of comparability may relate to more general requirements concerning the appearance (or even design) of the bill, the second criterion of transparency can be interpreted as having a broader scope of

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<sup>979</sup> See in that respect the clear statement made in Recital 51 of Directive 2009/72/EC: ‘Consumer interests should be at the heart of this Directive and quality of service should be a central responsibility of electricity undertakings. Existing rights of consumers need to be strengthened and guaranteed, and should include greater transparency. Consumer protection should ensure that all consumers in the wider remit of the Community benefit from a competitive market. Consumer rights should be enforced by Member States or, where a Member State has so provided, the regulatory authorities.’

<sup>980</sup> See, for example, on energy efficiency measures and the implementation of intelligent metering systems: Recitals 50 and 55, Article 3.11, Annex I para. 1(h) and (i) and para.2, Directive 2009/72/EC.

<sup>981</sup> As detailed in section 6.1.1.1, Directive 2009/72/EC imposes a disclosure obligation as to the components of the fuel mix. This information must be included in or with the bill and promotional materials (Article 3.9). Fuel mix disclosure, even if it enables the customer to choose a supplier of renewable electricity, does not address the issue of the passing on of costs related to the support of RES-E generation.

application. The ERGEG has commented on the meaning and consequences of price transparency:

*'The word transparent in itself means that something is clearly visible and can be distinctly seen. In the framework of electricity and gas markets it means that some sort of information is easily available, it is clearly and distinctly presented, and furthermore, that it is presented in an understandable form. Often the term transparency is used in the context of prices but it may also refer to some other type of information.'*<sup>982</sup>

The requirement of transparency must be interpreted as including accuracy in billing in relation to consumption and the different price components. Following the adoption of Directive 2009/72/EC, this certainly includes accuracy in respect of consumption data.<sup>983</sup> But the wording of Directive 2009/72/EC is too general to be capable of interpretation to mean that suppliers must detail all the costs individually. Suppliers may, for example, list costs by category (*e.g.*, including the payment of TGCs costs within the costs of supply) without breaching the requirements of the Directive.<sup>984</sup> There is in any event no Court decision in favour of a restrictive interpretation of the price transparency requirements in Directive 2009/72/EC. The level of comparability and transparency in billing is consequently left to Member States' discretion, in accordance with the principle of subsidiarity and the use of the directive as a legal instrument. Note, however, that the price information included in the electricity contracts and bills must be transparent.<sup>985</sup>

These general requirements are complemented by the non-sector-specific legislation on customer protection that is discussed in detail in the next section. These requirements have also given rise to best-practice guidance of a non-binding nature, as well as cooperation initiatives between regulatory authorities.

#### **8.3.4.2 Price transparency in billing requirements in EU customer protection legislation**

Because transparency in pricing affects the sale of goods and the protection of consumers in general, other EU rules are applicable besides the sector-specific rules of the electricity legislation, in particular with regard to the household sector. The focus of these requirements is on informing consumers about the pricing of goods and services and avoiding unfair practices. It can be argued that these directives oblige electricity suppliers to inform consumers about the components of the supply price, or the 'costs' of the goods or services purchased (*i.e.*, electricity and its supply), but the requirements are rather too general to allow one to draw these types of conclusions. In any case, no such interpretation has been confirmed by the Court. From the perspective of consumer protection, and due to the modalities applied for the conclusion of electricity supply contracts, two directives apply. These are explicitly referred to in Annex I to Directive 2009/72/EC.

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<sup>982</sup> *Report on Transparency of Energy Prices, Bills and Contracts*, ERGEG, Doc. E05-CFG-02-07, 30 September 2005, p. 7.

<sup>983</sup> See Annex I, para.1 (a), 6<sup>th</sup> point, Directive 2009/72/EC.

<sup>984</sup> See *Transparency of Prices – Best Practice Proposition*, ERGEG, Doc. E05-CFG-03-04, 21 July 2006.

<sup>985</sup> See *Transparency of Prices – Best Practice Proposition*, ERGEG, Doc. E05-CFG-03-04, 21 July 2006, paras. 7-8.

The first is Directive 97/7/EC of the European Parliament and of the Council of 20 May 1997 on the protection of consumers in respect of distance contracts.<sup>986</sup> This directive focuses on the provision of information to customers entering into distance contracts, *i.e.*, on transparency in contracting. In relation to the supply of electricity to customers, this directive applies to pricing conditions and can be interpreted as requiring the supplier to make reference to additional costs related to TGCs costs in the distance contract. In particular, the directive requires suppliers to inform consumers in good time prior to the conclusion of any distance contract about the price of the goods or services, including all taxes.<sup>987</sup> A second provision of the directive that might be applicable denies consumers the opportunity to exercise their right of withdrawal where the price of the goods (or services) supplied is ‘*dependent on fluctuations in the financial market which cannot be controlled by the supplier.*’<sup>988</sup> Electricity commodity prices fall clearly within this category. Whether fluctuations in TGCs prices could also allow suppliers to benefit from this provision is less clear and depends on the legal classification of the green certificates. If a TGC qualifies as a financial instrument, one can interpret the provision to include TGCs and as allowing suppliers to alter the end-user price for electricity in accordance with variations on the TGCs market. If the TGC is classified differently, however, as is most probable,<sup>989</sup> fluctuations in the TGCs market will not qualify as a sufficient reason for altering price conditions where the contract does not allow this and may allow consumers to exercise their right of withdrawal. Another consideration to take into account is the amount represented by the TGCs costs on the bill, as it might be too low to catch the attention of the consumer and/or to make the supplier liable for breach of contract if it increases.

The second instrument is Council Directive 93/13/EEC of 5 April 1993 on unfair terms in consumer contracts, which has already been addressed above. The directive addresses the situation where there is an unexpected increase in the price of goods at the time of delivery, but non-disclosure of the different components of the price is not assessed as being unfair. However, delivery of electricity at a higher price than was either agreed or expected because of the high price of TGCs could qualify as unfair, based on global increases in the electricity price. There are a series of factors that may restrict the application of the directive in such circumstances. For example, if the contract stipulates that the price of electricity may increase, subject to particular conditions, the increase cannot qualify as ‘unexpected’. The size of the increase might also play a role. An increase in electricity price that results from more expensive TGCs might be too small to harm customer protection. It is, however, clear from the directive’s provisions that failure to disclose costs related to TGCs in the consumer’s contract is not as such unfair.

#### **8.3.4.3 Voluntary coordination of practices in transparency in billing (outcomes of the Citizen’s Energy Forum)**

As reflected in the preceding analysis, EU legislators have not deemed it necessary to enact a more harmonised approach to transparency in billing beyond the general principles contained in Directive 2009/72/EC and consumer protection law. In 2007, the European

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<sup>986</sup> Directive 97/7/EC of the European Parliament and of the Council of 20 May 1997 on the protection of consumers in respect of distance contracts, OJ L 144, 04.06.1997, p. 19, as amended.

<sup>987</sup> Article 4.1 (c), Directive 97/7/EC.

<sup>988</sup> Article 6.3, Directive 97/7/EC.

<sup>989</sup> See Chapter 4.



Commission tried without success to consolidate this *acquis* in a formal but non-binding European Charter on the Rights of Energy Consumers.<sup>990</sup> Following that failure, initiatives from the European Commission have mainly focused on a bottom-up approach, consisting of the voluntary coordination of national practices.

Sharing of experiences and harmonisation of billing practices have been discussed within the Citizen's Energy Forum (known as the London Forum) since its establishment by the European Commission in 2008, the year following the total opening of the electricity market to competition. The London Forum is discussing the possible harmonisation of practices as regards the information provided on customer bills.<sup>991</sup> Within this framework, a Working Group on Billing has drafted a 'Good Practice Guidance for Billing' (GPG), which includes a list of 10 recommendations on energy billing and a 'Comparability Box' that can serve as draft model.<sup>992</sup> The GPG remains voluntary in nature, but does contain a few recommendations on price transparency in billing. The most general recommendation, which derives from EU legislation and is reproduced in the GPG, is that '*bills must be accurate, transparent, readable, thus easily understandable*' (Recommendation #1). The information that is '*essential for consumers to understand the price they pay for the service they receive*' is considered as '*primary information*' and '*should be displayed prominently on the bill*' (Recommendation #6). Among the 'priority billing items' identified in the GPG and relating to pricing are: the total costs arising from consumption (for each product); the VAT charged (if costs excluding VAT); the total amount payable (including VAT); tariff name and related information; the price per kWh ('*with base price & variable elements and min-max price variations, if appropriate*'), as well as other discounts; and disaggregation between network and supply price components, if appropriate given national market conditions.<sup>993</sup> The GPG were endorsed by the Second London Forum in 2009, which also recommended the insertion in the regular bill of: the

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<sup>990</sup> Price transparency in billing was one of the elements of the proposal, which was, as far as price transparency was concerned, merely a reiteration of the provisions already enshrined in EU law. *Towards a European Charter on the Rights of Energy Consumers*, Communication from the Commission, COM(2007)386 final, 05.07.2007. See also *European Parliament resolution of 19 June 2008 on Towards a European Charter on the Rights of Energy Consumers*, Doc. P6\_TA(2008)0306. The proposal for a Charter was dropped after the conclusion of a consultation process which raised concerns about the implementation of the Charter.

<sup>991</sup> The London Forum aims to address shortcomings in current billing practices: '*.. energy bills are currently a major source of consumer complaints. In many countries, consumers are confronted with unreadable bills. Some suppliers confuse more information with better information. Many consumers find bills complicated and unclear and therefore difficult to understand. Pricing is not always clear. Accuracy in bills and (lack of different) payment methods for bills are also mentioned as problems for consumers. In some countries, comparing offers and finding out how to switch supplier are also problematic for consumers. This has a major knock-on effect on consumers. Those who are confused about their bills are less likely to play a role in the liberalised energy markets by exercising their choice and looking for better offers.*' (MEMO from European Commission, 'Citizen's Energy Forum', MEMO/09/429, 03.09.2009.)

<sup>992</sup> *Good Practice Guidance for Billing*, Working Group on Billing, Citizen's Energy Forum, 2009. Available under the reports file of the 2nd meeting of the Citizens Energy Forum, London, 29-30 September 2009, available at <[http://ec.europa.eu/energy/gas\\_electricity/forum\\_citizen\\_energy\\_en.htm](http://ec.europa.eu/energy/gas_electricity/forum_citizen_energy_en.htm)>. Setting up a working group on billing was one of the key requirements of the first Citizens' Energy Forum (London, 27-28 October 2008). The Forum also mandated the Commission to set up a working group to elaborate recommendations for consumer-friendly energy bills.

<sup>993</sup> *Good practice guidance for billing*, Working Group on Billing, Citizen's Energy Forum, 2009. Available under the reports file of the 2nd meeting of the Citizens Energy Forum, London, 29-30 September 2009, available at <[http://ec.europa.eu/energy/gas\\_electricity/forum\\_citizen\\_energy\\_en.htm](http://ec.europa.eu/energy/gas_electricity/forum_citizen_energy_en.htm)>, p. 11.

tariff name; a reference to a clear price breakdown for the tariff (base price plus all other charges and taxes); and the base price of one energy unit (kWh) under the tariff selected.<sup>994</sup> In 2010, the Third London Forum resolved in favour of making the base price for energy easily identifiable on the bill, as well as additional information of about fees such as the renewables contribution.<sup>995</sup>

To sum up, the recommendations of the GPG endorse the detailed disclosure of supply price components and consequently favour the disclosure of costs related to the purchase of TGCs in the electricity bill. These recommendations remain, of course, voluntary in nature. However, the provisions of Directive 2009/28/EC on guarantees of origin do contain some mandatory requirements as regards the indication to customers of the level of support. These are reviewed in the next Section.

#### **8.3.4.4 Mandatory disclosure of support level in the guarantee of origin (Directive 2009/28/EC)**

The only provision to address directly the disclosure of information as regards the costs of RES-E generation support schemes to the final customer is contained in Directive 2009/28/EC in relation to guarantees of origin. According to Article 15.6(d) of the directive:

*‘A guarantee of origin shall specify at least:*

*...*

*(d) whether and to what extent the installation has benefited from investment support, whether and to what extent the unit of energy has benefited in any other way from a national support scheme, and the type of support scheme.’*

First, the information on the provision of support is mandatory. Second, the information to be provided concerns both the existence and the extent of any support. The way in which the extent of the support should be indicated may be subject to different interpretations, for example suggesting the inclusion of either percentages or the exact amount of the financial support. Third, the directive requires information to be provided as to whether the installation has received investment support and whether the unit of energy has benefited *‘in any other way from a national support scheme’*. Since a green certificate does not qualify as investment support but does equate to a national support scheme (quota obligation combined with compliance certificates), the directive clearly requires the supplier to indicate as part of the GO whether the RES-E generation plant has received TGCs and to what extent the TGCs have benefited the unit of energy supplied. This can be interpreted as a requirement to state the price paid by the supplier for the TGCs.

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<sup>994</sup> Fuel-mix disclosure is intentionally not addressed here, although it is mentioned in the GPG, because it is a legal obligation defined in Directive 2009/72/EC. It relates to the generation attributes of electricity, but not to pricing. The issue of bill design is also not addressed here, as it is not a core concern in terms of competition, although obviously it is important to secure a minimum level of quality.

<sup>995</sup> Conclusions, working group, 3<sup>rd</sup> London Forum, October 2010, p. 23:

*‘It is also important to help individual consumers identify what are the most important elements in their bill namely consumption, price to pay, contract length, payment modalities and base price with an indication where additional information of fees (network tariff, renewables contribution, taxes etc.) can be found easily. To this effect a ‘comparability box’, where all important information is presented in a condensed manner for consumers to review and allow for comparisons as a tool for consumer participation, could be considered.’*

### 8.3.4.5 National practices in showing the costs of TGCs in the electricity bill

It must be concluded from the above that Member States enjoy a wide margin of appreciation as regards the transposition of the requirements of price transparency in billing. Indeed, a 2010 Commission Staff Working Paper on retail electricity markets took note of wide divergences in national practices in billing. While certain Member States' regulation has focused on the objective of making the bill more transparent and understandable, other Member States have prescribed the exact nature of the information to appear on the bill.<sup>996</sup> Some of the Member States required suppliers to insert the exact costs related to TGCs in their bills. Indeed, some national legislation requires costs related to TGCs to be itemised.

The Working Group on Billing of the London Forum recommended implementing the recommendations of the GPG at national level through, among other instruments: a code of conduct; bill validation by the regulatory or the competent authority; and/or legislation. The ERGEG reported in 2010 at the Third London Forum that a majority of countries had opted for legislation to ensure quality of energy bills, and quite a few others were practising a combined legislative and self-regulatory approach.<sup>997</sup> In cases where an authority is to be charged with the task of reviewing billing, it is 'very likely' that this task will be given to the NRA.

Indeed, most of the countries that operate green certificates schemes have legislation requiring suppliers to show separately the costs of TGCs in their bills (either in total or by kWh). In Wallonia, Belgium, suppliers are required by law to '*identify specifically*' in the contract and the bill the price of the green certificates excluding VAT. The certificates' price cannot be included in the costs related to taxes and levies.<sup>998</sup> Sweden offers an interesting example of a legislative amendment that altered the requirement for disclosure of TGCs costs in the bill from an explicit and separate indication to inclusion in the electricity price. Until 1 January 2007, electricity suppliers were obliged to indicate separately the price of certificates in the customer's contract and bill. As of 1 January 2007, the price of the certificate has been included in the electricity commodity price.

In its legislative proposal of December 2010, the Norwegian government envisaged requiring suppliers to state on electricity bills the amount of support granted to RES-E generation by way of TGCs. This was to appear as a 'direct cost' and be accompanied by information about the TGCs scheme, including the TGCs quota obligation for the current year.<sup>999</sup> The law, as it is now adopted, requires in more general terms that the quota obligated party provides specific information on the costs related to compliance with the quota.<sup>1000</sup> The proposal also envisaged regulating how the costs of the support scheme

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<sup>996</sup> *The functioning of the retail electricity markets for consumers in the European Union*, Commission Staff Working Paper, SEC(2010) 1409 final, 11.11.2010, p. 18.

<sup>997</sup> *Implementation of EC Good Practice Guidance for Billing – ERGEG Status Review*, ERGEG, Doc. E-10-CEM-36-03, 8 September 2010.

<sup>998</sup> Article 4 §1 (g') (as regards electricity supply contracts) and Article 7 §1 (9) (as regards electricity bills) *Arrêté du Gouvernement wallon du 30 mars 2006 relatif aux obligations de service public dans le marché de l'électricité*, M.B. of 27.04.2006, p. 22143, as amended.

<sup>999</sup> OED høringsbrev 08.12.2010, para. 4.3.1

<sup>1000</sup> Law on elcertificates (Lov 2011-06-24 nr 39: Lov om elsertifikater), 24.06.2011, § 22.

should be integrated into the electricity price. This can still be done by implementation legislation. It is generally expected that the obligation to provide information in bills about costs relating to support schemes will play a role in retail competition.

### **8.3.5 Conclusion**

It follows from the above that the apparent wide margin of appreciation left to Member States in retail electricity price setting and regulation is limited by a series of EU requirements, aimed to ensure competition and consumer protection. The limits put by the Electricity Directive and EU consumer protection law intend to ensure the free play of competition between suppliers, including in the transfer of TGCs costs.

EU consumer law and the electricity directive define some general criteria in terms of price transparency in contracting and billing. These criteria serve as general principles in the manner to make TGCs costs apparent in the bill, but leave Member States a large margin of appreciation as their implementation. This means that EU law contains general principles, but of limited practical consequences as regards the manner customer are informed of the costs related to RES-E generation support. In addition, those provisions set requirements on the information on price, but not as such on the components of price. Here, EU law cannot be interpreted as defining a strict obligation to indicate the price of the certificate in the electricity bill. Directive 2009/28/EC provides for a higher degree of harmonization as regards the indication of the level of support in the guarantee of origin, which concerns green power offers only. It underlines once again the diverse utilisations of the guarantee of origin in relation to green power. The most concrete initiative at EU level to harmonise bill components for increased competition and customer protection is the Citizens' Energy Forum that adopted concrete proposals in the matter. Those proposals remain meanwhile non-binding.

Meanwhile, the context of competition and full opening of the market characterised by the free choice of supplier, the unbundling between regulated and competitive price components of the bill, the customers protection provisions, and the targets in renewable energy consumption, argue for making apparent the different costs supported by customers. With these objectives in mind, most of the national legislations on TGCs scheme require suppliers to indicate on the electricity bill the price of the certificates.

Any attempt to further harmonise provisions on transparency in electricity billing will need to balance the different interests in presence. It is a question of competence (energy, social policy), subsidiarity and proportionality.

## **8.4 Electricity market integration through regional cooperation: relationship to RES-E support schemes**

An aspect of EU electricity policy that gained importance in the third energy package is regional cooperation as a path towards market integration. It is hereinafter examined how, based on the provisions of the third package and the so-called Regional Initiatives, the requirements related to regional cooperation may interact with the manner Member States design or coordinate their RES-E support schemes. An example of well integrated regional

electricity markets that envisage coordination of support is to be found on the Nordic electricity market, where Norway and Sweden have announced a joint TGCs scheme.

The regional approach in market integration is a relatively recent focus of EU energy policy and the legislation dated from the eleventh Florence Forum of 2004 and the launch of the Regional Initiatives in 2006. It was primarily motivated by pragmatism, following a bottom up approach towards the establishment of an internal electricity market.<sup>1001</sup> Regional cooperation for market integration can help to overcome some technical or legal barriers hindering the completion of the internal market.<sup>1002</sup> This is why the literature agrees with this approach and sees regulatory harmonisation at regional level as a priority action in the establishment of the internal energy market.<sup>1003</sup> Besides the separate establishment of regional power exchanges and ‘market coupling’,<sup>1004</sup> the Regional Initiatives have primarily applied to the physical market, based on the respective interests of the states participating voluntarily on these initiatives. The third energy package and the 2010 Communication of the Commission on ‘*The future of Regional Initiatives*’<sup>1005</sup> show a more prescriptive approach as regards the establishment of regional cooperation.

First, as regards *regional initiatives* as such, Directive 2009/72/EC requires Member States and their regulatory authority to participate to at least one regional initiative. Article 6.1 of the directive provides:

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<sup>1001</sup> See also comments by F. Gräper and C. Schoser, ‘The establishment of common network rules’, in C. Jones (ed.), *EU Energy Law – Volume I – The Internal Energy Market – The Third Liberalisation Package* (Clays & Casteels, 2010), Chapter 12, p. 532. It is also argued that Regional Initiatives can be used in relation to the harmonisation of retail markets (see *Retail Markets*, Commission Staff Working Paper, Interpretative Note on Directive 2009/72/EC concerning common rules for the internal market in electricity and Directive 2009/73/EC concerning common rules for the internal market in natural gas, 22.01.2010, p. 5).

In Directive 2009/72/EC, Recital 19, Article 6.1 and Article 36(c) reflect all the final objective of regional cooperation as being ‘*the integration of national markets.*’

<sup>1002</sup> F. Gräper, C. Schoser, ‘The establishment of common network rules’, in C. Jones (ed.), *EU Energy Law – Volume I – The Internal Energy Market – The Third Liberalisation Package* (Clays & Casteels, 2010), Chapter 12, p. 533.

<sup>1003</sup> See list of priority actions identified by authors, and among them ‘#5. *Encouraging the negotiation of reinforced regional cooperation agreements between TSOs*’. J.-M. Glachant and F. Lévêque, ‘The electricity internal market in the European Union: what to do next?’, in J.-M. Glachant and F. Lévêque, *Electricity Reform in Europe* (Edward Elgar, 2009), p. 27.

<sup>1004</sup> In its 2009-2010 *Report on progress in creating the internal gas and electricity market*, the Commission takes note of the positive signs of market integration represented by market coupling, like in the Northern and Central West electricity region in November 2010 (Commission Staff Working Document, 09.06.2011, pp. 1, 5-6). Market coupling is defined as ‘*the use of so-called implicit auctioning involving two or more power exchanges*’ (Source: European Market Coupling Company, EMCC).

<sup>1005</sup> *The future Role of Regional Initiatives*, Communication from the Commission to the European Parliament and the Council, COM(2010)721, 07.12.2010. In the Communication, the Commission proposed to define new tasks and a new governance structure for the existing Regional Initiatives, to use them in order to implement the provisions of the third energy package, and to adjust their geographical scope ‘*to make regional cooperation more effective.*’

*'Member States as well as the regulatory authorities shall cooperate with each other for the purpose of integrating their national markets at one or more regional levels, as a first step towards the creation of a fully liberalised internal market.'*<sup>1006</sup>

The geographical scope of the regional initiatives referred to in the directive shall include the ones defined by the Commission in accordance with Article 12.3 of Regulation (EC) No. 714/2009, but can also extend to other geographical areas.<sup>1007</sup> At the time of publication of the 2010 Communication of the Commission, seven electricity regional initiatives had been defined.<sup>1008</sup>

The intended areas of regional cooperation are also defined in the directive:

*'... the regulatory authorities where Member States have so provided or Member States shall promote and facilitate the cooperation of transmission system operators at a regional level, including on cross-border issues, with the aim of creating a competitive internal market in electricity, foster the consistency of their legal, regulatory and technical framework and facilitate integration of the isolated systems forming electricity islands that persist in the Community.'*<sup>1009</sup>

And

*'Member States shall ensure, through the implementation of this Directive, that transmission system operators have one or more integrated system(s) at regional level covering two or more Member States for capacity allocation and for checking the security of the network.'*<sup>1010</sup>

These areas of cooperation correspond to the current practice of the Regional Initiatives. Until the adoption of Directive 2009/72/EC, the Regional Initiatives gave rise to cooperation in relation to investment and development of cross-border infrastructures, network codes, pilot testing such as volume coupling, congestion management, intra-day and balancing markets, and transparency.<sup>1011</sup>

Another novelty of the directive in relation to regional cooperation consists in the powers attributed to ACER which shall cooperate with Member States and TSOs in order to ensure the compatibility of legal and regulatory frameworks between the different regions, but which also make recommendations when they determine that '*binding rules*' on regional cooperation are required.<sup>1012</sup>

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<sup>1006</sup> Emphasis added.

<sup>1007</sup> Article 6.1, Directive 2009/72/EC.

<sup>1008</sup> These are: Baltic Region (Estonia, Latvia, Lithuania); Central-East Region (Austria, Czech Republic, Germany, Hungary, Slovakia, Slovenia); Central-South Region (Austria, France, Germany, Greece, Italy, Slovenia); Central-West Region (Belgium, France, Germany, Luxembourg, the Netherlands); Northern Region (Denmark, Finland, Germany, Norway, Poland, Sweden); South-West Region (France, Portugal, Spain); France-UK-Ireland Region. Some Member States are also member of an eighth region, the South-East Region, that primarily includes non-EU states.

<sup>1009</sup> Article 6.1, Directive 2009/72/EC. Emphasis added.

<sup>1010</sup> Article 6.3, Directive 2009/72/EC. Emphasis added.

<sup>1011</sup> *The future Role of Regional Initiatives*, Communication from the Commission to the European Parliament and the Council, COM(2010)721, 07.12.2010, p. 3. See also the assessment of the Regional Initiatives provided in: *From Regional Markets to a Single European Market*, Everis and Mercados, Final Report, 28.04.2010.

<sup>1012</sup> Article 6.2, Directive 2009/72/EC.

Second, as regards the *establishment of integrated markets*, both Directive 2009/72/EC and Regulation (EC) No. 714/2009 provide for extended requirements on cross-border cooperation. As summarised by ERGEG, these requirements relate in particular to: the establishment of cross-border capacity; the coordination of the role of TSOs; the creation of ENTSO; the networks code; the development of regional network development plans; congestion management.<sup>1013</sup> These provisions, which complete those in Directive 2003/54/EC and Regulation (EC) No. 1228/2003, play an important role in the establishment of an internal market for electricity and cross-border trade in electricity.

The articulation between organised regional cooperation and the regulation of markets integration is not obvious in the EU texts. One interpretation could be that the provisions of the directive and the regulation only define a minimum level of harmonized rules for cooperation, while regional cooperation allows for enhanced cooperation. This enhanced cooperation could aim either to deal with issues specific to the region or, as suggested by the Commission, to assist in the implementation of the parts of the *acquis* requiring cross-border coordination (e.g., technical aspects of cross-border trade).<sup>1014</sup> These two levels of cooperation and regulation must be kept in mind when appraising the relationship between regional cooperation/integration and RES-E support schemes.

The review of the seven Regional Initiatives reveals that, so far, only the Northern Region has identified the integration of renewable energy, and in particular wind, as one of its priorities.<sup>1015</sup> As underlined by the heading of this priority of the Northern Region, namely '*Cooperation on dealing with major shares of wind-energy in the system*', integrated regional electricity markets will have to deal with the consequences for the network of an increased share of RES-E being introduced into the network. The increased share of new RES-E has its primary origin in the support scheme.<sup>1016</sup> In the context of an integrated regional market, as favoured by the legislation and the Regional Initiatives, the support scheme may have effects not only on the national market but also on the regional market, as well as aspects of cross-border trade (market arrangements) and network arrangements.<sup>1017</sup> The latter include arrangements for, inter alia, auctioning of capacity on interconnectors, balancing, price or volume coupling.<sup>1018</sup> This means that the effects of the support scheme must be adjusted at the level of the regional cooperation.

Conversely, market integration may also have effects on the national support scheme. By requiring increased integration of electricity markets at regional level, the EU legislation

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<sup>1013</sup> ERGEG, Strategy for delivering a more integrated European energy market: The role of the ERGEG Regional Initiatives. An ERGEG Conclusions Paper, Doc. E10-RIG-10-04, 21.05.2010, pp. 7-8.

<sup>1014</sup> *The future Role of Regional Initiatives*, Communication from the Commission to the European Parliament and the Council, COM(2010)721, 07.12.2010, p. 4.

<sup>1015</sup> See ERGEG website dedicated to Regional Initiatives at: <[http://www.energy-regulators.eu/portal/page/portal/EER\\_HOME/EER\\_INITIATIVES/ERI](http://www.energy-regulators.eu/portal/page/portal/EER_HOME/EER_INITIATIVES/ERI)>.

<sup>1016</sup> As well as other and associated measures aimed to support RES-E generation. See on that point section 2.2.3 of the Introduction.

<sup>1017</sup> On the effects of the integration of wind on market and network arrangements in the context of cross-border trade, see: *Regulatory aspects of the integration of wind generation in European electricity markets*, Council of European Energy Regulators (CEER), CEER Public Consultation, Doc. C09-SDE-14-02a, 10.12.2009, p. 18.

<sup>1018</sup> *Ibid.*

will create a need for coordination of RES-E support schemes at the same level, because of the effects mentioned above. The more the markets are integrated, the more a change in the support regime is able to affect the different markets. As long as RES-E represents a small part of the energy put into the network, the importance of the issue remains minor. This is also due to the fact that cooperation requirements apply to issues at the cross-border level, that is, when RES-E is already in the system. But in countries which possess a high potential for cross-border trading in relation to new RES-E generation and/or which share with other countries' infrastructures to which new RES-E generation is connected (e.g., NSCOGI), it becomes necessary to discuss the issue. It can also be concluded from the example of Norway and Sweden that when two countries that have established integrated electricity markets decide to establish support schemes such as a TGCs market, this requires a high degree of coordination of the two national support schemes, including at the level of physical electricity market.<sup>1019</sup> The purpose of integrating electricity markets is, *inter alia*, to create cost-effectiveness, competitiveness and security of supply. The adoption of an ambitious RES-E support scheme that will alter the energy-mix in one of the countries may hamper the attainment of the objectives of the integrated markets by altering the conditions of competition. If the hypothesis is pushed one step further, one can say that an integrated European electricity market may require further coordination of national support schemes at EU level. As demonstrated by the still recent Regional Initiatives and the new provisions on regional cooperation, this remains a long-term goal. Finally, it must be noted that integrated regional markets may also benefit the deployment of RES-E by enlarging the scope of the market.<sup>1020</sup> Well integrated regional electricity markets also have the experience and infrastructures for dealing more easily and rapidly with the issues that the integration of renewable energy could create.<sup>1021</sup>

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<sup>1019</sup> *Haromiseringsbehov ved etablering av et norsk-svensk marked for grønne sertifikater*, XRGIA, report for Energi Norge, January 2010.

<sup>1020</sup> R. Pierce, M. Trebilcock and E. Thomas, 'Regional Electricity Market Integration – A comparative Perspective,' *Competition and Regulation in Network Industries*, Vol. 8 (2007), No.2, p. 224.

<sup>1021</sup> See the position of the Norwegian government in that respect in the Law proposal on green certificates, Petroleum and Energy Ministry (Høringsnotat om lov om elsertifikater), 08.12.2010, p. 5:

*'Satsingen på å fremme produksjon av elektrisk energi basert på fornybare energikilder har tradisjonelt vært et nasjonalt anliggende. Samtidig er den samlede satsingen i de nordiske landene viktig for forsyningsikkerheten i det felles nordiske kraftmarkedet. En større grad av koordinering av satsingen vil kunne gi en bedre utnyttelse av ressursene og styrke forsyningsikkerheten. De nordiske landene har gode erfaringer med samarbeid fra det nordiske kraftmarkedet, og det er et godt grunnlag for å utvikle et felles elsertifikatmarked.'*



**Part IV – Internal market rules applied to the trading of electricity and certificates under national TGCs schemes**



## 9 National TGCs schemes and free movement of electricity

The European Court of Justice has defined electricity as a good, which is subject to free movement within the borders of the internal market.<sup>1022</sup> Green electricity is not different from other types of electricity in that respect, except that it carries an additional value represented by its generation attributes. Some Member States may be keen to open their support scheme to the relying RES-E electricity (9.1). Other Member States may prefer to maintain control over their national support schemes, and render eligible only RES-E generated on their territory. In the latter case, the trade restrictive nature of the TGCs scheme and its legality must be assessed (9.2). Any barrier to trade electricity has to be assessed on the background of the Treaty provisions, secondary law, and case law. There is already an extensive legal literature on the topic of trade barriers. However, the availability of reliable tracking instruments, the provisions of the newly adopted Directive 2009/28/EC and the concomitant EU objectives of a sustainable, competitive and secure energy shed a new light on an old topic. The following analysis focuses on the trading of renewable electricity in relation to TGCs schemes, and on the applicability of internal market rules.

As reviewed in Chapter 7, the TGCs certificates schemes in operation or notified so far either do not constitute state aids in the sense of Article 107.1 TFEU or can be exempted from the general prohibition on the grounds of environmental protection. In these circumstances, the question of the concomitant application of state aid rules and Article 34 TFEU to the same measure will not be further explored.

### 9.1 The eligibility of imported RES-E to the national TGCs scheme of another Member State

As mentioned previously, there is no harmonisation of RES-E support schemes at EU level. The criteria for eligibility of imported RES-E to national schemes can consequently differ from one Member State to another. However, Directive 2009/28/EC provides for a new regime as regards the manner by which Member States can cooperate with each other to reach their mandatory target by the use of the three cooperation mechanisms. Any extraterritorial action of a Member State that would like to support renewable energy generation in another Member State must take these provisions into account.

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<sup>1022</sup> The European Court of Justice has settled by case law that electricity should be considered as a good for the purpose of Article 34 TFEU. The Treaty's rules relative to the free movement of goods are consequently applicable to the energy sector, including electricity. See case law: Case 6/64, *Flaminio Costa v ENEL* [1964] ECR 585; Case C-393/92, *Amelo v Energiebedrijf Ijsselmij* [1994] ECR I-1477, para. 28; Case C-158/94 *Commission v Italy* [1997] ECR I-5789, para. 17. In Case 72/83 *Campus Oil Ltd and others v Minister for Industry and Energy and Others* [1984] ECR 2727, para. 17, the Court insisted that such goods could not be exempted from the Treaty just because of their importance for the life or the economy of a Member State.

## 9.1.1 On extraterritorial unilateral action for the purpose of RES-E promotion

### 9.1.1.1 On extraterritorial unilateral action

In its judgement in the *PreussenElektra* case, the Court stressed the benefits of the generation of electricity based on renewable energy sources for the abatement of greenhouse gas emissions that constitute a European objective, as it is enshrined in EU law and as the EU has committed itself to act for under the UNFCCC and its Kyoto Protocol.<sup>1023</sup> Advocate General Jacobs was even clearer as to the benefits of the promotion of RES in one Member State for the protection of the environment in another Member State.<sup>1024</sup> From the perspective of the protection of the environment, supporting the generation of RES-E in one Member State is as good for the EU as the generation of RES-E in another Member State. It reflects the principle of solidarity between Member States enshrined *inter alia* in Article 3.3 TEU and Article 194.1 TFEU in the domain of energy. Solidarity for purposes of security of energy supply is also identified as an important component of the EU energy policy, as endorsed by Member States.<sup>1025</sup> In practice, and as regards RES-E promotion, this means that one Member State could protect the environmental interests of another Member State because it benefits the whole EU. Such proactive action is qualified as extraterritorial unilateral action.

The Court has developed a very restrictive interpretation of extraterritorial unilateral actions. At the same time that it applies the principle of solidarity between Member States as referred to above, any extraterritorial action on the own initiative of a Member State will challenge the principle of mutual trust between Member States. As settled by the Court in *Hedley Lomas*, ‘the Member States must rely on trust in each other to carry out inspections on their respective territories.’<sup>1026</sup> While the circumstances are different in the case of RES-E support, the eligibility of imported RES-E into a national TGCs scheme will nevertheless affect the renewable energy policy of the two Member States.

This raises first the question of the justification of extraterritorial unilateral action. A Member State may be keen to support the RES-E generated in another Member State because it falls short of accessing similar natural resources on its territory, at the same costs. Supporting imported RES-E can also facilitate compliance in a cost-effective way with its mandatory targets under Directive 2009/28/EC. There are also some projects of international nature, related to cross-border transport infrastructures, which may benefit

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<sup>1023</sup> Case C-379/98, *PreussenElektra AG v Schleswag AG*, [2001] ECR I-2099, paras. 73-74.

<sup>1024</sup> Opinion of Advocate Jacobs delivered on 26 October 2000, Case C-379/98, *PreussenElektra AG v Schleswag AG*, point 236: ‘... I cannot see why electricity from renewable sources produced in another Member State would not contribute to the reduction of gas emissions in Germany to the same extent as electricity from renewable sources produced in Germany. In both cases the domestic production of electricity from conventional sources, and the attendant pollution, will be reduced to the same extent.’ By that point, he contested the position of the Commission as regards the proportionality of the feed-in tariff law in Germany at stake in the case.

<sup>1025</sup> The 2007 Spring European Council invoked solidarity between Member States as a core motivation in the strengthening of security of energy supply within the European Union.

<sup>1026</sup> Case C-5/94, *Hedley Lomas*, [1996] ECR I-2553, para. 19. The *Lomas* case concerns the refusal by a Member State to issue export licences, i.e. quantitative restriction on exports according to the Court, on the ground that the importing State is not complying with a harmonisation directive.

from the access to a national support scheme. However, there would be a risk of overcompensation in the event a cross-border RES-E project could benefit from the support scheme of several Member States at the same time.

Secondly, it raises the question of pre-emption of Member States' action in relation to the exercise of an EU competence and the degree of harmonisation, as reviewed in the next paragraphs.

### 9.1.1.2 On extraterritorial action in case of harmonisation

The unilateral action of a Member State outside its national territory has been reviewed by the Court of Justice of the EU in the *Hedley Lomas* judgement. In the latter, the Court concluded that one Member State may not unilaterally adopt any corrective or protective measures designed to obviate any breach by another Member State of rules of harmonised EU law. According to constant case law, '[r]ecourse to [Article 36 TFEU] is no longer possible where Community directives provide for harmonization of the measures necessary to achieve the specific objective which would be furthered by reliance upon this provision.'<sup>1027</sup>

When there is harmonisation at EU level, any unilateral action from one Member State in favour of the protection of the environment in another Member State is almost automatically precluded. The recourse to the exemptions of Article 36 TFEU or the 'rule of reason' is no longer possible. As settled by the Court in *CFW*,<sup>1028</sup> when there is a harmonising directive which exhaustively regulates certain minimum standards, a Member State can no longer rely on Article 36 TFEU grounds, such as the defence of public-health in that case, to apply its own standards which are higher than the one of the harmonising directive. As summarised by Barnard, when there is harmonising European legislation that '*already occup[ies] the field,*' Member States lose the right to regulate this area.<sup>1029</sup>

The degree of EU harmonisation will consequently determine the level of pre-emption of national actions by Member States. Although the European Union has exclusive competence for the adoption of legislation aimed at establishing competition rules necessary for the functioning of the internal market (Article 3 TFEU), the rules applicable to the internal market, the environment, and energy are defined as shared competences between the EU and the Member States (Article 4.2 (a), (e) and (i) TFEU). In the areas of shared competences, the law-making power of the EU must have been exercised for the Member States to be pre-empted, as reviewed in Chapter 5.

In the case in question, and as detailed above, there is no harmonisation of support policies at EU level. However, EU law provides for harmonised provisions on GOs, and has exhaustively harmonised requirements regarding the cooperation between Member States for the purpose of meeting the mandatory targets defined in Directive 2009/28/EC by the

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<sup>1027</sup> C-5/94, *Hedley Lomas* [1996] ECR I-2553, para.18. This was previously set in case 5/77 *Tedeschi v Denkavit* [1977] ECR 1555; Case 148/78 *Ratti* [1979] ECR 1629; and Case 251/78 *Denkavit* [1979] ECR 3369; and Case 190/87, *Oberkreisdirektor v Moorman* [1988] ECR 4689, para.10). See as well conclusions by Advocate General Léger in *Hedley Lomas* case and *Compassion* Case (para. 66) where he discusses extraterritorial application.

<sup>1028</sup> Case C-1/96, *R. v. MAFF, ex parte Compassion in World Farming* [1998] ECR I-1251.

<sup>1029</sup> C. Barnard, *The Substantive Law of the EU* (Oxford, 2004), p. 84.

definition of cooperation mechanisms.<sup>1030</sup> For this reason, it can be argued that Directive 2009/28/EC has settled the case, as further analysed in Section 9.1.2 below.

### **9.1.1.3 The legality of unilateral extraterritorial action in the absence of harmonisation is less clear**

In the absence of harmonisation, Member States can evoke the derogations of Article 36 TFEU, ‘*provided that the harmonization occupies the field to the exclusion of Member State competence.*’<sup>1031</sup> In the *Scottish Grouse* case,<sup>1032</sup> the European Commission argued that the defence of common European interests like the protection of birds could justify extraterritorial action within the framework of Article 36 TFEU, under the limits put by the principles of proportionality and necessity. However, necessity ceases to exist when the destination Member State has adopted a statutory system equivalent to that of the exporting State.<sup>1033</sup> The Court followed a similar approach in *Inter-Huiles* and *Dusseldorp*, where it ‘*dismissed unilateral action in the name of environmental protection on the grounds, inter alia, that the environment was protected just as effectively in the other Member State to which exports were prohibited.*’ Meanwhile, the Court adopted a more protective approach in the *DaimlerChrysler* case where it concluded that, in the particular context of cross-border waste management, the extraterritorial unilateral action of a Member State must be rejected as it is the competence of the destination State to ensure environmental friendly disposal of waste on its territory, not that of the exporting State.

Indeed, the responsibility of the Member States to ensure compliance with EU requirements plays an important role. It is the responsibility of each Member State to ensure compliance with EU law, and adopt ‘*all measures at national law necessary to implement legally binding Union acts.*’<sup>1034</sup> Member States are required by Directive 2009/28/EC to take action, and adopt national measures for the fulfilment of their targets.<sup>1035</sup> Support schemes for RES-E generation are one of the implementation measures used in the context of these mandatory targets which are binding on each Member State individually.<sup>1036</sup> Allowing the eligibility of the renewable electricity of another Member State under a national scheme would indeed support the protection of the environment in that state, but it will also influence the manner by which the Member State complies with these obligations. It is defended hereafter that the conditions to allow such eligibility have been to a certain extent harmonised by Directive 2009/28/EC, which limits and even precludes - if not agreed - unilateral action on the part of the importing State. Although the implementation instrument is not harmonised, the directive limits the conditions of unilateral actions by Member States on that particular point. Obviously,

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<sup>1030</sup> See provisions on the three flexible mechanisms and the online transparency platform (Article 24, Directive 2009/28/EC).

<sup>1031</sup> Case 190/87 *Oberkreisdirektor v Moorman* [1988] ECR 4689, para. 10.

<sup>1032</sup> C-169/89 *Criminal proceedings against Gourmetterie Van den Burg* [1990] ECR I-2143.

<sup>1033</sup> L. Hancher, ‘Trade-Neutral Policies for the Promotion of Electricity from Renewables,’ in J. Bielecki and M. G. Desta, *Electricity Trade in Europe – Review of the Economic and Regulatory Changes* (Kluwer Law, 2004), pp. 298-299.

<sup>1034</sup> Article 291.1 TFEU.

<sup>1035</sup> Article 3.2, Directive 2009/28/EC.

<sup>1036</sup> Article 3.3, Directive 2009/28/EC.

rendering imported RES-E eligible requires, under the new requirements defined in Directive 2009/28/EC, a preliminary agreement between the Member States concerned. This is because of the possible alterations this eligibility will entail for the development of national resources.

Finally, the practice of reverse discrimination and the possible export restrictions adopted under the national legislation of the exporting state can contravene the desire of an importing state to make the imported green electricity eligible. Such situations could be motivated by the desire to control the development of national RES-E generation capacity, for policy-mix and security of energy supply purposes. As analysed in section 9.2, such protection can be grounded in new justifications in the provisions of Directive 2009/28/EC.

### **9.1.2 Eligibility of imported RES-E: Has Directive 2009/28/EC closed the issue?**

Directive 2009/28/EC makes clear that Member States can keep control over their national scheme. It endorses the fact that Member States ‘grant benefits solely to energy from renewable sources that is produced on their territory.’<sup>1037</sup> In these circumstances, one may wonder what interpretation is to be given to the provisions of the directive and the discretion it leaves to Member States as regards the manner by which they choose to open their support schemes to RES-E generated in another Member State.<sup>1038</sup> Recital 25 of Directive 2009/28/EC reads as follows:

*‘... This Directive aims at facilitating cross-border support of energy from renewable sources without affecting national support schemes. It introduces optional cooperation mechanisms between Member States which allow them to agree on the extent to which one Member State supports the energy production in another and on the extent to which the energy production from renewable sources should count towards the national overall target of one or the other. ... it is essential that Member States are able to determine if and to what extent their national support schemes apply to energy from renewable sources produced in other Member States and to agree on this by applying the cooperation mechanisms provided for in this Directive.’*

From the reading of Recital 25 it can be concluded that the eligibility of foreign produced RES-E to a national support scheme is subject to the use of the cooperation mechanisms defined in Directive 2009/28/EC. In other words, if a Member State wants to render imported RES-E eligible, it must apply the cooperation mechanisms. This is consistent with the interpretation of the directive given previously, namely that the directive does not harmonise support schemes, but harmonises the manner by which Member States can cooperate to reach their mandatory targets.<sup>1039</sup> This interpretation is supported by Article 3.3, last sub-paragraph of the same directive, which provides that:

*‘Without prejudice to Articles 87 and 88 of the Treaty, Member States shall have the right to decide, in accordance with Articles 5 to 11 of this Directive, to which extent they support energy from renewable sources which is produced in a different Member State.’*

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<sup>1037</sup> Recital 25, Directive 2009/28/EC.

<sup>1038</sup> It can be envisaged that a national support scheme also renders eligible RES-E generated in a third country, but the present analysis will primarily focus on cooperation between Member States.

<sup>1039</sup> See section 5.3.

If such an interpretation is to be followed, it entails that a Member State rendering imported RES-E eligible to its support scheme must apply one of the cooperation mechanisms. The manner by which to render foreign RES-E eligible would consequently be exhaustively harmonised. This interpretation is supported by the statements of the Commission in its 2011 review of the European and national financing for renewable energy. The Commission suggests here that a Member State can agree to finance a project supported by private parties in another Member State under the ‘joint project’ cooperation mechanism of the directive by giving them access to its national scheme. The Member State will receive an agreed share of the renewable energy produced and that it supported for compliance with its target.<sup>1040</sup> It should nevertheless be pointed out that opening up a national support scheme by this means represents a certain administrative burden, both at national and European level, since such decision would be made on an individual basis. Opening the RES-E support scheme to projects on a more regular basis could conduct to join, partly or totally, the support schemes, moving to another type of cooperation, which in turn is encompassed by the directive.

In conclusion, the discretion of a Member State in adopting extraterritorial unilateral action depends on the existence of harmonisation rules. It is here defended that Directive 2009/28/EC does in fact preclude the unilateral extraterritorial action of a Member State entailed by opening up its support scheme to the renewable electricity of other Member States because of the harmonisation measures contained in the directive. The manner a Member State opens up its TGCs scheme to imported RES-E is harmonised by the directive.

## **9.2 Trade restrictive nature of national TGCs schemes as regards imported RES-E**

National support schemes for RES-E generation can conflict with the internal market rules when they limit the free movement of green electricity. *PreussenElektra* remains the landmark decision in that domain, but Directive 2009/28/EC is now providing Member States important safeguards as regards the control over their support scheme and the possibility to limit eligibility of imported electricity to their support scheme. The following paragraphs assess the legality of trade restrictive measures under TGCs schemes by looking at the room of appreciation left by Directive 2009/28/EC (9.2.1) and the scope of application of Article 34 TFEU, as it has been interpreted by the Court (9.2.2). Finally, the *PreussenElektra* judgment is put in perspective with the new shape of the electricity market and the availability of tracking instruments for renewable electricity (9.2.3).

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<sup>1040</sup> *Review of European and national financing of renewable energy in accordance with Article 23(7) of Directive 2009/28/EC*, Commission staff working document, SEC(2011) 131 final, 31.01.2011, p. 8. By reference to the use of joint project, the Commission suggests the following:

*‘A private entity such as a power generator, infrastructure company, energy equipment manufacturer, a banking consortium can identify projects in any Member State. Financing such a project could occur under the normal and existing domestic arrangements, but if such arrangements are insufficient, because the support is too low or does not qualify according to domestic priorities, the project would not be built. In such a case, the project developer could broker an agreement whereby another Member State agrees to help finance the project; again, this could be through loans, grants, tenders or access to national support schemes such as feed-in tariffs or green-certificate regimes. In exchange for this co-financing, the Member State would receive credit for a share of the renewable energy that was produced as a result of the project.’* Emphasis added.



## 9.2.1 Directive 2009/28/EC and the necessity for Member States to keep control over their support scheme

The reading of Directive 2009/28/EC gives the impression that the European legislator has endorsed the *PreussenElektra* case law, and the fact that Member States are able to restrict the eligibility of their national support scheme to renewable electricity generated on their territory. Recital 25 of Directive 2009/28/EC reads as follows:

*‘The majority of Member States apply support schemes that grant benefits solely to energy from renewable sources that are produced on their territory. For the proper functioning of national support schemes it is vital that Member States can control the effect and costs of their national support schemes according to their different potentials. One important means to achieve the aim of this Directive is to guarantee the proper functioning of national support schemes, as under Directive 2001/77/EC, in order to maintain investor confidence and allow Member States to design effective national measures for target compliance. This Directive aims at facilitating cross-border support of energy from renewable sources without affecting national support schemes. ... In order to ensure the effectiveness of both measures of target compliance, i.e. national support schemes and cooperation mechanisms, it is essential that Member States are able to determine if and to what extent their national support schemes apply to energy from renewable sources produced in other Member States and to agree on this by applying the cooperation mechanisms provided for in this Directive.’*

It also corresponds to the position defended by the Member States that want to keep control over their national support schemes, the development of their renewable energy sources and related economic and social interests. During the negotiations of Directive 2009/28/EC, Member States were concerned about the uncertainty entailed by an open system, leaving decisions on investments in RES-E generation on their territory to the discretion of private actors who could shop around for the best support. In the long run, that would entail a more harmonised system of support between Member States, but, as seen in section 5.1.3, this might first be temporarily inadequate, and, second, this would withdraw from Member States important discretionary powers in designing their support scheme. The safeguard provided in Directive 2009/28/EC can also be seen as the counterpart of the control Member States keep over their energy mix and the conditions for exploiting their energy resources, pursuant to Article 194.2 TFEU.<sup>1041</sup> Mandating Member States to admit renewable electricity generated in another Member State to their support scheme could alter such discretion. Article 3.3, last sub-paragraph of Directive 2009/28/EC quoted previously, mirrors the same discretionary power left to Member States as regards eligibility of imported RES-E. Finally, and as also stated above, Member States are individually responsible for the attainment of the mandatory targets set in Directive 2009/28/EC, as well as for the implementation of EU law measures. Not reaching the individual targets would constitute a breach of their obligations under the Treaty. As long as *national* targets exist, it can be argued that Member States should keep control over their support scheme to comply with their obligations under EU law. For these reasons, the provisions of the directive should be understood as strong safeguards for the control that Member States exercise over their national RES-E support scheme.

Against this background, there are different ways by which to restrict the eligibility of imported electricity to a national support scheme. The most common one is to define as eligible only national resources, plants located in the national territory, or the electricity

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<sup>1041</sup> See on that point Chapter 5.

fed into the national electricity network. Outside the European Union, the United States is a good illustration of similar regulatory delimitations.<sup>1042</sup>

## 9.2.2 Trade restrictive nature of TGCs schemes as regards imported RES-E

Article 34 TFEU defines a general prohibition on restriction on imports of goods between Member States as well as all measures having equivalent effect. A TGCs scheme does not directly prohibit the import of electricity from another Member State, and cannot as such be qualified as a general prohibition. However, certain elements of the scheme have or may have as an indirect consequence a restrictive effect on import. The question raised in this Section is consequently whether a national TGCs scheme can create actual or potential barriers to electricity trading between Member States, and so be qualified as measures having equivalent effect to a quantitative restriction on imports (MEQR) within the meaning of Article 34 TFEU. Ultimately, by identifying the components of the TGCs scheme resulting in restrictions on import of electricity, a Member State can design its scheme in a way that avoids the application of the prohibition of Article 34 TFEU or at least limits the restrictive effects on electricity trading.

While *PreussenElektra* was the first and remains the leading case where the conformity of an operating aid scheme for RES-E generation was assessed under Article 34 TFEU, and besides the similarities of qualification under the EU state aid rules reviewed in Chapter 7, the conclusions of the Court in that case must be carefully applied to the functioning of a TGCs scheme.<sup>1043</sup> A major conclusion from the *PreussenElektra* judgment that is applicable to all RES-E support schemes is that a national measure that discriminates against imported electricity is capable, even potentially, of hindering trade between Member States.<sup>1044</sup> Here, the *Dassonville* formula remains the reference definition for MEQRs, namely: ‘*All trading rules enacted by Member States which are capable of hindering, directly or indirectly, actually or potentially, intra-community trade are to be considered as measures having effect equivalent to quantitative restrictions.*’<sup>1045</sup>

A national TGCs scheme can entail elements of discrimination as regards imported RES-E at two levels: first, when defining which electricity generation plants are eligible to receive TGCs (at the issuance level); and, second, when defining which types of certificates are accepted for compliance with the quota obligation (at the redemption level). These two aspects of the scheme are very much related, because they both concern the nature of the

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<sup>1042</sup> C. Banet, ‘Terms and Conditions of Renewable Energy Certificates Trading in the United States’ in B. Delvaux, M. Hunt and K. Talus (eds.), *EU Energy Law and Policy Issues*, 2<sup>nd</sup> ed (Brussels, Euroconfidentiel, 2010) (ELRF Collection).

<sup>1043</sup> The Court has reviewed support measures in favour of renewable energy in other cases. Ex: varying taxation, C-213/96, *Outokumpu Oy* [1998] I-01777. As regards tax measures it should be noted that the latter are generally excluded from the scope of application of Article 34 TFEU (see: Case C-266/91 *CELBI* [1993] ECR I-4337, para. 9).

<sup>1044</sup> In the *PreussenElektra* case, the purchase obligation imposed on electricity supply undertakings applied only to electricity produced from RES within the scope of that statute and within the respective supply area of each supply undertaking concerned. Only this electricity was eligible to the support scheme. The restriction on trade was not contested by the parties to the *PreussenElektra* case.

<sup>1045</sup> Case 8/74, *Procureur du Roi v Benoît and Gustave Dassonville* [1974] ECR 837, para. 5.

certificate. They nevertheless address two different risks of restraint as regards imported electricity.

### 9.2.2.1 Trade restrictive elements of TGCs schemes at issuance level

As regards the issuance of TGCs, the national legislation usually excludes RES-E generators located outside the national territory to become eligible to issue TGCs, except if the Member States are using cooperation mechanisms. The foreign generators will consequently never be eligible to ‘produce’ the certificates. However, this explicit and so direct exclusion does not prevent foreign RES-E generators from selling their electricity on the Member State’s market. It does not either refrain these generators from commercialising their electricity as green, because of the system of guarantees of origin defined by Directive 2009/28/EC.

Consequently, the measure does not constitute a barrier to access the electricity market in that country. It does not either refrain generators to become traders of TGCs on the TGCs market in accordance with the free movement of services, if they wish to do so. What the measure prevents foreign RES-E generators from doing is first ‘producing’ TGCs, and then becoming first suppliers of TGCs on the national TGCs market. This part of the scheme can consequently not be deemed to hinder the cross-border trade of electricity.

It should already be noted here that national TGCs – i.e., used for compliance with a national quota obligation – are not supposed to be in free movement in the European Union.<sup>1046</sup> It follows that the restrictions put on the plants’ eligible to issue TGCs have limited impact on cross-border trade, which is a core factor for the Court in assessing the application of Article 34 TFEU. The literature notes a recent tendency of the Court to extend the scope of application of Article 34 TFEU, but access to the electricity market and effect on cross-border trade, which remain important criteria, do not seem to be jeopardised by this component of the scheme.<sup>1047</sup>

### 9.2.2.2 Trade restrictive elements of TGCs schemes at redemption level

A more trade restrictive component of the TGCs scheme appears at the redemption level. To comply with their quota obligation, obligated parties must submit TGCs in accordance with the eligibility criteria. Here, two situations must be distinguished according to trading modalities of certificates and electricity.<sup>1048</sup>

According to a first situation, electricity and TGCs are traded unbundled. The obligated suppliers,<sup>1049</sup> purchase electricity on the electricity market and the TGCs on the TGCs market, independently of each other. Thereafter, the buyer notifies the registry of the transfer of ownership of TGCs. The origin of the electricity is not relevant to the supplier. The latter is only interested in purchasing electricity according to quantity, price and quality criteria, as it should be in a competitive electricity market. The extent to which the

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<sup>1046</sup> See further developments on the issue of certificates trading in Chapter 10.

<sup>1047</sup> D. Chalmers, G. Davies and G. Monti, *European Union Law*, 2<sup>nd</sup> ed., (Cambridge University Press, 2010), p. 749.

<sup>1048</sup> Trading modalities for TGCs under national schemes have been previously described in section 1.2.4.

<sup>1049</sup> The hypothesis here is that the obligation is placed on electricity suppliers.

electricity comes from another Member State depends on physical infrastructures, and financial trading with other Member States depends on the status of the financial power market (via power exchange eventually). The supplier gets the certificates that he will use for compliance separately. In such a situation, there is no consequence for electricity trading resulting from the TGCs eligibility criteria being limited to national RES-E. This is a very different system than that of a FITs, where obligated parties must purchase renewable electricity according to discriminatory criteria such as in the *PreussenElektra* case.

However, according to a second situation, electricity and TGCs are sold bundled in a power purchase agreement (PPA). In this case, suppliers may prefer entering into a PPA that includes TGCs, which they can use for compliance, and consequently prefer buying electricity from national RES-E generators. They have ‘*practically no interest in buying*’ the imported RES-E.<sup>1050</sup> Otherwise, they would need to conclude an additional transaction for the purchase of eligible TGCs, which would increase their costs. Again, the scheme does not explicitly prohibit the import of RES-E from other Member States, but it affects, or can potentially affect, the demand for such electricity. It is therefore an indirect consequence that the eligibility criteria for the TGCs to be used for compliance have an effect on electricity trading between Member States. Depending on the extent to which bundled PPAs are common practice, the risk of discrimination as regards imported electricity is at least potential, at worst actual.

According to settled case law, state measures that encourage or require national undertakings to purchase a certain amount of products from national producers must be regarded as a MEQR as it reduces the demand for similar imported goods.<sup>1051</sup> Imported RES-E and nationally produced RES-E cannot be qualified under these circumstances differently than like products. The broad interpretation given to the notion of MEQRs, as attested by the decision of the Court in the *Alfa Vita* case,<sup>1052</sup> may conclude in favour of such qualification. Ultimately, the effects of the measure taken by the state will also contribute to qualify it as restrictive and call for the application of Article 34 TFEU.

However, an additional element in the assessment under Article 34 TFEU relates to the commercial practices in the electricity market. Although the scheme’s criteria are indirectly at the origin of the potential effect on trade, the bundled purchase of electricity and TGCs derives from a commercial practice, not directly from a state measure, whatever the form it could take.<sup>1053</sup> The Member State does not encourage suppliers to conclude bundled TGCs-PPAs. This is again a major difference with the FITs regime at stake in *PreussenElektra* case, which is based on a purchase obligation imposed by the national

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<sup>1050</sup> Case C-110/05, *Commission v Italy*, [2009] ECR I-519, para. 57.

<sup>1051</sup> Case C-379/98, *PreussenElektra AG v Schleswig AG*, [2001] ECR I-2099, paras.70-71, and Opinion from A.G. Jacobs in the case, points 191 and 201; Case 72/83 *Campus Oil v Minister for Industry and Energy* [1984] ECR 2727, para.16; Case C-21/88 *Du Pont de Nemours Italiana* [1990] ECR I-889, para.11. See also Case 113/80 *Commission v Ireland* [1981] ECR 1625, para. 11. See on the encouragement to purchase national products: Case 249/81 *Commission v Ireland* [1982] ECR 4005, paras.27 to 29; Case 103/84 *Commisison v Italy* [1986] ECR 1759, para. 24.

<sup>1052</sup> Joined Cases C-158/04 & C-159/04 *Alfa Vita Vassilopoulos AE* [2006] ECR I-8135.

<sup>1053</sup> On the different forms that can take the state measure at the origin of the restriction, see: Case 21/84 *Commission v France* [1985] ECR 1355; Case C-192/01 *Commission v Denmark* [2003] ECR I-9693; Case C-212/03 *Commission v France* [2005] ECR I-4213.

legislation. The question here is the extent to which the state can be held responsible for a private commercial practice at the origin of the restriction.

As regards the application to Article 34 to private undertakings, the Court has constantly held that it is strictly limited to measures attributable to the state.<sup>1054</sup> As noted by Chalmers *et al.*, the behaviour of undertakings discriminating against importers will be subject to observance of EU competition rules.<sup>1055</sup> While the state is not at the origin of the commercial practice of bundled TGCs-PPAs, the mere fact that it does not restrain suppliers from discriminating against the purchase of imported RES-E, might again fall within the definition of MEQRs.<sup>1056</sup> As set by the Court in Case C-112/00 *Schmidberger v Austria*:

*‘58. The fact that a Member State abstains from taking action or, as the case may be, fails to adopt adequate measures to prevent obstacles to the free movement of goods that are created, in particular, by actions by private individuals on its territory aimed at products originating in other Member States is just as likely to obstruct intra-Community trade as is a positive act.*

*59. [...] Articles 30 and 34 of the Treaty [now 34 and 35 TFEU] require the Member States not merely themselves to refrain from adopting measures or engaging in conduct liable to constitute an obstacle to trade but also, when read with Article 5 of the Treaty [now 4.3 TEU], to take all necessary and appropriate measures to ensure that that fundamental freedom is respected on their territory. Article 5 of the Treaty [now 4.3 TEU] requires the Member States to take all appropriate measures, whether general or particular, to ensure fulfilment of the obligations arising out of the Treaty and to refrain from any measures which could jeopardise the attainment of the objectives of that Treaty.’*

In *Schmidberger* as well as in a previous case of similar nature, C-265/95 *Commission v France*, the fundamental rights of demonstrators who were the instigators in blocking imports were at stake. In these cases, the Court assessed whether the Member State, once informed about the private action, had taken measures. Then, it assessed whether the national authorities had reacted in a proportional and reasonable manner, by balancing the need to ensure the exercise of a fundamental right and the need to ensure the free movement of goods. In the case of bundled PPAs, the contractual freedom should be balanced against the respect of the free movement of electricity.<sup>1057</sup> The result of this balancing test will depend on the extent to which the bundled PPAs constitute a common practice. But prohibiting a commercial practice as a consequence of the effect of the criteria of redemption of certificates seems *a priori* too general to be proportionate and reasonable, because bundled TGCs-PPAs do not represent a dominant practice.

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<sup>1054</sup> Case 311/85 *Vereniging van Vlaamse Reishureaus (VVR) v ASBL Sociale Dienst van de Plaatselijke en Gewestelijke Overheidsdiensten* [1987] ECR 3801, para. 30.

<sup>1055</sup> D. Chalmers, G. Davies and G. Monti, *European Union Law*, 2<sup>nd</sup> ed., (Cambridge University Press, 2010), p. 757.

<sup>1056</sup> See on the role of the state in import restrictions consecutive to the behaviour of individuals: Case C-265/95 *Commission v France* [1997] ECR I-6959, which relates to French farmers that prevented by their demonstrations the import of strawberries from Spain. See also Case C-112/00 *Schmidberger v Austria* [2003] ECR I-5659, paras. 57-58. The latter case relates to Austrian citizens' blockage of road access into Austria from Italy in order to protest against the resulting pollution from road traffic. The consecutive days of road-traffic blockage by demonstrators resulted in a restriction on the imports of goods from Italy.

<sup>1057</sup> On the recognition of contractual freedom as a fundamental right: Case 151/78, *Sukkerfabriken Nykoebing*, [1979] ECR para. 19; C-240/97, *Spain v Commission* [1999] ECR I-6571, para. 99.

The discrimination against imported electricity would become direct, and the measure would probably qualify as MEQR, if the national legislation requires suppliers to conclude bundled TGCs/PPAs. Such a hypothesis has been rarely illustrated, except in the United States. In California, the Public Utility Commission (CPUC) has for a very long time been reluctant to unbundle the Tradable Renewable Energy Certificates (TREC)s from the PPA. As of January 2011, the CPUC authorises both bundled and unbundled certificates, the latter being subject to so-called ‘REC-only transactions.’<sup>1058</sup>

### 9.2.2.3 Conclusion

The previous paragraphs have pointed out the differences in terms of effect on trade between a TGCs scheme and a FIT. A TGCs scheme tends to have far fewer effects on electricity trade than a FIT. The exception is the situation where the certificates are bundled to the PPA. A first conclusion in terms of scheme design is consequently that a TGCs scheme based on the unbundled trade of certificates is less apt to hinder trade.

In the event of the existence of a MEQR, an important question remains; namely, how to combine the reading of Directive 2009/28/EC provisions and the general regime of Article 34 TFEU. Even in the situation where the TGCs scheme is recognised as being a MEQR in the sense of Article 34 TFEU, it would find justification in both the directive and Article 194 TFEU. In other words, the objective of the MEQR would be justified under the directive, but its effects would be contrary to Article 34 TFEU. It raises basically the question of the legality of Directive 2009/28/EC against the provisions on free movement of the Treaties. The answer to this question is not easy, in the absence of similar cases before the Court. One can eventually extend the *PreussenElektra* case law, which also balanced a measure corresponding to the fulfilment of EU objectives enshrined in primary and secondary law (protection of the environment and climate change policy), and the effects of the measure on trade. For this reason, the judgement is put in perspective in the next section.

One can wonder *a contrario* what would be the effect on trade of a scheme allowing the eligibility of imported RES-E. The forthcoming common TGCs market between Norway and Sweden provides part of the answer; it is also limited to two countries. Here it is foreseen that the location and the type of new RES-E plants should be decided by the market. In theory, the additional RES-E generation capacity could be only realised in one country, if the market so decides. Even in such a situation, the cooperation mechanisms defined in Directive 2009/28/EC will ensure that this will not put the other country in a situation of non-compliance, because the two governments need to agree in advance on the way to share the amounts of RES produced. In that sense, the cooperation mechanisms offer a safety net to the opening-up of national support schemes to imported RES-E.

## 9.2.3 Derogations to trade restrictive RES-E support schemes: putting *PreussenElektra* in perspective

Here is considered the situation where the restriction put on the eligibility of imported RES-E to a national TGCs scheme hinders even potentially the free movement of that

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<sup>1058</sup> These changes have been adopted by CPUC Decisions 11-01-025 and 11-01-026 of 13 January 2011. See CPUC website on TREC)s: <[http://www.cpuc.ca.gov/PUC/energy/Renewables/hot/TREC\)s.htm](http://www.cpuc.ca.gov/PUC/energy/Renewables/hot/TREC)s.htm)>.

electricity. The measure constitutes a MEQR, and its compatibility with the Treaty will need to be assessed on the background of the Court case law on the application of Article 34 TFEU, and in particular the *PreussenElektra* decision.

In *PreussenElektra*, the Court concluded that ‘*in the current state of Community law concerning the electricity market, legislation such as the amended [FITs law] is not incompatible with [Article 34 TFEU].*’<sup>1059</sup> To assess whether the restrictions were compatible with the Treaty, the Court looked at, first, the aim of the measure, and, second, the particular features of the electricity market. In his opinion in the case, Advocate General Jacobs looked also at other possible derogations based on the aim of the measure (security of supply in addition to environmental protection), the content of secondary legislation (Directive 96/92/EC), but called also upon the Court to clarify its position as to whether directly discriminatory measures can be justified by mandatory requirements such as environmental protection.<sup>1060</sup>

Several of the arguments raised by the Court in its judgment are challenged by recent developments on the internal market of electricity and the use of trustful electricity tracking instruments. These new elements would be additional criteria in the application of the proportionality test. The Court’s arguments are hereafter put in perspective at the light of the new regulatory and factual circumstances related to the renewable electricity market, as well as the evolution of the Court’s case law on derogations to Article 34 TFEU. The reasoning is applied to the particular case of TGCs scheme following the hypothesis according to which some elements of the scheme would have as effect to restrict the free movement of electricity. But first, some preliminary comments must be made as to the methodology applied in the assessment.

### 9.2.3.1 Methodology of the assessment

A TGCs scheme may qualify as a MEQR under the circumstances stated above. It should be stressed again here that the measure is distinctly applicable because it expressly excludes imported RES-E from being eligible under the TGCs scheme. The Court has traditionnality defended that distinctly applicable measures can only be saved by the express derogations provided for in the Treaty. Article 36 TFEU reads as follows:

*The provisions of Articles 34 and 35 shall not preclude prohibitions or restrictions on imports, exports or goods in transit justified on grounds of public morality, public policy or public security; the protection of health and life of humans, animals or plants; the protection of national treasures possessing artistic, historic or archaeological value; or the protection of industrial and commercial property. Such prohibitions or restrictions shall not, however, constitute a means of arbitrary discrimination or a disguised restriction on trade between Member States.*

Article 36 provides for an exhaustive list of derogations to the general prohibition of Article 34 (and 35) TFEU that has been restrictly interpreted by the Court, because of the barriers the national measures represent for the functioning of the internal market. In *PreussenElektra*, the Court tends to include environmental protection under the derogations of Article 36 TFEU as reviewed in next section. Meanwhile, the Court has been progressively more flexible as regards its strict interpretation of the derogations of

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<sup>1059</sup> Case C-379/98, *PreussenElektra AG v Schleswag AG*, [2001] ECR I-02099, para. 81.

<sup>1060</sup> Opinion AG Jacobs in case C-379/98 *PreussenElektra*, point 229.

Article 36 TFEU in order to take into account more contemporary objectives, including again the protection of the environment, or to endorse fundamental rights, such as contractual freedom referred to above. Consequently, the exhaustive list of Article 36 TFEU has been progressively completed by the additional list of mandatory requirements (also called imperative requirements).<sup>1061</sup> The latter were originally applied solely to indistinctly applicable MEQRs but their recourse has extended to distinctly applicable MEQRs. This conducts authors to conclude that the distinction between the regime of derogation of Article 36 TFEU and the mandatory requirements is now shading. In terms of methodology, Barnard concludes that ‘*the Court still considers Member States’ arguments separately under each heading but then applies common principles.*’<sup>1062</sup>

The second part of the assessment relates to the proportionality test, which consists in assessing the suitability and necessity of the measure towards its effects on trade.<sup>1063</sup> It is settled case law that, under Article 36 TFEU, the burden of proof lies with the Member State at the origin of the MEQR.<sup>1064</sup>

Finally, and pursuant to the second sentence of Article 36 TFEU, the measure must not either represent a means of arbitrary discrimination or a disguised restriction on trade.

### 9.2.3.2 Aim of the measure

The potentially restrictive effects of the TGCs scheme on electricity trading because of the eligibility criteria of the scheme founds a stronger justification under the currently binding EU law.

As stated in the very first paragraph of this thesis, TGCs are compliance instruments used to support RES-E generation. They bring flexibility in the compliance strategy of a Member State. They contribute to the achievement of the objectives of promotion of RES-E generation, which has, as a core effect, to protect the environment by the reduction of GHG emission and the ‘preservation of finite conventional energy sources’ as mentioned by Advocate General Jacobs. These objectives are enshrined in the Preamble and Article 3.3 of the TEU, and Articles 11, 191.1 and 194.1 TFEU. In *PreussenElektra*, the Court already insists on the relationship between the promotion of RES and the obligations contracted by the Union and its Member States under the international climate change

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<sup>1061</sup> On the use of the term ‘imperative requirements’ and ‘public-interest requirements’ as alternatives to ‘mandatory requirements’, see: on the first term, Case 178/84 *Commission v Germany* [1987] ECR 1227, para. 30, or Case C-239/90 *Boscher* [1991] ECR I-2023, paras.17-18; on the second term, joined cases C-267 and 268/91 *Keck and Mithouard* [1993] ECR I-6097, para .15.

<sup>1062</sup> C. Barnard, *The Substantive Law of the EU*, 3<sup>rd</sup> edition (Oxford University Press, 2010), p. 149 and Chapter 4.

<sup>1063</sup> The fact that the objective pursued cannot be achieved by less restrictive measures will be a crucial criterion in that respect. See case C-213/96 *Outokumpu Oy* [1998] ECR I-1777 and Case 72/83, *Campus Oil v Ministry for Industry and Energy* (Campus Oil) [1984] ECR 2727.

On general framework for the application of the proportionality test, see, inter alia: P. Craig and G. de Búrca, *EU Law – Text, Cases, and Materials*, 3<sup>rd</sup> edition (Oxford University Press, 2003), p. 626; C. Barnard, *The Substantive Law of the EU*, (Oxford University Press, 2004), p. 28.

<sup>1064</sup> Case 227/82, *Criminal proceedings against Leendert van Bennekom* [1983] ECR 3883, para. 40; Case C-17/93, *Openbaar Ministerie v Van der Veldt* [1994] ECR I-3537.



regime.<sup>1065</sup> The same objectives are referred to in Directive 2009/28/EC. To reach these objectives, the directive requires Member States to adopt measures ‘*effectively designed to ensure that the share of energy from renewable sources equals or exceeds that shown in the indicative trajectory...*’<sup>1066</sup> On the one hand, Member States have the legal obligation to reach a certain share of energy from renewable sources in their own gross consumption of energy in 2020. On the other hand, Member States are required to take action, which may be the adoption of a support scheme.<sup>1067</sup>

In *PreussenElektra*, the Court suggests that environmental protection can fall under Article 36 TFEU by reference to the need to protect health and life of humans, animals or plants. It ‘suggests’ it because it refers to the same wording than in Article 36 TFEU without referring explicitly to the article.<sup>1068</sup> Recently, the Commission expressed the opinion that the promotion of RES-E could fall within the public security entry of Article 36 too.<sup>1069</sup>

In recent decisions, environmental protection has been more clearly recognised as a mandatory requirement by the Court, even if the MEQR was indistinctly applicable.<sup>1070</sup> As noted by authors, it has become common for mandatory requirements to mirror objectives or policies of the Treaty.<sup>1071</sup>

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<sup>1065</sup> Case C-379/98, *PreussenElektra AG v Schleswag AG*, [2001] ECR I-02099, para. 73, referring in particular to Council Decision 94/69/EC of 15 December 1993 (OJ 1994 L 33, p. 11), concerning the international commitments of the Community under the United Nations Framework Convention on Climate Change, as well as the commitments under the Kyoto Protocol signed by the European Community and its Member States on 29 April 1998.

<sup>1066</sup> Article 3.2, Directive 2009/28/EC.

<sup>1067</sup> Article 3.3, Directive 2009/28/EC.

<sup>1068</sup> Case C-379/98, *PreussenElektra AG v Schleswag AG*, [2001] ECR I-02099, para.75. C. Barnard, *The Substantive Law of the EU*, (Oxford University Press, 2010), 3<sup>rd</sup> edition, p.162.

<sup>1069</sup> See state aid case N 178/2010 – Spain, Public service compensation linked to a preferential dispatch mechanisms for indigenous coal power plants, decision of 29.09.2010, C(2010) 4499, published in OJ C312 of 17.11.2010, footnote 52:

‘It may be noted that in Case C-379/98 *PreussenElektra*, paragraphs 68-81, the Court examined an obligation placed on traders in a Member State to obtain a certain percentage of their supplies of a given product from a national supplier and found that it was not incompatible with Article 30 EC [now Article 34 TFEU] as it was justified by a “mandatory requirement”. A fortiori, such a measure may be justified on public security grounds, expressly foreseen in Article 36 TFEU. The grounds referred to in Article 36 TFEU, unlike mandatory requirements under Article 34 TFEU, are, by nature, capable of justifying measures that are not indistinctly applicable to domestic and imported goods.’

<sup>1070</sup> See for example: Case C-320/03 *Commission v Austria* [2005] ECR I-7929, para. 35; Case 142/05 *Mickelsson* [2009] ECR I-000, para. 30.

See also comment by S. Poli as to the application in the *PreussenElektra* case: S. Poli, *National Schemes Supporting the Use of Electricity Produced from Renewable Energy Sources and the Community Legal Framework*, case law analysis, Case C-379/98, *PreussenElektra AG v Schleswag AG*, (2002) 14 (2) *Journal of Environmental Law*, p. 222.

See also, on mandatory requirements in the light of the *PreussenElektra* judgment: Johnston, Angus, ‘Legal aspects of Articles 8 and 9, concerning the trade in Guarantees of Origin between Member States,’ in *Report – Workshop on the Renewable Energy Directive Proposal*, Policy Department Economic and Scientific Policy, Briefing papers, IP/A/ITRE/WS/2008-04, p. 22 et seq.; Johnston, Angus [et al.], ‘The Proposed New EU Renewables Directive,’ in *European Energy and Environmental Law Review*, vol 17 (2008), p. 134 et seq.

<sup>1071</sup> N. Nic Shuibhne, ‘The free movement of goods and Article 28 EC: An evolving framework’ (2002) 27 *ELRev.* 408.

An important particularity of the restriction on imported RES-E to its eligibility to national TGCs scheme is that it relies on a provision of Directive 2009/28/EC. The possibility to adopt restrictive criteria for support schemes is explicitly provided for by Directive 2009/28/EC (Article 3.3, Recital 25). This has for consequence to legitimise the trade restrictive measure, which has an additional weight in the application of the proportionality test. Since Directive 2009/28/EC expressly provides for the potentially trade restrictive measure, there is less need to look at the provisions of Directive 2009/72/EC, even if it provides for the possibility to adopt discriminatory measures in favour of RES-E.

In his Opinion in the *PreussenElektra* case, Advocate General Jacobs discussed another possible ground for derogation, namely security of energy supply. The extent to which security of energy supply can be relied upon as a justification under Article 36 TFEU to the adoption of measures restricting imports of electricity is however of relative applicability, for a series of reasons. First, the dominating purpose of the adoption of a TGCs scheme is environmental protection, even if it has positive effects on security of energy supply. Environmental protection was similarly chosen as a legal basis for Directive 2009/28/EC that requires the adoption of RES-E support measures. The Court itself did not discuss security of energy supply as a possible source of derogation. Before closing the issue, it should be noted that the argument of security of energy supply gains progressively in force. At the time of the *PreussenElektra* judgement, the share of renewable sources in the electricity consumption was still relatively low in Germany as in the whole EU.<sup>1072</sup> However, the situation is changing rapidly, RES counting for a growing part of the energy mix. In some countries, like Norway, they even count for the wide majority. At EU level, the European Commission expects the share of renewable energy in the European electricity mix to rise from 16 per cent today to 33 per cent in 2020.<sup>1073</sup> The economic role of renewable energy sources is certainly not yet as decisive as in the *Campus Oil* case which related to petroleum energy sources,<sup>1074</sup> but this should not be excluded in a long-term perspective.

### 9.2.3.3 Factual background: shape of the electricity market and guaranty of the origin of renewable electricity

In assessing the proportionality of the German FITs regime in the *PreussenElektra* case, the Court emphasised the remaining obstacles to free trade in electricity between Member States, that are slowly being removed by the liberalisation process. To that respect, Directive 96/92/EC constituted ‘*only a further phase in the liberalisation of the electricity market*,’<sup>1075</sup> and was obviously not in measure to ensure free movement. Advocate General Jacobs pointed out to that fact and that the information given to the Court did not allow to determine ‘*precisely how and to what extent imports of electricity from other*

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<sup>1072</sup> Parties to the *PreussenElektra* case argued that renewable energy counted to only 1 per cent of the country’s electricity consumption.

<sup>1073</sup> *Review of European and national financing of renewable energy in accordance with Article 23(7) of Directive 2009/28/EC*, Commission staff working document, SEC(2011) 131 final, 31.01.2011, p. 9, footnote 21.

<sup>1074</sup> Case 72/83 *Campus Oil v Minister for Industry and Energy* [1984] ECR 2727, para. 34.

<sup>1075</sup> Case C-379/98, *PreussenElektra AG v Schleswag AG*, [2001] ECR I-02099, para.78.

*Member States are in practice affected by the operation of the StrEG 1998, and in particular for example whether imports of electricity from renewable resources are technically feasible at all and whether such electricity can be distinguished from electricity generated from conventional sources.*<sup>1076</sup> He even proposed the Court to reopen the oral procedure of that part of the case.<sup>1077</sup>

Certainly, a series of barriers to electricity trade between Member States remains today, and in particular as regards RES-E. This situation was at the origin of the proposal for Directive 2009/72/EC based on the conclusions of the Energy Sector Inquiry. Looking at the period 2009-2010, the Commission was still observing that national electricity markets remain nationally segmented and that a truly single energy market is ‘*far from complete*.’<sup>1078</sup> At the expiry of the transposition deadline of Directive 2009/72/EC on 3 March 2011, the Commission observed that Directive 2003/54/EC was not yet implemented in all Member States.<sup>1079</sup> For these reasons, liberalisation is still an undergoing process. But the factual background did change in ten years. Member States are progressively putting their legislation in conformity with Directives 2003/54/EC and 2009/72/EC. Cross-border trade of electricity is promoted by: provisions of secondary EU law,<sup>1080</sup> the duty of Member States to participate in at least one regional initiative pursuant to Article 6 of Directive 2009/72/EC, and a strong policy commitment from the Commission in terms of trans-European energy infrastructures.<sup>1081</sup>

In *PreussenElektra*, the Court identifies a second practical barrier to the free movement of renewable electricity as such. The Court notes that ‘*the nature of electricity is such that, once it has been allowed into the transmission or distribution system, it is difficult to determine its origin and in particular the source of energy from which it was produced*.’<sup>1082</sup> The development of electricity tracking instruments since the time of the judgement challenges the statement of the Court. First, and as analysed in Chapter 6, trustful electricity tracking instruments do exist and can ensure the type of energy source used of electricity generation. Second, Directive 2009/28/EC provides for a harmonised system of GOs, subject to a principle of mutual recognition, which facilitates the cross-

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<sup>1076</sup> Opinion AG Jacobs in case C-379/98 *PreussenElektra*, point 195

<sup>1077</sup> Opinion AG Jacobs in case C-379/98 *PreussenElektra*, point 196.

<sup>1078</sup> *2009-2010 Report on progress in creating the internal gas and electricity market*, Commission Staff Working Document, 09.06.2011.

<sup>1079</sup> Press conference, Council Transport-Telecommunications and Energy, 28 February 2011.

<sup>1080</sup> Directive 2009/72/EC previously mentioned; Regulation (EC) No 714/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the network for cross-border exchanges in electricity (OJ L 211 of 14.08.2009, p.15); Commission Regulation (EU) No 838/2010 of 23 September 2010 on laying down guidelines relating to the inter-transmission system operator compensation mechanism and a common regulatory approach to transmission charging (OJ L 250 of 24.09.2010, p. 5).

<sup>1081</sup> See *Energy infrastructure priorities for 2020 and beyond – A Blueprint for an integrated European energy network*, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, COM(2010) 677 final, 17.11.2010.

<sup>1082</sup> Case C-379/98, *PreussenElektra AG v Schleswag AG*, [2001] ECR I-02099, para. 79. The Court also notes that a system of ‘certificates of origin’ is proposed by the Commission as part of the proposal a directive on the promotion of renewable electricity, which intends to ‘*make trade in [RES-E] both reliable and possible in practice*’ (para. 80).

border trading of renewable electricity. A first version of the system of GOs was already provided in Directive 2001/77/EC, but this directive was not yet adopted at the time of the judgement. This particular aspect of the Court's judgement seems to be extremely outdated on the background on these regulatory and factual developments. It should also be noted that the Court had previously recognised the existence of methods to proof the origin of electricity, and to a certain extent does not follow its own case law, as noted by Hancher in relation to case C-213/96 *Outokumpu Oy*.<sup>1083</sup> In addition, and already at the time of the *PreussenElekta* judgement and along the transposition of Directive 2001/77/EC provisions on GOs, certain Member States started using GOs as proof of the renewable nature of RES-E. In state aid case N 550/2000, the Belgian government recognised that under the Flemish TGCs scheme, eligible RES-E producers did not necessarily need to have their headquarter in the Flemish region. The competent authority would verify the authenticity of the certificates issued outside Flanders by checking the GO. Put in the context of a TGCs scheme that only renders national RES-E eligible to the issuance of certificates, the system of GOs guarantees that RES-E generators get access to the RES-E market in other member states.

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<sup>1083</sup> [1998] ECR I-1777. See comments by L. Hancher, 'Trade-Neutral Policies for the Promotion of Electricity from Renewables,' in J. Bielecki and M. G. Desta, *Electricity Trade in Europe – Review of the Economic and Regulatory Changes* (Kluwer Law, 2004), p. 297.

## 10 Cross-border trading of TGCs: some internal market issues

For the time being, there is no trade in TGCs for compliance between Member States, nor is there a common legal definition of the certificates under EU law. Consequently, a series of non-settled issues makes the application of internal market rules to TGCs trading either irrelevant, due to lack of cross-border trading, or uncertain, due to varying legal frameworks dependent on agreement between Member States. Meanwhile, the hypothesis of cross-border trade in certificates must be envisaged for reasons of exhaustivity and because it will become a reality in the near future. Indeed, Norway and Sweden, by agreeing to establish a joint market as of 1 January 2012, will be the first countries to allow cross-border trading of TGCs for compliance at EU/EEA level. The realisation of cross-border trade of TGCs for compliance raises a series of comments on treatment of TGCs trading under internal market rules, namely, the criteria that would render internal market rules applicable, along with the effects of the application of the internal market rules on certificates trading. Because several issues are not yet settled under EU law, the present chapter is narrower in scope than the previous ones and serves only to point out some of the key issues related to cross-border trading of TGCs from an internal market perspective.

A first condition for the application of the internal market rules of the Treaties is that the certificates fall within the scope of application of Article 26 TFEU and relate to one of the four freedoms defined in the article.<sup>1084</sup> Three of the four freedoms – namely goods, capital and services – might be alternatively applicable to the cross-border trading of certificates, depending on their legal definition. The matter of whether certificates can be qualified as goods or securities (*i.e.*, financial instruments) needs to be settled by the Court or the European legislator, as argued in Chapter 4. In the absence of a harmonised definition of certificates, the question of the legal regime applicable to the certificates as an object subject to trading on the internal market remains uncertain and renders certificates trading more difficult and less trustful. However, as noted previously, the lack of a harmonised definition does not prevent parties from other Member States from engaging in trading certificates on national TGCs markets, if they qualify as a trading party in these markets. The activity of trading certificates *per se* is expected to fall under the regime of the free movement of services.

A second condition for the application of internal market rules is that the trading of certificates must have a cross-border character.<sup>1085</sup> If there is no *movement* between Member States, and where ‘*activities ... are confined in all respects within a single Member State*,’<sup>1086</sup> free movement rules do not apply. This means that internal market rules will only apply to certificates trading if the certificates cross the border between two Member States.

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<sup>1084</sup> Article 26.2 TFEU provides that: ‘*The internal market shall comprise an area without internal frontiers in which the free movement of goods, persons, services and capital is ensured in accordance with the provisions of the Treaties.*’

<sup>1085</sup> C. Barnard, *The Substantive Law of the EU*, 3<sup>rd</sup> edition, (Oxford University Press, 2010), p. 35.

<sup>1086</sup> Case C-97/98, *Peter Jägerskiöld v Torolf Gustafsson*, [1999] ECR I-7319, para. 42, and case law cited. See latter: Case C 60/00 *Mary Carpenter v Secretary of State for the Home Department* [2002] ECR I 6279, para. 28.

As noted before, there is no cross-border trade of TGCs between Member States for the purpose of compliance at the present time. In order for this to happen, Member States have to agree on the coordination of their TGCs schemes and apply the mechanisms defined in Directive 2009/28/EC if they want to count the exchanges as part of their target. When they agree on allowing TGCs trading for compliance, they will also agree on the trading conditions in an international agreement. This hypothetical cross-border trading is now being concretised with the signing, on 29 June 2011, of the international agreement between Norway and Sweden concerning the establishment of a joint TGCs market as of 1 January 2012.<sup>1087</sup> The agreement opens for the cross-border trading of certificates between the two countries for the purpose of compliance, but also foresees the extension of the compliance market to other countries in the future.<sup>1088</sup>

Even if there is an agreement between two or more Member States, this does not mean that the certificates are in free movement within the whole internal market. They are freely tradable for compliance between these Member States under the conditions set in the agreement, but not normally within the whole internal market. Similarly, TGCs issued in Member States which are not part of the agreement will not be accepted for trading on the compliance market. If TGCs are to be recognised as subject to the free movement rules, one can question the legality of the restrictions put on the trading of certificates with other Member States.

Compared to the restrictions on free movement of electricity (see Chapter 9), the restrictions on certificates trading are more direct. The regulatory framework usually provides that only national TGCs or TGCs from countries having access to the joint market can be traded.<sup>1089</sup> From an internal market perspective, this can be qualified as a restriction on the import of TGCs from Member States outside the joint market, since the restriction is not equally applicable. The restriction on exports of TGCs is more indirect: the legislation does not prohibit export, but the certificate that is transferred to a party located in another state and which does not own an account in the registry, will lose its value on the compliance market and is reduced in financial value *de facto*, or has no value at all for compliance. Under these circumstances, the restrictions on TGCs trading between Member States must be deemed contrary to the internal market rules. Some justifications, however, can be advanced. A first line of argumentation may relate to the necessity to refuse imported TGCs by reason of environmental protection. A second line of argumentation may be based on the nature of the different certificates. In particular, the question can be raised as to whether the imported TGCs from a Member State that is not

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<sup>1087</sup> *Avtale om felles elsertifikatmarked undertegnet*, Norwegian Ministry of Petroleum and Energy, press release Nr. 63/11, 29.06.2011. Text of the agreement, *Avtale mellom Kongeriket Norges Regjering og Kongeriket Sveriges Regjering om et felles marked for elsertifikater*, 29.06.2011, available at: <[http://www.regjeringen.no/upload/OED/pdf%20filer/EV/063-2011-Avtale\\_elsertifikater.pdf](http://www.regjeringen.no/upload/OED/pdf%20filer/EV/063-2011-Avtale_elsertifikater.pdf)>.

<sup>1088</sup> *Ibid.*, Preamble to the agreement, where it is stated that: '*Partene ... er åpne for at elsertifikatmarkedet senere skal kunne utvides til flere stater.*'

<sup>1089</sup> For example, the agreement signed between Norway and Sweden limits the access to the compliance TGCs market to certificates issued in those two countries and according to rules defined in the agreement. See Article 1.1 (a), definition of elcertificates: '*et bevis utstedt hos en part for at det er produsert en megawattime elektrisk energi i henhold til nasjonale bestemmelser i samsvar med denne avtale*' (emphasis added). See also Article 3.1: '*Partene oppretter et felles elsertifikatmarked fra og med avtalens ikrafttredelse. Det felles markedet innebærer at hver av partene skal sikre at elsertifikater utstedt i det ene landet skal kunne brukes til å oppfylle elsertifikatplikten i det andre landet.*'

participating to the joint market are products similar to the national TGCs. Indeed, in the absence of EU harmonisation, it is reasonable to assume that they answer different issuing criteria, such as: the year of construction of the plant, the year of generation, or the type of renewable energy source.<sup>1090</sup>

Meanwhile, the question of whether the exclusion of imported TGCs from the TGCs compliance market concluded between several states is a MEQR to the trading of certificates has been rendered irrelevant by Directive 2009/28/EC, which endorses the establishment of such markets of more limited territorial application. If TGCs are to be regarded as goods or a form of capital falling under the scope of Article 26 TFEU, this would result in an unusual situation where a directive backs a restriction on trade that would be contrary to the rules of free movement defined in the Treaties. A follow-up question would be whether the trade in certificates, as agreed between two Member States, is subject solely to the rules of the agreement concluded between these states or, instead, to the internal market rules.

As long as TGCs are not recognised as being subject to free movement rules, and there is no harmonisation of TGCs schemes, and as long as they do not infringe primary EU law rules, the conditions for trading certificates between the participating states to the compliance market are primarily regulated by the agreement signed between them. However, if TGCs are to be recognised as falling within the scope of application of the internal market, there could be a conflict between the regime of the agreement and the internal market rules. This could be sufficient grounds to challenge the legality of Directive 2009/28/EC under the restrictive conditions set in Articles 263-264 TFEU, since the directive would thereby endorse a discriminatory measure contrary to the rules of primary EU law.<sup>1091</sup> There is an important distinction here between the situation where a Member State adopts a discriminatory measure based, for example, on the grounds of environmental protection, and the situation where a directive allows Member States to adopt a discriminatory measure contrary to primary EU law as a general rule. Again, this is conditional on the recognition of the TGCs as being subject to the free movement regime.

The purpose of the internal market is to integrate national markets in order to ensure the completion of one single market. It is clear that the integration of the national TGCs markets is not yet a priority for EU policy. A major evolution from the current legal situation would be to consider electricity generation attributes that include the financial support, such as TGCs, as being subject to the free movement rules of the Treaties. This

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<sup>1090</sup> However, certain definitions or standards must be consistent with the European one, whether or not the trading of certificates falls under the scope of the internal market. The definition of RES must be consistent with the one found in Directive 2009/28/EC for example.

<sup>1091</sup> In accordance with Article 263 TFEU, a directive can be annulled after judicial review by the Court if the latter recognises it as being in contradiction with the Treaties or any rule of law relating to their application. Other grounds for annulment can be: lack of competence; infringement of an essential procedural requirement, or misuse of powers. Article 263 TFEU also provides further details on the nature of the receivable applicants. It must be noted that the *time limit* for challenging the legality of the act can exclude the receivability of any action for annulment (i.e., ‘*within two months of the publication of the measure, or of its notification to the plaintiff, or, in the absence thereof, of the day on which it came to the knowledge of the latter, as the case may be*’, Article 263 sixth paragraph). On time limit and receivability, see Case T-468/10, *Doherty v European Commission*, [2011] ECR (not yet published).

step is politically difficult, as Member States do not want to concede sovereignty on the issue of financing new RES-E generation on their territory. It may also raise some issues of competences if the EU has to legislate on the issue as reviewed in Chapter 5. This contrasts with the EU regime applicable to the cross-border trading of GOs, which is made mandatory by Directive 2009/28/EC and is subject to the obligation of mutual recognition between all Member States. Similarly, the cross-border trading of EU allowances is ensured by Directive 2003/87/EC.



## **Part V – Conclusion**



# 11 Influence of EU law on the regulation of TGCs schemes

The analysis provided in this thesis has demonstrated the extent to which the regulatory design of national TGCs schemes and the trading regime are influenced by EU law. Some of the main conclusions follow, revealing the margin of appreciation left to Member States in the choice and regulation of their RES-E support scheme (11.1). The analysis also revealed some key challenges in the regulation of TGCs schemes (11.2).

## 11.1 Member States' margin of appreciation

Renewable energy policy is an area of shared competence, and any harmonisation measure in that domain would need to find legal basis in the Treaties. Article 194 TFEU intends to clarify the legal basis for the adoption of EU measures in the area of renewable energy policy. Meanwhile, Member States remain free to choose the type of national support instruments for RES-E generation in the absence of EU harmonisation. The action of the EU must also not alter the national energy mix of the Member States, although this is without prejudice to Article 192(2)(c) TFEU. Directive 2009/28/EC provides an additional constraint to any EU harmonisation proposal since it prevents the Commission from putting forward proposals that would affect Member States' control over their national support scheme. However, when Member States envisage cooperation in the support of RES-E generation for the attainment of their mandatory target, or when their scheme may have effects on the internal market or competition between Member States, EU law provisions are numerous.

Besides the question of the choice of support instrument, this thesis identified that EU law imposes *pre-conditions* for the design of TGCs schemes in four respects: (i) the manner by which RES-E generation attributes are tracked and used; (ii) the application of state aid rules, as a frame for the support granted by the state; (iii) the regulation of the electricity sector and requirements associated with the establishment of a competitive electricity market; (iv) internal market rules as safeguards to national measures hindering free movement. The applicable EU provisions are found in primary and/or secondary EU law.

The influence of these EU law provisions on national TGCs schemes has both *an internal and an external dimension* for the Member States. On the one hand, EU law influences the regulatory design of the national scheme through the provisions on electricity tracking, state aids and electricity sector regulation. On the other hand, EU law applies to the way national TGCs interact with other Member States through provisions on cooperation for the purpose of compliance with Directive 2009/28/EC targets, or when it may affect the internal market, as noted above. Whether the influence appears at the internal or external level, EU legislation is applicable in both situations because the national legislation is capable of having effects on other Member States. At the same time, the level of EU harmonisation provided differs, and certain provisions can explicitly lead to divergent implementation strategies. For example, Directive 2009/28/EC, Directive 2009/72/EC and Directive 2004/8/EC contain important provisions that regulate the use of electricity tracking instruments, primarily GOs, in relation to disclosure, target compliance and national support schemes. These provisions leave an appreciable margin of discretion to the Member States regarding implementation strategies, and regulate only partially the

interactions between tracking systems for disclosure and support schemes. Any divergence in that domain may have effects on the development of *the internal market for renewable electricity* and may hamper the attainment of EU objectives in a broad sense. The same reservation applies to the rules applicable to the accumulation of aids. Undoubtedly there is room here for amelioration of EU legislation if the objective is to establish a competitive and cost-effective renewable electricity market between Member States.<sup>1092</sup>

Finally, the influence of EU law on national TGCs schemes is of both *a direct and an indirect* nature. Some provisions will directly affect the regulatory design of the scheme, such as the involvement of state resources under EU state aids rules. Other provisions will indirectly influence the schemes, like the regulation of the electricity sector, which conditions the nature and the number of parties in the TGCs scheme and the TGCs market, but do not play a direct role in their regulation. The national TGCs schemes use the competitive environment created in the electricity sector.

## **11.2 On the regulatory design of TGCs schemes: level of details, complexity and government intervention**

The application of EU law to national TGCs schemes reveals some of their key characteristics but also some challenges in their regulation, starting with the level of details required to ensure their functioning and their interaction with other policy objectives, such as environmental protection.

Although TGCs, as market-based instruments, aim to allow market forces to play freely, they require a minimum degree of regulation in order to ensure their functioning and to deliver specific benefits. The more precise and numerous the expected benefits are, the more detailed and complex the regulation of the scheme becomes. There has indeed been a tendency to increase the level of detail in the regulation of the TGCs scheme throughout time. This can be explained by a series of reasons, but one central reason relates to the objective(s) of the scheme. Some schemes are intended to achieve not merely one objective, but several. For example, the primary objective of a TGCs scheme should be to support RES-E generation in a cost-effective manner. In this case, the scheme is usually technologically neutral. Some Member States found it necessary to further regulate their TGCs scheme in order to secure additional benefits and in particular to support less competitive RES-E technologies. This has resulted in additional regulation which has granted additional advantages to the beneficiaries, but has also introduced additional elements of distortion of competition in favour of the eligible technologies, raising issues of competition law. The case of the UK ROCs scheme has been dealt with extensively in this thesis. The scheme is based on a differentiated level of support based on a combination of factors: the RES-E technology; the location of the generation plant; the date of permitting or entry into function; the fuel mix used at the plant; the simultaneous grant of additional support. The Italian scheme has also seen the introduction of a differentiated level of support by RES-E technology, where GSE, the Italian issuing body,

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<sup>1092</sup> See comment in the 2011 Communication from the Commission: '*Effective selection and coordination of financing tools at national and EU level is essential [to ensure that the money spent on renewable energy is used cost effectively]*' (emphasis added). Source: *Renewable Energy: Progressing towards the 2020 target*, Communication from the Commission to the European Parliament and the Council, COM(2011) 31 final, 31.01.2011, p. 8.

is responsible for applying a varying multiplicative factor for the issuing of certificates. So far, this additional support granted to less developed or more expensive RES-E technologies has always found justification under the Community Guidelines on state aids for environmental protection. The often differing objectives pursued by national governments through their TGCs scheme entail that there is not one single model, but rather several alternative models for the regulatory design of TGCs schemes. This also entails that the differences in scheme design may affect the trading regime, with the risk of raising barriers to trade electricity when the latter is bundled with the support element (TGCs), or barriers to trading TGCs.

The analysis pursued in this thesis also revealed the manner by which TGCs schemes interact with other policy objectives applicable to RES-E generation. An important conclusion is that it should not be expected that TGCs schemes can solve all issues related to RES-E generation. It is also a requirement of legal consistency to avoid double regulation by the introduction of external considerations into the support regime. One of the most explicit examples of that is the manner by which the support schemes interact with requirements of environmental protection. TGCs schemes contribute by their effects to the protection of the environment by increasing the share of electricity generation based on renewable sources and dedicated to a reduction of GHG emissions. But environmental protection *per se* is not integrated as a criterion in the regulation of the schemes. The effects of the increased electricity generation originating from the eligible RES-E sources under the TGCs schemes are dealt with in other areas of law. For example, the environmental consequences of additional generation capacity are evaluated as part of the authorisation procedure and the impact assessment necessary for the construction of the power plant and related infrastructures, but are not part of the TGCs scheme regulation. Similarly, the environmental effects of the biomass and bioliquids used for electricity generation eligible to TGCs scheme are assessed in accordance with the sustainability criteria defined in Directive 2009/28/EC.<sup>1093</sup> The same comments apply to EU water and waste legislation.

The level of details in the regulation of TGCs, which often increases with time, entails two brief, final comments regarding the complexity of the schemes and the nature of state intervention.

TGCs schemes are often presented as complex instruments because they are unknown to the general public, rely on the ‘interaction’ between different sectors already highly regulated, and that their basic functioning requires explanation.<sup>1094</sup> This was the task undertaken in section 1.2 of this thesis. Here there is no legal question to be addressed, but rather a pedagogical issue to be resolved. The legal question arises when the complexity of TGCs schemes is attributed to their regulation. This entails two comments.

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<sup>1093</sup> As regards the implementation of Directive 2009/28/EC sustainability requirements in the UK, and the consequences for eligible to receive ROCs, see: *Renewables Obligation: Sustainability criteria for bioliquids*, Ofgem, Guidance Document 51/11, 01.04.2011. The document makes clear that: ‘As of 1 April 2011, meeting the sustainability criteria is a condition for operators of generating stations using bioliquids currently receiving support in the form of ROCs’ (p. 5); and that from the same day, ‘all bioliquids used for the purpose of electricity generation will have to meet the land criteria (along with the GHG emissions saving criteria) [...] in order to be eligible for ROCs’ (p. 6).

<sup>1094</sup> The word ‘interaction’ is used here by reference to the Latin origin of the word complexity, which is *complexus* (that which is intertwined together), and also by reference to its association with something that is complicated.

First, as pointed out by Doat in his works on complexity and law, and before him by Portalis, law has never been ‘*an easy thing*’.<sup>1095</sup> One can reasonably expect that the details of the regulation of TGCs scheme will remain a task for specialists. The same requirement of expertise applies to practitioners in other areas of law and in disciplines other than law. However, the complexity of a regulatory regime becomes an issue when it raises problems of interpretation, application and compliance. It is at this point that a reflection on the quality of law commences, and relates closely to the requirement of legal certainty. The quality of the regulation of the TGCs scheme may be assessed on the basis of a series of criteria such as: the clarity of the text; the extent to which it is easy to apply; the nature of the compliance control mechanisms; the frequency of the amendments to the schemes; and ultimately, the effects the scheme has on new RES-E generation, both in terms of effectiveness and efficiency.<sup>1096</sup> But these criteria apply equally to other regulatory instruments, whether market-based or not. The quality of law has likewise been an issue for national and European legislators, as demonstrated by the initiatives on ‘better regulation’ and more recently ‘smart regulation.’<sup>1097</sup> The complexity attributed to TGCs schemes should therefore be assessed more on the background of the quality of the regulation of the scheme rather than on the nature of the mechanism. The choice of the support instrument remains after all a political decision.

Second, it is necessary to distinguish between the supposed complexity of TGCs scheme and the complex regulation of RES-E projects development as a whole, that is, between a regulatory instrument and the regulation of the whole sector. The administrative procedures for the authorisation, certification, licensing and building of a RES-E generation plant or infrastructure are numerous and complex, and may delay the

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<sup>1095</sup> The issue of complexity and law has been discussed in more detail in the French legal literature, which is referred to hereafter. The issue of complexity has been introduced in different sciences, in particular in the sense used by Edgard Morin (see, *Introduction à la pensée complexe*, Editions du Seuil, 2005; first edition from 1990). As noted by M. Doat, it has been progressively discussed by the legal literature (see e.g., D. de Béchillon (ed.), *Les Défis de la Complexité. Vers un nouveau paradigme de la complexité*, L’Harmattan, 1994). See. M. Doat, ‘Droit et complexité,’ in *Les annales de droit*, Nr. 3/2009, Collectif, pp. 63-64.

See also the quotation from Portalis in his *Discours préliminaire du premier projet de Code Civil* (Éditions Confluences, 2004 ; original text from 1801), on p. 19 : ‘*Quelle est d’ailleurs la nation à laquelle des lois simples et en petit nombre aient longtemps suffi?*’ ; ‘*Ce serait donc une erreur de penser qu’il pût exister un corps de lois qui eût d’avance pourvu à tous les cas possibles, et qui cependant fut à la portée du moindre citoyen.*’

<sup>1096</sup> On the consequences in terms of legal certainty of the complexity of law, see: *Sécurité Juridique et Complexité du Droit*, Conseil d’Etat, public report, 2006, p. 281 *et seq.*

<sup>1097</sup> See some examples of national debates on better regulation quality: in the UK, the Better Regulation Executive (BRE) (<<http://www.bis.gov.uk/bre>>); in Norway, *Lovteknikk og Lovforberedelse – Veiledning om lov- og forskriftsarbeid*, Ministry of Justice and the Police, Legislation Department, 2000, and I. L. Backer, ‘Juristenes rolle i lovforberedelsen,’ in *Lov og rett* (2011) 50(1-2), pp. 63-77; in France, J.-L. Warsmann, *Rapport sur la qualité et la simplification du droit*, Report to the prime minister, December 2008. The EU has also developed a *Better Regulation Strategy* (<[http://ec.europa.eu/governance/better\\_regulation/index\\_en.htm](http://ec.europa.eu/governance/better_regulation/index_en.htm)>) which is based on the 2001 *Mandelkern report on Better Regulation*, and resulted *inter alia* in the adoption of the 2003 *Inter-institutional Agreement on Better Lawmaking* (OJ C 321, 31.12.2003, p.1) and lately the Commission Communication on *Smart Regulation in the European Union* (COM(2010)543, 08.10.2010). National governments have also discussed the quality of their legislation by reference to the manner in which EU legislation is transposed into domestic law. This gives only a glimpse of a much broader issue, the treatment of which falls outside the scope of this thesis.

construction of new RES-E generation capacity.<sup>1098</sup> Both legislators and practitioners are aware of these concerns for the use of RES. In an attempt to answer these shortcomings, Directive 2009/28/EC aimed at simplifying and ‘streamlining’ the procedures.<sup>1099</sup> There is certainly room here for amelioration of both the legislation and the administrative practices associated with the granting of financial support in the form of TGCs. But the regulation of the TGCs scheme remains a separate issue. There is also certainly room for a better coordination of the interaction between the different forms of support granted to an RES-E project, as pointed out in section 7.4 on the accumulation of aids, or between the use of the different electricity generation attributes associated with RES-E, as pointed out in section 6.2, or finally between the regulation of the electricity sector and the RES sector. This calls for a broader reflection on the way the rapidly evolving sector of renewable energies is regulated. This assessment is also an urgent task for the development of the sector and for the quality of law, but falls outside the scope of this thesis.

Finally, in conjunction with the intention to move the burden of the financial support from the state budget to market parties,<sup>1100</sup> it is questionable whether this alteration will lead to less government intervention. The necessary regulation of the scheme to attain certain benefits may result in another form of government intervention, but not necessarily less regulation. The manner the regulation of TGCs schemes evolves over time, combined with the requirements of EU law, entails a change in the regulatory function of the government in the area of RES-E generation. This has been observed in other sectors,<sup>1101</sup> but is now also apparent in the RES-E sector as it grows in importance.

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<sup>1098</sup> See on the effects of complex administrative procedures on the development of renewable energy projects: A. Gossement, ‘La complexité, frein au développement des énergies renouvelables?’, *Environnement*, Nr.3, Mars 2011.

<sup>1099</sup> See Article 13 (Administrative procedures, regulations and codes), Directive 2009/28/EC.

<sup>1100</sup> See on that point recent statements by the European Commission: ‘*It is essential that such costs are “off budget” i.e. are borne by energy consumers rather than tax payers (see staff working document) to avoid “stop-start” interruptions as government budgets become more constrained.*’ Source: *Renewable Energy: Progressing towards the 2020 target*, Communication from the Commission to the European Parliament and the Council, COM(2011) 31 final, 31.01.2011, p. 9.

<sup>1101</sup> This has been observed in relation to the introduction of competition in the electricity sector, with an increase in both the volume of regulation and the action of the government. See *The OECD Report on Regulatory Reform* (OECD, 1997), p. 9. See comments in section 2.2.





## 12 Towards an internal market for renewable electricity?

Looking at the way forward, the EU is progressively defining a new ambition for its renewable energy policy, which will directly affect the regulation of national support schemes. This ambition, as it is currently profiled, is to move towards an internal market for renewable electricity. The first part of this chapter intends to define further the underlying objectives of this upcoming EU policy line (12.1). Then, by comparing the nature of the instruments chosen to achieve these objectives, the second part reflects on the legal approach proposed to pursue an EU RES-E generation policy (12.2). This final chapter puts the regulation of RES-E support and RES-E trading in the broader perspective of European integration.

### 12.1 An internal market for renewable electricity - intended meaning

The idea of an internal or European market for renewable electricity has been referred to as an objective by the EU institutions and the legislation at different points in time, without being further defined. It is hereinafter proposed to reflect on the content to be given to it. Already in 1999, the Commission identifies ‘*the introduction of a single market for RES-electricity*’ as a separate objective of the EU.<sup>1102</sup> The concept is also used by several research projects and organisation position papers, although it may be given slightly different meaning according to the interests at stake.<sup>1103</sup> Because its scope of application is not limited to the electricity sector, Directive 2009/28/EC refers to ‘*the market for renewable energy sources*.’<sup>1104</sup>

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<sup>1102</sup> *Electricity from renewable energy sources and the internal electricity market*, Commission Working Document, SEC(1999) 470 final, 13.04.1999, p. 28.

<sup>1103</sup> See for example: *Intelligent Energy For Europe (2003-2006)*, Detailed description of Key Actions, Working Papers, 12/2003, p. 27, where the Commission requires research on support schemes which ‘*must therefore not lead to distortion of the single European market for renewable electricity, and should not inhibit trading between Member States*’; the OPTRES report, the purpose of which was to examine ‘*the effectiveness and efficiency of current and future RES-E support schemes ... with particular focus on a single European market for renewable electricity products*.’ (OPTRES, *Assessment and optimization of renewable energy support schemes in the European electricity market, Intelligent Energy Europe*, 2007); a memo published by RECS International on the *Concept for an Internal Market RES-E*, 12 July 2007; The ADMIRE REBUS project, which concluded that ‘*With the current variety of support schemes there is no single market for renewable electricity in the EU*’ (Source: B.W.Daniëls, M.A. Uytterlinde, ‘ADMIRE-REBUS: modeling the European market for renewable electricity’, *Energy* 30 (2005), pp. 2596-2616); ‘Green power accounting’ (refocus, March/April 2004, pp. 58-59), in which Rolf de Vos was of the opinion that ‘*The accounting of imports for the indicative targets is considered as a first step towards a European market for renewable electricity, which leads to a cost efficient compliance of targets set in Europe*.’; Chapter 3 ‘Towards a European market for renewable electricity’, in ECOFYS, *The Outlook for Green Certificates Markets in Europe*, 2003; or M. Schreyer and L. Mez, *ERENE - European Community for Renewable Energy*, feasibility study, for the Heinrich Böll Foundation, Publication Series on Europe, Vol. 3 (Heinrich-Böll-Stiftung, 2008), in which the authors attribute to ERENE the task of enabling an ‘*increase the use of renewable energy*’ and ‘*the creation of an internal market for green electricity*’ (p. 55).

<sup>1104</sup> Recital 4, Directive 2009/28/EC. See also: Recital 13, ‘*A legislative framework for the market in renewable energy sources needs to be established*’; and Recital 19, ‘*When favouring the development of a market for renewable energy sources...*’ See also, in the same vein, reference made by the

It can already be stated that the objective is to go beyond the sole integration of RES into the electricity market, which was the central objective of Directive 2001/77/EC. Guaranteeing access to the internal market for RES-E producers remains a central element of EU RES-E policy which is still to be completed and which aims to create a level playing field between all sources of energy production. In that respect, it may appear peculiar to distinguish the RES-E market from the electricity market, since, as put by the Commission, *'renewable electricity is part of the internal electricity market and needs to comply with the single market rules.'*<sup>1105</sup> The internal market in electricity includes RES-E as soon as the latter has gained access to the electricity market. The relevant product market for renewable or conventional electricity is also considered to be the same under competition law, i.e., *'the market for electricity.'*<sup>1106</sup> Talking about an internal market for RES-E is also, but not solely, a matter of integration into the electricity market. Discussion entails a focus on the specific barriers met when trading RES-E between Member States. It also includes a supplementary dimension related to the development of renewable energy sources in a spirit of solidarity and cost-effectiveness at EU-level.

It follows that the primary aim of an internal market for RES-E should be to facilitate trade in RES-E between Member States. The characteristics or, put more subjectively, the qualities associated to RES-E generation must be able to persist beyond the transmission into the electricity network. The renewable origin of electricity carries an additional value which must be identifiable. This is clearly facilitated by the provisions of Directive 2009/28/EC and Directive 2009/72/EC on electricity tracking and disclosure, analysed in Chapter 6. The tracking of renewable electricity attributes, and in particular the regime for GOs, enables the free movement of RES-E associated with its generation attributes.

A second aim, which is the counter-part of the first one, is to abolish the trade barriers represented by national support schemes and regulatory regimes (access to the grid, authorisation procedure, infrastructures development, etc.). As demonstrated in this thesis, the EU harmonisation is much more advanced in the area of regulatory regimes for physical market access for RES-E than for opening of national schemes. In a 2011 report, the Commission reiterates its position that *'any revision of financing instruments [at national level] should be pursued in a way that ... takes into account other Member States' policies to ensure an approach coherent with the creation of a genuine European market.'*<sup>1107</sup> It also encourages coordination between support schemes in the absence of

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Commission to *'the development of a market for renewable energy sources and technologies'* (Commission's proposal for a directive on the promotion of the use of energy from renewable sources, COM(2008)19 final, p. 4). Or, before that, in Recital 13 of Directive 2001/77/EC, the affirmation according to which *'A legislative framework for the market in renewable energy sources needs to be established.'*

<sup>1105</sup> *The support of electricity from renewable energy sources*, Commission Staff Working Document, SEC(2008) 57, 23.01.2008, p. 12.

<sup>1106</sup> See e.g., EFTA Surveillance Authority Decision of 16 March 2011 on the aid to Troms Kraft Produksjon AS for Fakken wind park, Dec. No. 68/11/COL, p.13; See also Decision of the Commission of 26.03.2007 in case COMP/M.4517 – Iberdrola Scottish Power, where the Commission considered that for the purpose of defining the relevant product market, *'one should not make a distinction between the different sources of electric energy (gas-fired, coal-fired, nuclear and hydroelectric power stations, wind farms or others) within the market for electricity generation.'* (Point 11.)

<sup>1107</sup> *Renewable Energy: Progressing towards the 2020 target*, Communication from the Commission to the European Parliament and the Council, COM(2011) 31 final, 31.01.2011, p. 14.

harmonisation: ‘*The move to market integration, in particular the evolution to feed in premiums is too slow and too fragmented. ... we need a greater convergence of national support schemes and to move to a more pan-European trade in renewable energy.*’<sup>1108</sup> But the reality, as discussed in Chapter 9, is that Directive 2009/28/EC endorses the trade restrictive nature of the national support schemes regarding imported RES-E, based in particular on the now dated *PreussenElektra* judgement.

Third, talking about an internal market for renewable electricity is adding another element to the free movement perspective which does not exist as of today, namely solidarity and cost-effectiveness in the financing of RES-E generation between Member States. Here lies a major difference with the financial support of electricity generation as experienced today, and without addressing the particular legal context of the Euratom Treaty and the former ECSC Treaty.<sup>1109</sup> There is as yet no element of cooperation, solidarity or cost-effectiveness between Member States in electricity *production*. This contrasts with the extensive references made by EU legislation to solidarity and cooperation between Member States in relation to security of gas *supply* and underlying need for regional cooperation.<sup>1110</sup> It has been a principle for Member States to keep sovereignty in the choice of their national energy mix and the manner by which they develop electricity production (see discussion in Chapter 5). The sole new exception is when Member States agree to participate in the development of renewable energy sources in other Member States by recourse to the cooperation mechanisms defined in Directive 2009/28/EC.

Interestingly, and for obvious reasons of flexibility and lack of political consensus, the level of solidarity in cooperation is left to the discretion of the Member States: they can decide to support a specific project in another state, or trade their additional production; or they can agree to let the market forces decide where investments should be made based on

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<sup>1108</sup> *Review of European and national financing of renewable energy in accordance with Article 23(7) of Directive 2009/28/EC*, Commission Staff Working Document, SEC(2011) 131 final, 31.01.2011, p. 7.

<sup>1109</sup> For a short analysis of the degree of integration of energy policy under the scope of these two Treaties, see: S. Andoura, L. Hancher and M. van der Woude, *Towards a European Energy Community: A Policy Proposal*, Notre Europe, Studies & Research No. 76, 2010, pp. 7-10. The authors note in their concluding assessment (p. 14) that: ‘*However paradoxical it may appear, energy seems to be the only sector where the Communities, in their almost 60 years of legal development, have been moving from a high degree of integration down to a lower level, never being able to regain the common vision and courage of their founding years.*’ They immediately balance the argument by saying that: ‘*this relative decline in European competence can be explained by changes in energy production and consumption patterns,*’ from a time where coal and nuclear energy were dominant before oil, gas and electricity were in the increase. For this reason, ‘*One could argue that the two Treaties were static and were not designed to keep pace with changing energy uses*’ (*Ibid.*).

<sup>1110</sup> See the extensive references to the objective of solidarity between Member States in relation to gas *supply* in Directive 2009/73/EC, Recital (55): ‘*In order to contribute to security of supply whilst maintaining a spirit of solidarity between Member States, notably in the event of an energy supply crisis, it is important to provide a framework for regional cooperation in a spirit of solidarity. Such cooperation may rely, if Member States so decide, first and foremost on market-based mechanisms. Cooperation for the promotion of regional and bilateral solidarity should not impose a disproportionate burden on or discriminate between market participants.*’ See also Article 6 on ‘*Regional solidarity*’. Article 6.4 provides that the Commission may adopt ‘*Guidelines for regional cooperation in a spirit of solidarity.*’

See also Regulation (EU) No. 994/2010 of the European Parliament and of the Council of 20 October 2010 concerning measures to safeguard security of gas supply and repealing Council Directive 2004/67/EC (OJ L 295 of 12.11.2010, p. 1), which contains similar recurrent references (thirteen times) to solidarity.

cost-effectiveness principles, like under a joint TGCs market. The cooperation mechanisms of Directive 2009/28/EC create a non-organised market for the financing of RES-E generation between the Member States. It also creates solidarity between the Member States that want to cooperate for the financing of RES-E generation across borders. Cooperation mechanisms are the instruments chosen for moving towards a pan-European approach in the development of renewable energy sources, as described by the Commission itself.<sup>1111</sup> The latter has long insisted on the benefits of market integration in the area of renewable energy that ‘*should ideally occur in a manner that ensures resources are developed where it makes most economic and environmental sense.*’<sup>1112</sup> Similarly, ‘*coordinated action across Member States can help exploit resources more efficiently and so create savings.*’<sup>1113</sup> This approach is often described with the following picture: ‘*free transfer of green kilowatt-hours across borders would mean that ... wind energy would be preferably generated in Scotland, biomass power in Lithuania and solar power in Greece.*’<sup>1114</sup> The Commission has more recently developed a new line of argument on the cost of non-cooperation that resembles the one of the Cecchini Report on the costs of non-Europe.<sup>1115</sup> It estimates that ‘*up to 10 billion Euro annually could be saved if Member States treated renewable energy as a commodity in a single European market rather than in national markets. Thus the move to market integration, ... is too slow, too fragmented and needs to be reinforced.*’<sup>1116</sup>

This ambitious level of solidarity can be interpreted as another European integration project, related to the specific objective of financing and developing renewable energy sources at EU-level, under the wider umbrella of EU energy policy that José Manuel Barroso as President of the Commission characterised in 2011 as ‘*the next great European integration project.*’<sup>1117</sup>

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<sup>1111</sup> *Renewable Energy: Progressing towards the 2020 target*, Communication from the Commission to the European Parliament and the Council, COM(2011) 31 final, 31.01.2011, p. 11.

<sup>1112</sup> *Renewable Energy: Progressing towards the 2020 target*, Communication from the Commission to the European Parliament and the Council, COM(2011) 31 final, 31.01.2011, p. 5.

<sup>1113</sup> *Review of European and national financing of renewable energy in accordance with Article 23(7) of Directive 2009/28/EC*, Commission Staff Working Document, SEC(2011) 131 final, 31.01.2011, p. 4.

<sup>1114</sup> R. De Vos, ‘Harmonisation, The continuing competition of support mechanisms,’ *reFocus*, January/February 2006 (Elsevier, 2006), p. 60.

<sup>1115</sup> P. Cecchini, *The European Challenge 1992: The benefits of a single market* (Aldershot: Wildwood House, 1988), p. 4.

<sup>1116</sup> *Renewable Energy: Progressing towards the 2020 target*, Communication from the Commission to the European Parliament and the Council, COM(2011) 31 final, 31.01.2011, p. 11.

<sup>1117</sup> ‘Growth and economic governance – orientation debate on energy and innovation,’ Speech given by J. M. Barroso, President of the European Commission, SPEECH//11/1, 05.01.2011.

See also the similar vision expressed by EU Commissioner for Energy Günther Oettinger in his speech ‘Towards competitive, sustainable and secure energy?’ (delivered at the EPC Breakfast Policy Briefing, Brussels, Doc. SPEECH/11, 25 January 2011:

- ‘For the founding fathers of the European integration process, there was no doubt that energy cooperation would not only help ensure security of supply – in this case coal – it would also ensure economic growth, European security and, most importantly, peace. It is exactly this spirit that continues to guide us, 60 years later. With the “Energy 2020” strategy adopted [in] November [2010], we want to achieve what has long been overdue: a “Europeanisation” of energy policy.’;
- ‘Now is time to pave the way for another European integration project of vast potential: a true European energy policy.’

Now that the future direction expected to be given to EU RES-E policy has been explicated, the next section offers a reflection on the method applied and the instruments used to attain this new phase of European integration.

## 12.2 A double track process

To achieve the objectives defined above, the European legislator has so far defined several instruments corresponding to different degrees of integration. It can be retained that a double-track process is taking place, on the one hand based on the establishment of a real integrated European market for the trading of RES-E generation attributes, and, on the other hand, based on a bottom-up approach that follows the model of regional cooperation. The latter model is gaining in popularity as a new integration model for EU RES-E policy and is already adopted, for example, in the energy sector. Both processes contribute to the establishment of an internal market for RES-E but at a different level and in different ways. The question, which remains open is whether such a differentiated approach will be sufficient to meet the objectives for the benefit of the EU as a whole.

First, secondary EU law establishes a market of EU dimension for the trading of guarantees of origin, either independent of or related to the support element (see Chapter 6). GOs serve the double purpose of facilitating trade in renewable electricity and guaranteeing the origin of electricity generation to the consumer. The regime for GOs allows the development of a retail market for RES-E, characterised under the term ‘green power offers.’ While GOs are not support instruments, Directive 2009/28/EC nevertheless draws a link between the development of new RES-E projects and the voluntary support granted through the GOs: *‘It is appropriate to allow the emerging consumer market for electricity from renewable energy sources to contribute to the construction of new installations for energy from renewable sources.’*<sup>1118</sup> The directive indeed creates a market for the trading of RES-E generation attributes at retail level, subject to a principle of mutual recognition. The recent practice has shown that the Commission has applied a strict review of any refusal to recognise GOs issued by another Member State. There is consequently a high degree of integration on the GOs market, as long as the infrastructures for the transfers between registries exist. Subject to these conditions, the market for GOs can be deemed to be well integrated at EU level, with an intensive trading level. Here, the focus is likely to be more on cost-effectiveness in the supply of a green power offer than on solidarity as such. Indeed, the GOs market remains a voluntary market, outside target compliance.

By contrast, solidarity in the financing of RES-E generation at the Member State level is subject to a different approach, much more restrictive and controlled by the Member States themselves. The trade restrictive nature of support schemes finds justification under the terms reviewed in Chapter 9. The only means by which to introduce an element of solidarity between Member States is to use the voluntary cooperation mechanisms defined in Directive 2009/28/EC. What the directive intends to do is to unblock the trade restrictive elements of the support schemes by creating means of cooperation, whilst allowing Member States to keep control over their national support schemes and the fulfilment of their mandatory targets. In this manner, the mechanisms allow for ‘cross-

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<sup>1118</sup> Recital 53, Directive 2009/28/EC.

*financing between Member States for the achievement of the EU target.*<sup>1119</sup> This marks a difference in approach with the voluntary but integrated market for GOs at retail level.

This approach based on voluntary cooperation between a small group of Member States is described by the Commission itself as a *'first step in integrating renewable energy.'*<sup>1120</sup> The cooperation mechanisms *'can facilitate real progress in the convergence of European support schemes, ensuring greater coherence with a single market.'*<sup>1121</sup> The Commission finally affirms that *'the framework to make real progress towards a European support scheme regime now exists.'*<sup>1122</sup>

Meanwhile, it cannot be concealed that the adoption of the cooperation mechanisms is the result of a compromise based on an initiative from the Member States, as an alternative to the Commission's proposal. It is the least bad option from the perspective of the Member States, a pragmatic solution which tries to maintain a balance between national interests and EU interests. It avoids allowing the private sector alone to decide on the location and type of new RES-E generation, as threatened under the Commission's initial proposal.

At the same time, it tries to insert a degree of solidarity based on a similar bottom-up approach than the one adopted in the energy sector with the reinforcement of regional initiatives and the obligation to participate in regional cooperation (see Section 8.4). This is another, more pragmatic way, as suggested earlier, to envisage European integration in the domain of RES-E generation. This bottom-up approach is described in the 2011 assessment made by the Commission of the EU renewable energy policy in the following terms:

*'Member States created the cooperation mechanisms of the new Renewable Energy Directive, allowing them to control how their renewable energy resources are jointly developed, co-financed, and their support schemes joined or harmonised. Thus when the level playing field of a single energy market is created and renewable energy producers are able to compete fairly, Member States should be more prepared for renewable energy to be promoted in pan European approach, exploited efficiently across the Union in Member States where it is feasible and makes most economic sense.*<sup>1123</sup>

Progress towards European integration via a bottom-up approach based on *enhanced cooperation* between a small group of Member States is not new in the history of the Union, but requires a careful equilibrium in order not to fragment the Union and its decision-making process.

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<sup>1119</sup> *Review of European and national financing of renewable energy in accordance with Article 23(7) of Directive 2009/28/EC*, Commission Staff Working Document, SEC(2011) 131 final, 31.01.2011, p. 7.

<sup>1120</sup> *Renewable Energy: Progressing towards the 2020 target*, Communication from the Commission to the European Parliament and the Council, COM(2011) 31 final, 31.01.2011, p. 11.

<sup>1121</sup> *Renewable Energy: Progressing towards the 2020 target*, Communication from the Commission to the European Parliament and the Council, COM(2011) 31 final, 31.01.2011, p. 12.

<sup>1122</sup> *Review of European and national financing of renewable energy in accordance with Article 23(7) of Directive 2009/28/EC*, Commission Staff Working Document, SEC(2011) 131 final, 31.01.2011, p. 9. Marked in bold in the original text.

<sup>1123</sup> *Renewable Energy: Progressing towards the 2020 target*, Communication from the Commission to the European Parliament and the Council, COM(2011) 31 final, 31.01.2011, p. 11. Emphasis added.

As noted by Chalmers *et alii*, tensions surrounding the ‘pace, direction and form of European integration’ were already apparent during the negotiations of the Amsterdam Treaty, in the continuation of the debates held at Maastricht and in different policy areas. The idea of enhanced cooperation was gaining ground for those Member States that wanted to expand their level of cooperation, where others were resilient.<sup>1124</sup> The Treaty of Lisbon contains new provisions which aim to both facilitate the establishment of enhanced cooperation in order to provide impetus for European integration and to place some safeguards on the creation of a multi-level Europe. This is made clear in Article 20.1 TEU which provides that:

*‘enhanced cooperation shall aim to further the objectives of the Union, protect its interests and reinforce its integration process. Such cooperation shall be open at any time to all Member States, in accordance with Article 328 of the Treaty on the Functioning of the European Union.’*

Article 20.1 TEU adds that the enhanced cooperation can only take place within the framework of the Union’s non-exclusive competences (which is the case for energy), and Article 20.2 TEU details the rules applicable to its authorisation by the Council.<sup>1125</sup> Further provisions on enhanced cooperation, in terms of both safeguards and procedure, are contained in Articles 326-334 TFEU.

The new provisions on enhanced cooperation, which have already been applied,<sup>1126</sup> reflect a move observed in several policy areas to a bottom-up or flexible approach to European integration. In support of the application of this approach to the energy sector, Jacques Delors, in his preface to a 2010 policy proposal on a European Energy Community, suggested that if consensus was not possible between all Member States, those wanting to move forward should be able to proceed by means of enhanced cooperation:

*‘II. Europe needs a common energy policy ... Despite a dramatic increase in regulatory activity designed to establish a broad European energy market and fight climate change, the European Union has struggled to develop a common energy policy. At the same time, the national solutions adopted by member states large and small have proven inadequate to the task and have increased the risk of diverging and even conflicting responses to common challenges.*

*III. To overcome the many stumbling blocks and doubts about the ability ... of the European Union and its member states to face these challenges together, a new approach aimed at deeper integration and solidarity is required. ...*

*V. Europe has several options when it comes to meeting these crucial requirements. The most radical, but also the most promising, would be a European Energy Community with its own rules and methods specific to the energy field.*

*In the wake of the recent difficult treaty revision process, not all EU states may be ready to embark upon this route just yet. If this proves to be the case, those states wishing to move forward without delay must be able to do so. A differentiated approach of this kind is not without precedent. It has*

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<sup>1124</sup> D. Chalmers, G. Davies and G. Monti, *European Union Law*, 2<sup>nd</sup> edition (Cambridge University Press, 2010), p. 29. As noted by the authors, this move also corresponded with a series of opt-outs backed under the Amsterdam Treaty, such as those in relation to the Schengen Agreement or to the European Economic and Monetary Union (EMU).

<sup>1125</sup> Article 20.2 TEU provides that:

*‘The decision authorising enhanced cooperation shall be adopted by the Council as a last resort, when it has established that the objectives of such cooperation cannot be attained within a reasonable period by the Union as a whole, and provided that at least nine Member States participate in it. The Council shall act in accordance with the procedure laid down in Article 329 of the Treaty on the Functioning of the European Union.’* Emphasis added.

<sup>1126</sup> E.g., Council Decision 2001/167/EU of 10 March 2011 authorising enhanced cooperation in the area of the creation of unitary patent protection (OJ L 76 of 22.03.2011, p. 53).

*been used, in the past, to make major strides in the European project, including the Schengen area and the single currency.*

VI. ... *Europe cannot afford to wait indefinitely. Efforts to build a coherent and effective common policy must get under way now. This can be done by developing some elements of the policy without delay, preferably within the framework of enhanced cooperation as defined by article 20 TEU.*<sup>1127</sup>

The main risk with such an approach is the introduction of fragmentation within the process of completion of the internal market. Allowing for cooperation between support schemes, and thus bottom-up harmonisation, will establish some highly competitive and integrated regional RES-E markets associated with a rapid take-off of the whole RES sector. If this will benefit the environment of the EU as a whole, as defended by Advocate General Jacobs in his opinion in the *PreussenElektra* case, it may introduce an element of imbalance within the internal market. It may even reproduce the negative effects of divergent national support schemes, but at a regional level (e.g., competing support schemes). This is also the type of risk that Monti highlighted in his 2010 report on *A New Strategy for the Single Market* when he suggested that: *'Renewables support policies will have to become an integral part of the internal energy market in order to avoid market distortion which can lead to wrong pricing signals to investors.'*<sup>1128</sup>

A comparison can be drawn here to the application of the Compact Clause doctrine in the United States to any cooperation between individual U.S. states. The Compact Clause provides that *'No State shall, without the Consent of Congress, [...] enter into any Agreement or Compact with another State, or with a foreign Power.'*<sup>1129</sup> The purpose of the clause is to avoid the constitution of blocks among U.S. states that will reinforce the powers of some of them to the detriment of the federation and other states.<sup>1130</sup> Legal authors have been wondering whether joint efforts between a small group of U.S. states to promote renewable energy production, sale and use would challenge the fundamental constitutional principles of the U.S. federation.<sup>1131</sup> EU law seems to be more supportive of the establishment of cooperation between Member States for the purpose of developing RES-E. The question raised here is whether the safeguards provided in primary and secondary EU law are sufficient to preserve the integrity of the internal market and provide the ambitious level of solidarity and cost-effectiveness in the financing of RES-E generation to the benefit of the EU as a whole.

The Treaties' provisions on enhanced cooperation provide some clear safeguards to counter the possible negative effects, both in material and procedural terms, *inter alia*: it

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<sup>1127</sup> J. Delors, 'A Call for a European Energy Community,' in S. Andoura, L. Hancher and M. van der Woude, *Towards a European Energy Community: A Policy Proposal*, Notre Europe, Studies & Research No. 76, 2010.

<sup>1128</sup> M. Monti, *A New Strategy for the Single Market - At the Service of Europe's Economy and Society*, Report to the President of the European Commission José Manuel Barroso, May 2010, p. 48.

<sup>1129</sup> Article I, sec. 10, cl. 3., U.S. Constitution.

<sup>1130</sup> See landmark judgement in *Virginia v. Tennessee*, 148 U.S. 503 (1893). The U.S. doctrine interprets the Compact Clause as requiring the consent of the Congress only where an inter-state agreement will result in a direct *'increase of political power in the States, which may encroach upon or interfere with the just supremacy of the United States.'* See L. Tribe, *American Constitutional Law* (West Publishing Company, 2000), pp. 649-651.

<sup>1131</sup> R. K. Craig, 'Constitutional Contours for the Design and Implementation of Multistate Renewable Energy Programs and Projects,' *University of Colorado Law Review* (2010) Vol. 81, No. 3, pp. 771-832.



must comply with Union law; must not undermine the internal market, or economic social and territorial cohesion; must not constitute a barrier to or discrimination in trade between Member States.<sup>1132</sup> The situation is relatively different for the cooperation mechanisms of Directive 2009/28/EC. The limits to, for example, a joint TGCs scheme between several Member States would essentially be the general principles of primary EU law, and in particular: loyalty towards the Union, sincere cooperation (Article 4.3 TEU), the duty of solidarity between Member States (several mentions in the Treaties, including in Article 194 TFEU), compliance with the internal market rules; observance of state aid rules, which is explicitly mentioned as a safeguard in Directive 2009/28/EC in relation to the cooperation mechanisms (Article 3.3).

To conclude, the manner in which EU law interacts with the regulation of national RES-E support schemes such as those for TGCs mirrors some of the most central legal issues and challenges in EU RES-E policy. The present chapter focuses on the way forward, and the adequacy of the legal tools adopted so far. A double track process was identified which is based, on the one hand, on the internal market logic. The latter is pursued for the purpose of creating a level playing field in the electricity sector and delivering cost-effectiveness based on the provisions of Directive 2009/72/EC, while in Directive 2009/28/EC it is limited to a voluntary market for GOs at retail level. On the other hand, Member States want to keep control over their energy mix and are not yet keen on applying the internal market logic to the financing of RES-E generation. Consequently, legal challenges remain with both processes: the further application of the logic of the internal market in areas of RES-E generation and support, and the discovery of acceptable and temporary alternatives to the internal market logic by creating new means of solidarity in the financing of RES-E generation between Member States and in the interest of the whole EU.

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<sup>1132</sup> See Articles 326-327 TFEU and the safeguards defined there.



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# **Abbreviations**



ACER	Agency for the Cooperation of Energy Regulators
A.G.	Advocate General
CA-RES	Concerted Action Renewable Energy Sources Directive
CHP	Combined heat and power
CHP-GO	Guarantee of origin for combined heat and power
CJEU	Court of Justice of the European Union
CML Rev.	Common Market Law Review
CO <sub>2</sub>	Carbon dioxide
CPUC	California Public Utility Commission
DG ENER	Directorate-General for Energy, European Commission
DSO	Distribution System Operator
EC Treaty	Treaty establishing the European Community
ECSC Treaty	Treaty establishing the European Coal and Steel Community
EEA	European Environment Agency
EEA Agreement	European Economic Area Agreement
EEELR	European Energy and Environmental Review
EFET	European Federation of Energy Traders
EFTA	European Free Trade Area
Ecology L.Q.	Ecology Law Quartely
ERGEG	European Regulators' Group for Electricity and Gas
EU	European Union
EU ETS	European Union Emissions Trading Scheme
EUPL	European Union private law
EU Treaty	Treaty on European Union (before Lisbon Treaty)
FIT	Feed-in Tariff
FSAP	Financial Services Action Plan
GBER	General Block Exemption Regulation
GHG	Greenhouse gases
GO	Guarantee of origin
GME	Gestore dei Mercati Energetici (Italy)
HE-CHP	high efficiency combined heat and power
IEA	International Energy Agency
IEE	Intelligent Energy Europe
Int. J. Global Energy Issues	International Journal of Global Energy Issues
IRENA	International Renewable Energy Agency
MEPs	Member of the European Parliaments
MEQR	Measure having an equivalent effect to a quantitative restriction
Mtoe	Million Tonnes of Oil Equivalent
NO <sub>x</sub>	Nitrogen oxides
NREAP	National Renewable Energy Action Plans
NSCOGI	North Seas Countries Offshore Grids Initiative
OECD	Organisation for Economic Co-operation and Development
OGEL	Oil Gas & Energy Law
OJ	Official Journal
OTC	Over-the-counter
PPA	Power purchase agreement
PV	Photovoltaic
PV-TGCs	Tradable green certificates issued for photovoltaic energy
PSO	Public Service Obligation
R&D	Research and development

R&D&I	Research, development and innovation
RECs	Renewable Energy Certificates (United States)
RE-GO	Guarantee of origin for renewable energy
RES	Renewable energy sources
RES-E	Electricity generation based on renewable energy sources
ROCs	Renewables Obligation Certificates (UK)
RPS	Renewables Portfolio Standard
RTFO	Renewable Transport Fuel Obligation
SAAP	State Aid Action Plan
SGEI	Services of general economic interest
TEU	Treaty on European Union (after Lisbon Treaty)
TFEU	Treaty on the Functioning of the European Union
TGCs	Tradable green certificates
TRECs	Tradable Renewable Energy Certificates (United States)
TSO	Transmission System Operator
UNFCCC	United Nations Framework Convention on Climate Change
UK	United Kingdom
USA	United States of America
VAT	Value-added tax

