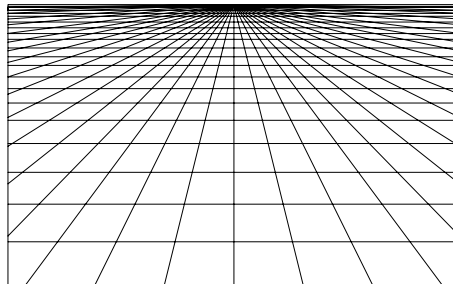




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## **ENVIRONMENTAL DISCOURSE IN TRANSITION**

'MODERN' ENVIRONMENTAL POLICY AND MUNICIPAL REALITY: THE CASE OF MADONA

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## **Preface**

The main source of inspiration behind this project can be found in Latvia. My interest for this country started in 1990/91, when I spent a year in Latvia. My experiences, the people I met and the feelings I had have been kept alive during these ten years. I keep returning to my 'second' country, and I think I always will. It has been interesting to write this thesis, and to get insight into a 'new' area of the Latvian society, an area I find very important.

I write this preface to say thank you to people that helped me during the process. Firstly, I want to thank my friends and my host family in Latvia, they always make me feel very welcome and make my stay pleasant. During my field trip I met sympathetic and very helpful people. Thanks to my informants in Madona, Riga and Viborg (Denmark).

In Aalborg I had good help from my supervisor, Marianne Rostgaard. I want to thank her as well as the other helpful staff at ESST in Aalborg.

I have enjoyed this year together with all my ESST friends. Thanks to all of you! My 'good old friends', I am grateful for help and support, it has been crucial. The person that knows the 'ups' and 'downs' during this period best needs to be recognised, thanks to Stein Terje!

Marte-Eline Stryken 2. October 2000

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## **Abbreviations**

EU: European Union

HELCOM: The Baltic Marine Environmental Protection Commission - the Helsinki Commission

MEPRD: Ministry of Environmental Protection and Regional Development

NEAP: National Environmental Action Programme

NEFCO: Nordic Environmental Finance Corporation

NEPP: National Environmental Policy Plan

NGOs: Non Governmental Organisations

OECD: Organisation for Economic Co-operation and Development

REB: Regional Environmental Board

REC: Regional Environmental Center

## Synopsis

The research question of this project is:

*What are the impacts of the national environmental discourse on environmental practises at the municipal level?*

The point of departure for this question is an observation of the Latvian environmental discourse as similar to the environmental discourses in countries in Western Europe. The discourse seems to be based on features of ecological modernisation. Ecological modernisation is characterised by changes in environmental policies from reactive “end-of-pipe” approaches towards anticipatory and precautionary solutions. There has also been a move towards more integrated regulatory approaches and an emphasise on environmental and economical benefits as mutually reinforcing. These and other features of ecological modernisation the point of reference for the analysis of the national environmental discourse.

There are two analytical chapters. The first is a study of the national environmental discourse with point of reference to the National Environmental Policy Plan (NEPP). The policy goals, principles and instruments for implementation are stated, and the main priorities and problems are identified in the NEPP. Through an analysis of the NEPP, with reference to the features of ecological modernisation, it is shown how the national environmental discourse seems to be in line with the ‘modern’ environmental discourse of ecological modernisation. The environmental discourse in Latvia has changed since independence. These changes are studied as institutional changes. Different institutional elements are identified and discussed. Most of the changes seem to be initiated from the level of the Ministry, or from foreign experts and organisations.

secondly, environmental practises will be studied as a case study of Madona municipality. The municipality is studied both as a target group and as a policy actor. As a target group the environmental practises of the municipality are meant to be changed by implementation of national environmental policy. Changes in environmental practises are mainly connected to national programmes and foreign donations. Few practises connected to the municipality as a policy actor are found. Main reasons for the weak position of the municipality as a policy actor

can be the difficult economic situation combined with a low level of knowledge on environmental issues and resource management.

A main conclusion is that a low level of knowledge, a lack of financial and human resources and a good environmental quality are barriers for change. These factors need to be changed if the goal of a decentralised environmental protection system, where municipalities are important policy actors, can be reached.

**Key words:**

- \* Transitional societies and environmental protection
- \* 'Modern' environmental policy
- \* Ecological modernisation

# Chapter 1 - Introduction

## The focus of the research and the research question

When I first presented my ideas for the master thesis the response from my fellow students and the staff of Aalborg University was that the project was too extensive, too broad and difficult to complete within the time frame of the ESST master programme. Since I started, my focus has been circling around questions like the transfer of environmental friendly technology, impact of environmental aid programmes on policy formulation and other questions related to environment and transition processes. Since I was living in Latvia as an exchange student in 1990-1991 I have visited the country many times, and followed the transition from a Soviet Union republic to an independent country with democratic institutions. Environmental questions have been focus of my interest for many years, and the choice to make my thesis on questions related to environmental management was a natural outcome of this interest.

The process of narrowing down the focus and formulating a research question that possibly could be analysed in seven months time, ended with a research question focusing on how the impact of the national environmental level is on the municipal level. What I saw during my initial research on the national environmental protection system in Latvia reminded me of features I knew from my own country. It was mainly the documents from the Ministry of Environmental Protection and Regional Development (MEPRD) that gave me the impression of the Latvian environmental policy as 'modern', and similar to other countries in western Europe. My knowledge of the tight economic situation in Latvia, the short time since the independence and other characteristics made me wonder about the implementation of the policy at the level of municipalities. I ended up with this research question:

*What are the impacts of the national environmental discourse on environmental practise at the municipal level?*

The national environmental discourse is currently under construction and has been changing during the years, both before and after the independence in 1991. The discourse is seen as dynamic and as constantly under construction. The concept of discourse is here seen as a specific composition of ideas, concepts and categorisations which are produced, reproduced and transformed through a particular set of practises. Through these ideas, concepts and

categorisations, meaning is given to physical and social realities (Hajer, 1995). In this thesis the ideas, concepts and categorisations of the environmental protection system, the policy<sup>1</sup> and politics<sup>2</sup> are the features of the discourse of interest. The practises that are in focus, the way ideas, concepts and categorisation gives meaning to physical and social realities has changed and are undergoing changes in Latvia. Discourses are seen as having some characteristics. They are seen as embedded in day-to-day life where they have substantial and constitutive effects and they 'naturalise' and often implicitly universalise a particular view of the world. In the terms of Foucault one might say that they enable us to understand *"how what is said fits into a network that has its own history and condition of existence"* (Johnston, 1994:136). In discourse analysis there is often a focus on language, here a theoretical discussion of the concept of discourse will not be given. Elements of what I see as the national environmental discourse are environmental policy and politics and the ideas and concepts that are the foundation of the whole environmental protection system. The environmental discourse is seen as having constitutive effects and to shape the contours of the taken-for-granted world. The concept of environmental discourse will not be discussed further, but rather be exemplified through the analysis.

The central argument behind the choice to analyse the discourse with point of departure from institutional theories, is that the discourse is seen as characterised by a specific institutional set-up. The mechanisms that regulate the activities within the environmental discourse are institutions. In order to describe and understand the discourse an institutional approach will be useful. Also for the analysis of environmental practises an institutional approach is seen as wise.

A starting hypothesis is that the environmental discourse in Latvia is influenced by ecological modernisation. Ecological modernisation has generally been dominating the environmental discourse in individual countries since the mid-1980s (Hajer, 1995).

In the study of the national environmental discourse the influence from external forces, like ecological modernisation will be central. The reason behind this choice is my observation of the national environmental discourse as having similarities with the discourse in western European countries. The research question is based on a hypothesis of the national environmental

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<sup>1</sup> Policy is seen as a set of ideas or plans that is used as a basis for making decisions (Collins, 1988).

<sup>2</sup> Politics are the actions or activities that the actors use to achieve power (Collins, 1988).



discourse as influencing on the municipal environmental practises. If the municipal practises are influenced by the national discourse, there is also a meeting between the municipal context and the more international context of ecological modernisation. To which extent this have an impact on the municipal practises is interesting and will be explored. This will be analysed through a case study. I visited the municipality of Madona, and gathered information in order to answer my research question. The analyse of the practices takes point of departure in questions on what the municipalities do in relation to environment, how they work and why they act as they do. Different elements of institutions will be identified related to their environmental practises.

### Latvia: an overview

Latvia was included in the Soviet Union after the Second world war, and for almost 50 years the country was a Soviet Union Republic. After protests and struggles for independence from the 'perestroika' years in the mid-1980s, through the national liberation in the late 1980s and early 1990s, Latvia became independent in 1991. The reawakening of the civil society and the steps towards the reconstitution of the national sovereignty were closely intertwined with the awakening and mobilisation of the Latvian green movements. The Environmental Protection Club (VAK) became a significant political force. Activities of VAK attracted public attention to the environmental situation in Latvia. The struggle of informal groups against construction of a subway network in Riga gained extensive public support. The public saw the metro as being the entrenchment of Moscow's power, and a way to speed up the Soviet colonisation process. The opinion of the informal groups and the public won, and the construction was never started. Another conflict between the central planners from Moscow and green movements was the public resistance to the construction of a hydro-power plant on the river Daugava. Because of environmental and social considerations the plant was never constructed. These and other victories of informal groups and the intellectuals, based on environmental and social considerations, contributed to the belief that it was possible to set and implement the idea of Latvian independence. Since the re-establishment of an independent state and transition to market economy most domains of the society has undergone changes (MEPRD,1995 and Ernsteins&Kudrenieckis,1999).

An important change is the official identification of environmental problems. Two main groups of environmental problems can be identified. The first are problems inherited from the Soviet Union period, and the second group is connected with risks caused by economic activities. Example on inherited problems are hazardous waste dug down in the ground. Risks caused by economic activities cover a wide range of issues. Restructuring of the economy and economic growth will probably make this a growing problematic in the future (MEPRD,1998). The majority of the environmental problems are concentrated in the largest industrial centres, transportation cross-roads, in territories abandoned by the Soviet army and in urban areas. Agriculture used to be an extensive polluter, but related to privatisation of land and economic problems the gross production fell by 60 per cent in the early 1990s. The environmental impact of agriculture is less than in the European Union (EU) countries (MEPRD,1998). The environmental problems manifested, by the Ministry of Environmental Protection and Regional Development (MEPRD) (1995), in the country as a whole are eutrofication and degradation of water ecosystems, excess usage of natural resources, transboundary pollution and accumulation of household and industrial waste. Natural forests, meadows and swamps where rich animal and plant populations live are found in Latvia. Many of the species are on the edge of extinction in the Western and North-western regions of Europe. Latvia's nature is comparatively untouched and there are forest reserves, undeveloped beaches and generally low pollution levels. Seven per cent of the territory is covered by particularly protected areas, and administered by special administrative authorities (MEPRD,1998).

Economic restructuring is a major change in Latvia. Due to the breakdown of regulating mechanisms and the collapse of internal trade relations in the Soviet Union the Latvian economy sharply declined in 1991-1992. The integration into the Soviet Union's centrally planned economy made the Latvian industry little diversified. It was specialised in heavy industry, machine building and electronics, representing 55% of total industrial production before independence. These industries had a heavy reliance on imported raw materials. After the independence the imports had to be paid in world market prices. An example is how energy imports amounted to 27 per cent of Gross Domestic Product in 1992 (United Nations,1999). The economy has since the independence recovered in many areas, the private sector has for instance expanded. As a result of the restructuring and growth in the economy, new and different environmental problems have appeared. The balance between economic growth and protection of natural resources and environment is one of the main challenges identified by the MEPRD (MEPRD,1995).

It is important to understand the municipal context in which the national policy is to be implemented. The greatest change for the municipalities is the establishment of a democratic system with local self-government. The first local election was in May 1994 where 58.5 percent of eligible voters participated. There are as many as 591 municipalities in Latvia, 77 municipalities are urban municipalities and 480 are rural parishes. Many of the parishes only have 400-500 inhabitants. The economic situation is difficult for most municipalities, and how to promote economic growth seems to be the main concern.

### Structure of the thesis

Chapter two sets up the theoretical frame for the analysis. I will first outline the background of ecological modernisation and features seen as important for the study of the national environmental discourse. In the second part of this chapter the framework for the study of institutions are established. In the third chapter the qualitative methodology is discussed, and my choice of methodology explained. The fourth chapter is the analysis of the national environmental discourse. The first part is a more empirical description of the history and establishment of the environmental protection system, and the national environmental policy goals, the principles and the instruments. In the second part the discourse will be analysed in the light of ecological modernisation. The discourse will finally be analysed with point of departure in institutional theories. The fifth chapter is the case study from Madona. Here the environmental practices of Madona will be described and analysed, with focus on the impact of the national discourse.

## Chapter 2 - Theoretical Approach

A theoretical framework will here be developed with the purpose of studying how the national environmental discourse is influenced by ecological modernisation, as well as the impact of the discourse on environmental practises at the municipal level. The development of the concept of ecological modernisation will first be sketched, and the most relevant features for the analysis of the Latvian environmental discourse described. Secondly, a framework for the study of institutions will be created.

### Ecological modernisation

Since environment found its place on the political agenda in the early 1970s the environmental discourse has undergone changes (Hajer,1995). The new way of conceiving environmental problems has been described with the concept of ecological modernisation. The meaning of ecological modernisation varies depending on author and context (Reitan,1998).

Ecological modernisation focus on changes in society, so do the thesis of the German sociologist Ulrich Beck about 'the risk society'. Beck described how there is a development of a society that both reflect an increase of risks, as well as a growing individualisation. Modernity as such has taken a reflexive turn, as ordinary people question the basis of political and technical authority. A more scientific discussion of what a theory is, and more general on theories of modernisation will not be given here. According to Seippel (2000) it seems unclear what makes it historically sound to characterise the changes in the environmental policy as modernisation, and more analytically how to deal with the core of the theories on 'the modern' seen as functional differentiation, rationalisation and individualisation in relation to ecological modernisation. Since the shifts in the orientation has manifested themselves on both a discursive level, where new principles are being formulated, as well as on a practical level, the focus here will be on developing a framework for the studies of changes at the practical level in Latvia (Seippel,2000 & Jamison,1999).

### Development of ecological modernisation

In a study of the roots of ecological modernisation Hajer (1995) argues how ecological modernisation is the product of a coalition of different forces. Four reasons for change within the movement are given. First of all, there is an emphasise on how environmental issues lost against the concern over depression of the economy in the 1970s. The radical environmentalism from the 1960s and early 1970s was influenced by the slow-down of the economy. In order to maintain its social credibility, environmental discourse had to find ways to adjust economic restructuring with environmental care. Secondly, important changes occurred within the environmental movement. The radical confrontational style was seen as limiting the social power of the environmental movements. The Non Governmental Organisations (NGOs) started to think about alternatives to the practice of mass demonstrations. The third factor was that advantage started to be taken of the importance of emblematic issues for the general public understanding of environmental problems. Issues such as acid rain or the diminishing of the ozone layer emerged, and they played a symbolic and metaphorical meaning. Emblematic issues were used to illustrate the large threats that various industrial practises formed to society as a whole. The last factor was that ideas of ecological modernisation at this time had overcome their initial phase. During the 1970s essential development of environmental discourse had taken place in the fields of policy making institutions and research units. They provided an alternative conceptual language and delivered concrete solutions that made an alternative discourse available. Secondary policy institutes such as the Organisation for Economic Co-operation and Development (OECD) and the United Nations Environmental Programme (UNEP) had all started their own environmental directorates or committees in the early 1970s. The activities of these institutions resulted in the formulation of a coherent alternative environmental policy that promised to be both effective and efficient. They started to ask for the introduction of policy-making strategies that focused on precaution, and for internalisation of environmental care in economic considerations (Hajer,1995).

Hajer (1995) also identifies three tracks that initially launched ecological modernisation. The first track is related to the *World Conservation Strategy* (WCS) published in 1980. WCS was a report arguing for a strategy of sustainable development based on efficient resource utilisation and considerate environmental planning. A second track was linked to the activities of OECD. In 1970 the OECD Environmental Committee was established. The Committee functioned as a mediator for ideas that sprang up in academia. The main drive of OECD was that pollution problems mostly indicated inefficiency, and that the costs of pollution should be bore by the

polluters. OECD emphasised especially the relationship of economy and environment. The OECD's contribution to the promotion of ecological modernisation culminated in the International Conference on Environment and Economics in June 1984. The major conclusion of the conference was that: *"the environment and the economy, if properly managed, are mutually reinforcing; and are supportive of and supported by technological innovation"* (OECD,1985:10 in / (Hajer,1995:99). The third track in the repositioning of environmental discourse were the UN reports like the Common Crisis (1983) and Our Common Future (1987). They expressed a continued concern with the need for increased multilateral co-operation, and an emphasis on the need to look at economic and environmental issues as intertwined (Hajer,1995)

In the extensive literature on ecological modernisation its meaning varies depending on author and context. Christoff (1996) points on a distinction between ecological modernisation as Technological Adjustments, as Policy Discourse and as a Belief-system. Hajer (1995) describes three ideal types of ecological modernisation. These are ecological modernisation seen as a Technocratic Project, as Institutional Learning and as Cultural Politics. I have chosen to illustrate how the meaning of ecological modernisation varies by referring to ecological modernisation as Technological Adjustment, Technical project , Policy Discourse and Institutional learning.

Ecological modernisation as Technological Adjustment describes technological developments with environmentally beneficial outcomes. One of the first who introduced ecological modernisation into policy analysis was Janicke<sup>3</sup>. For him ecological modernisation was essentially a strategy for industries where they could minimise technical costs. In this view ecological modernisation is seen as: *"a form of 'ecological rationalisation' which will lead simultaneously to greater 'ecological and economical efficiency'"* (Christoff, 1996:480). According to Christoff (1996) ecological modernisation as Technological Adjustment is primarily a strategy with the intention to maintain or improve market competitiveness. The environmental benefits will be incidental, and not the main concern. He argues that innovation may be limited to areas and types of technical improvements that ensure market competitiveness. As a consequence the technological change may not contribute to lasting environmental improvements when viewed in the context of national or international ecological requirements.

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<sup>3</sup> Janicke, M. 1988 "Ökologische Modernisierung: Optionen und Restriktionen präventiver Umweltpolitik" in Simonis referred to by Christoff, 1996. The original article is not conferred by the author.

According to Christoff this is a narrow interpretation of ecological modernisation where corporate, public or political values related to wanted ecological outcomes are not necessarily reflected.

The interpretation of ecological modernisation as a Technical Project emphasises that the technology is out of control, not the nature. According to Hajer (1995) this interpretation argues that the emergence of ecological modernisation can be seen in the context of increasing domination of humanity by technology<sup>4</sup>, and that the real problem is to stop the “*growth machine*” (Hajer,1996:255). Only when the ‘machine’ is stopped, the real environmental problems can be solved.

Ecological modernisation as Technological Adjustment and as a Technical Project can be seen as contradictory to each other. It seems as if the argumentation of Christoff (1996), on ecological modernisation as Technological Adjustment, has its foundation in a scepticism against technology as the main factor solving environmental questions. His critique can be seen as reflected in this ideal type identified by Hajer in the critics against technology seen as deterministic, containing the possibility to solve problems.

Ecological modernisation seen as changes in environmental Policy Discourse refers to changes in different policy areas. For instance in the area of environmental policy making anticipatory regulative formulation has replaced a more reactive formulation. Also the role of science in environmental policy-making is seen as more pro-active and critical. The idea that prevention of pollution is beneficial economically has expelled environmental protection seen as increasing the costs. The view on nature has changed from nature seen as a free good, to nature seen as a public good and resource. In the legislative discourse the burden of proof, or the responsibility now rests with those accused as polluters (Christoff,1996).

The central hypothesis of ecological modernisation as Institutional Learning is that institutions can learn, and that the learning can produce meaningful changes. Developments in the environmental discourse is seen as a process of institutional learning. Nature is seen as out of control and as defined ‘outside’ societies. If further degradation is to be prevented, nature needs to be integrated into our conceptual apparatus. A specific set of social, economic and scientific concepts are needed to make environmental issues calculable. According to Hajer

(1996), this interpretation of ecological modernisation assumes that political institutions can internalise ecological concern.

I will argue that there is a link between ecological modernisation as changes in the environmental Policy Discourse and as Institutional Learning. The changes in the policy discourse depend on the learning of the institutions. Institutions need to learn in order to internalise concern for the environment and new practises for environmental protection.

### Features of ecological modernisation

In the mid-1980s the ecological modernisation discourse came to be a force that could effectively challenge the dominant conceptualisation of environmental problems. Ecological modernisation conquered rapidly the environmental field, and came to be seen as the most legitimate way of conceptualising and discussing the environment as a policy-making problem. This is reflected in the changes in the content and the style of environmental policy in most industrialised countries. These environmental policy changes can be generalised into different features. There was a shift from reactive “end-of-pipe” approaches towards anticipatory and precautionary solutions. There was also a move towards more integrated regulatory approaches. The emphasise on environmental and economical benefits as mutually reinforcing and focus on an increased resource efficiency and waste minimisation were also growing. These features of environmental policy can be identified in most countries with environmental protection system and policies, and reflect that the environmental agenda has an international character (Christoff,1996, Hajer,1995 & Reitan,1996).

*Table 1 - Features of ecological modernisation (Pepper,1999:3)*

New policy making principles:	Integrated environmental concern, polluter-pays principle, cost-benefit analysis, precautionary principle, pollution charges and taxes.
A new role for science:	Experts take a more central role in policy making.

<sup>4</sup> Technology refers to both merely technical “artefacts” and machines, as well as social techniques (Hajer,1996:255).



Nature reconceptualised:	Nature seen as a public rather than a 'free' good.
Environmental protection seen as source of growth:	Low- and non-wasteful anticipatory technologies generate profits.
Burden of proof reassigned:	To the suspected polluter, not the damaged party
Policy making opened up:	New participation and partnerships. Voluntary agreements rather than command and control regulation and encourage

One theoretical thesis of Hajer (1995) is that institutional practises in the environmental domain functions in accordance with policy discourses. I will argue in chapter 4 that the institutional practises in Latvia functions in accordance with these features of ecological modernisation. The images, causal understanding and priorities of the discourses is functioning as "signposts" for action within these institutional practises. Hajer argues that development in environmental policy depend on social construction of environmental problems. In Latvia both «outside-in» and «top-down» forces influence priorities. How environmental problems are defined and constructed, both at the national- and the local level, depend on a social construction of problems. This construction is formed and influenced from different angles. In the analysis I will argue that the environmental discourse is created and constructed by both internal and external forces.

Hajer (1995) studied how 'hot issues' function as emblems of environmental discourse. His example is how acid rain in the 1980s was one of the top issues through which people understood what the 'crisis' was about. Through his study he argues that emblematic issues plays an essential role for shifts in policy discourse. While the emblematic level of environmental politics remains, the issues like acid rain comes and goes. Emblematic issues are also important for the definition of solutions to the 'ecological crisis'. I will argue that in Latvia, the waste water treatment and waste collection can be seen as emblematic issues. These issues seems to form the local environmental practises. At the national level international emblems are influencing on the priorities.

The influence of ecological modernisation on the Latvian environmental discourse will be studied mainly through literature. The features of ecological modernisation identified here will

serve as a starting point, and if I can find these features I will argue that the national environmental discourse is influenced by ecological modernisation.

## Institutional theories

I will here first clarify what is meant by institutional theories. Secondly I will set up a frame for analysing institutions, and lastly argue why institutional theories are important for my study.

### What are institutional theories?

Many different approaches to the study of institutions exist. In my study of the environmental-discourse and practise the point of departure will not be based on only one of the institutional scholars. Rather it will be based on a broad definition of institutions as consisting of:

*“..cognitive, normative and regulative structures and activities that provide stability and meaning to social behaviour. Institutions are transported by various carriers – cultures, structures and routines – and they operate at multiple levels of jurisdiction” (Scott 1995:33).*

In this definition, Scott reflects how different social theorists identify institutions differently. He identifies three main axes of controversy, which are the most significant dispute among the various schools of institutional scholars. The first controversy is the difference in emphasis accorded to regulative, normative and cognitive elements. The second is that the institutions, whether regulative, cognitive or normative perspectives are stressed, have varying “carriers” of institutional elements. The third controversy is that the levels of institutional elements vary in terms of whether the researcher is focusing on micro or macro phenomena.

In the analysis of Latvia, regulative, normative and cognitive structures and activities will be identified and analysed. The stand is that all these elements are making up or supporting institutions in the environmental discourse and environmental practises. In order to identify and analyse these elements of institutions, a clarification of what is meant by institutions is essential.

### How to understand institutions?

Institutions are concrete and historically specific mechanisms that regulate social activity (Rostgaard,1996). Institutions consist of both formal rules and informal norms, conventions and standardised practices that regulate and structure relations between individuals and social groups. Both the environmental discourse and the municipal practises are regulated by institutions of environmental management, protection etc. These institutions are mechanism that regulate the discourse and the practises. The institutions consist of cognitive, regulative and normative elements. Important features of the regulative, normative and cognitive elements of institutions will here be outlined with the purpose of using these as an analytical departure.

The regulative institutions can be thought of as the rules of the game, providing the incentives and enforcement mechanisms (Rostgaard,1996). According to the regulative pillar, institutions constrain and regularise behaviour. Regulative processes can be rules, setting, monitoring and sanctioning activities. The influence given to regulative processes vary between different scholars of institutional theories (Scott,1995). There are in the relations between institutions and actors a focus on the incitement structure, and the creation of the right type of incitements (Rostgaard,1996).

In the normative approach to institutions there is an emphasise on how values and normative framework structures choices, and how prescriptive, evaluative and obligatory dimensions are a part of social life. Rational action is grounded in a social context that *"specifies appropriate means to particular ends"* (Scott 1995:38). In the relationships between institutions and actors, the focus is on the interaction between actors and institutions. Actors contribute to the creation and the maintenance of institutions through their actions. It is interesting to study how the actors act in relation to the values, norms and expected roles of the institution (Rostgaard,1996 & Scott,1995).

According to Scott (1995:45) a cognitive conception of institutions stress the central roles played by *"socially mediated constructions for a common framework of meaning"*. The cognitive elements of institutions are the rules that constitute what is seen as reality and the frames through which meaning is created (Scott,1995). According to Rostgaard (1996) there is a shared definition of reality, symbols and meanings. The subjective interpretation of the actors has to be taken into account when explaining and understanding an action. There is a focus on how social identity is shaped through use of symbols, and diffusion of attitudes.

Scott (1995) points on how institutions are embedded in various types of “carriers”. As seen in table 2 he distinguishes between cultures, social structures and routines as carriers of institutions.

*Table 2, Institutional Elements and Carriers (Scott,1995:52)*

CARRIER	ELEMENT		
	Regulative	Normative	Cognitive
Cultures	Rules and laws	Values and expectations	Categories and typification
Social structures	Governance systems	Authority systems	Structural isomorphism, identities
Routines	Protocols, standard procedures	Conformity, performance of duty	Performance programs, scripts

Cultural carriers are according to Scott (1995), carriers that rely primarily on interpretative structures. These patterns of meaning and rule systems are codified. Depending on which element of institutions that are given influence, the aspects of culture emphasised vary. Regulative theorists will focus on conventions, rules and laws, while normative theorists will emphasise shared values and normative expectations. For cognitive theorists the importance is on categories and typifications. Social structures are carriers that rely on expectations that are patterned. The expectations are connected to networks of social position, like social role systems. At the same time as the structures both constrain and empower the behaviour of actors, the structures are also reproduced and transformed by the behaviour of the actors. Rules and belief systems are coded into structural distinctions and roles. Institutional elements are incorporated into the structures. When routines are seen as carriers, institutions may be embodied in structured activities. These activities can take form as behaviours and routines that are habitual. The routines are carriers that rely on patterned actions reflecting the tacit knowledge of actors (Scott,1995).

### How are institutions created and changed?

As explained in the beginning of the thesis the study of the national environmental discourse and municipal practises implies a study of institutions that are newly created or has undergone changes. In order to study the creation and change in these institutions, a framework needs to be established.

Braathen, with an inspiration from Scott, identifies four possibilities for institutions to be created or changed (Rostgaard,1996). One possibility is when previously latent institutions become important. These are institutions that have been hidden behind other formal institutions, when the existing institutions disappear, these institutions can become visible. During a revolution, changes like this can occur. An example of this kind of change can be how environmental movements came into force and power after the independence of Latvia. A second way of change is when new actors come into play to pursue new goals within existing institutions. In Latvia, different subordinated institutes of the MEPRD are example of new actors seeking new goals. When existing actors adopt new means within existing institutions, it is a third possibility for change. A fourth possibility is when existing actors develop new goals and cognitive structures to accommodate to changes in the institutions themselves. Since Latvia is in a process of approximation towards EU standards and norms, this can be contributing to such changes.

A link between the three elements identified by Scott and this characterisation of changes by Braathen, gives different ways actors can create new or change existing institutions (Rostgaard,1996). One possibility is to create a new social identity. This means that the actors create a new picture of themselves and a new self-understanding. This is a change in the cognitive elements of institutions, where the culture is changing. Another possibility is to create new norms and roles. These are norms that are broadly accepted and transferred in an organised way. The normative institutions are changed or new ones are created. Creation or change of regulative institutions are the third possibility. When new rules or legislation are created, the outcome is new regulative institutions. For instance, when new legislation is adopted and new organisations established to control the observance of these rules, new regulative institutions create new enforcement mechanisms. Rostgaard (1996) points out the changes can be both 'bottom-up' and 'top-down' initiated. 'Top-down' changes often starts with changes in the regulative institutions, new actors promote the changes. If it really is possible to talk of new institutions depends on whether there is a success in the establishment of new

norms and roles, or new normative institutions supporting the regulative and the cognitive institutions.

One important point is that there are different institutions in a society, these have different field of range and are together creating or consisting a strong or a weak institutional system. In the thesis I focus on the system of environmental protection. The institutions are created in different ways, and through different means. Attitudes and action do not necessarily change because of new rules and legislation. The nature of the normative and the cognitive institutions play a role in the way they play together with or fight against the regulative institutions. Contradictions and conflicts can also have as an outcome a creation of new institutions.

#### *Why are institutional theories useful in my study?*

The current environmental protection system, the policy and the politics are characterised by newly established values, norms, rules and enforcement mechanisms. The environmental discourse is not seen as static, but rather as changing related to factors like the 'political climate', economic- system and situation, international forces etc. Since institutions are the mechanisms regulating activities within the discourse, a distinction of different elements by Scott will be useful in order to structure the analysis, and analyse the relation between the different institutional elements of environmental discourse at the Ministry level and at the level of the municipality. Institutional theories are useful for my study because an analysis of the institutional set-up is thought to give a good picture of different features of the discourse, and the environmental practises of the municipality.

Other studies of Eastern European countries in transition also take their point of departure in institutional theories. Both Bruckner (1995), Holm-Hansen (1999) and Campbell & Pedersen (1996) are arguing in favour of using institutional theories when studying the development of Post-Soviet societies. They all use the theories on studies of different issues. But my main point is that the usefulness of institutional theories in the study of transition is explored in different academic work, and that the use of institutional theories of others are strengthening my choice.

## Chapter 3 Methodology

In this part, I will describe my choice and use of method. Since my main methodology is field-research and study of literature, I will look at both strengths and weaknesses of these approaches. Last I will identify some problems related to interpretation of qualitative data.

### Choice of methodology

The focus of the thesis is the environmental discourse and practises in Latvia. I want to say something about the direction of the development of this newly established discourse, and especially about changes at the municipal level. The nature of my research question makes it natural to use qualitative methodology. According to Eneroth (1994) qualitative methodology is: *“quite simply a methodology with the aim to describe the quality of a phenomenon”* (my translation). The objective is therefore not to measure the extent and the diffusion of a phenomena. Rather, it is to identify a whole range of different sides of the phenomena, and through this try to understand it. In my project, the qualitative aspects are the ones I want to emphasise.

In order to study municipal practises, I chose to visit a municipality. The very limited literature available on environmental practises and changes at the municipal level in Latvia, also made it almost compulsory to visit a place, and make interviews with key informants. Since I wanted to see the impact of the national environmental discourse on the municipal level, I also had to make a study at the national level. I chose to study the national discourse mainly through existing literature. An alternative, or supplement could be to make interviews with key-informants in the system of the Ministry. Due to time limits I couldn't make anything but short conversations with key-persons, while searching for literature. Since the number of documents from the ministry are quite extensive, and literature on environment and municipalities are limited, I decided to spend most time in one municipality. The case study is, anyway, supplemented by conversations with people from the University of Latvia, employees of the Ministry of Environmental Protection and Regional Development and of the Latvian office of the NGO Regional Environmental Centre for Central and Eastern Europe (REC) (Appendix one - Informants) .

I was searching for a medium-sized municipality. I didn't want to make my research on a place being an 'hot-spot' of environmental problems, but rather on an average municipality. I can't argue that Madona is representative for all towns in Latvia, but as a case, Madona can illustrate some features of the impact of the national discourse on the environmental practises at the level of local self-government. Medium sized towns have the same legal responsibilities, the political and administrative structures are similar, the economic situation is generally tight and the environmental quality quite good. Because of these similarities I find the case of Madona as illustrative also for other municipalities.

I spent five days in Madona. The information I gathered can be limited by the time frame, but I mean that the information is sufficient for my purpose. The interviews I made and conversations I had with very helpful and sympathetic people are my main source of information (Appendix one - Informants). A goal in qualitative research is to go in depth on certain phenomenon, and find most aspects of these. It is therefore not necessary with representative selection of many respondents. It can often be more useful to have few informants giving extensive information. When choosing my informants, I searched for people with key positions in the organisations I was interested in. First I got in touch with Irena Leite, she was my door opener and helped me to find and make arrangement with both Aris Vilkserts and Austra Gailite. I had been in touch with the director of the Madona REB before I went to Latvia, when I arrived he set me up with Sandra Broka. I spent one week in Riga after my stay in Madona, as already written I talked to different people. I feel that the information gained in Riga is supporting the information from my informants in Madona.

Eneroth (1994) distinguish interview and conversation from other qualitative methods like empathy, observation and observation by participation. The difference is that knowledge is gained about other peoples thoughts only through words, by asking questions and getting answers. Compared to methodologies where the researcher participates, the relationship between the researcher and the informants are more distant in interviews or conversations. The distance can make it difficult to gain certain types of information, but the methodology is at the same time more inter-subjective, because other researchers can ask the same questions and test the answers. In practise, anyway, this is difficult because of factors in the interview situation that are difficult to control, like place, chemistry between people or other people listening.



Eneroth distinguishes between interview and conversation by the degree of control exercised by the interviewer on the answers. In an interview the researcher is asking well prepared questions in a certain pre-decided order. In conversation the researcher only has a subordinated theme, and the informant is free to talk within the theme. The questions are asked during the conversation in order to keep it on the right track. My research is mainly based on interviews, but I have also gained useful information through conversations. I prepared questions before I went to Latvia (Appendix two - Interview guides). During the interview I tried to both keep to my scheme and also to follow up interesting information. This combination was quite difficult, and in the interview I mainly kept to the prepared questions. Some of my informants I also met in more informal environments, where I gained useful information through conversations. I prepared my questions in English even if I knew I could meet people with limited understanding of English. Before I went to Madona, a friend of mine translated the questions prepared for the Madona REB into Latvian. My knowledge of Latvian made it possible for me to pose the questions, to understand the answers and to follow up with new questions. There is always a danger of losing information or misunderstanding when translating, but I felt that the communication between Broka and me was very good. The interview with Leite was done in English, her English is good and there very few, if any, misunderstandings. In the interview with Vilskevics, Leite was translating. It was very useful to get the questions translated, and less useful to get a translation of the answers. A danger when using translator is that the information is going through a filter where information can be changed, added or lost. I noticed this when I got the answers translated, because I understood the most of what was answered. But the translation was useful because it gave me a possibility to control my understanding. The last interview I did in Madona was with Gailite. Her English was not good enough to make the whole interview in English, the interview was therefore made in both Latvian and English. We changed language as we went on, depending on both her and my knowledge and understanding. It is very interesting to listen to the tape from the interview, because the changes are often in the middle of a sentence and seems very natural. I made these four interviews with questions prepared specially for the organisations. I did not get any routines and I didn't feel experienced in any of the interviews, this will also probably influence on the knowledge gained during my stay in Madona.

The analysis of the environmental discourse at the national level through literature is also based on qualitative methodology. It is possible to collect literature like diaries, letters,

biographies, reports, scientific articles and books (Hammersley&Atkinson,1995). Since the research on the national environmental discourse is not very extensive, I based myself mostly on the reports from the ministry. For me it seemed wise to base my work mainly on these reports with support from scientific articles on the transition in the environmental domain, especially in Latvia and the Baltic states, and to a certain degree also on literature on changes in central and eastern European countries.

An important part of the qualitative research process is to interpret information. This is important both when using existing literature and when collecting data. All data can be interpreted in different ways, and there is no blue-print on how to do it. Since interpretation are based on experience and judgement, they have an element of uncertainty (Gilje&Grimen,1993). Interpretations can be more or less good related to the argumentation for why the interpretation is reasonable. In qualitative methodology, it is especially important to argue for the interpretation.

Holme&Solvang (1991) emphasise the important departure in a qualitative research as the pre-judgement and pre-understandings of the researcher. The pre-judgement is the socially based interpretations on the phenomena studied, and the pre-understanding is the theoretical understanding, from e.g. the theoretical approach chosen. In the meeting point between these and the empirical material, and the meeting point between the researcher and the researched, the result of the research are created. When literature is used this interpretation process will be even longer. Then the researcher has to interpret the interpretation of the author of the literature. My interpretations depends on the context of the whole interview situation. The validity of answers are often high in interviews, because of the face to face interaction and the context.

I will in this thesis try to present the literature and the information from my informants in a fair way, which mean that I try not to express meanings my informants didn't seem to have. How I interpret the information is based on my theoretical framework, and one of several possibilities. I will try to make it clear how I ended up with my interpretations.

## Chapter 4 National Environmental Discourse

The Ministry of Environmental Protection and Regional Development (MEPRD), and its subordinated organisations are seen as the main environmental actors in Latvia. In the formulation of the national environmental discourse, as well as in the implementation they play the central roles. A theoretical thesis of Hajer (1995) is how environmental practises functions in accordance with policy discourses. As we remember from the introduction, discourse is seen as different ideas, concepts and categorisation being produced, reproduced and transformed in sets of practices. Meaning is given to physical and social realities through these ideas, concepts and categorisations (Hajer,1995). A starting hypothesis here is that the practises of the MEPRD system functions in accordance with a policy discourse, where features of ecological modernisation can identified.

This chapter is divided into three parts. Firstly, the creation of the discourse and important characteristics of it, will be described. Secondly, different features of the discourse will be analysed, in the light of ecological modernisation. Thirdly, the institutions regulating the activities within the discourse will be analysed.

### Agenda- and Goal setting

Agenda setting is important for the ability to shape an environmental discourse, moving issues into the arena of political action sets the agenda. Different actors can contribute in the agenda setting process. Initiative can come from actors like the Ministry, Regional or Local municipalities, Non Governmental Organisations (NGOs), researchers, the media or individual actors. Here the main focus will be on the Ministry level, the reason is that they seem to be the main agenda setter. Goal-setting is here seen as primarily a political process where political priorities are set, and available options weighted. The outcome is political commitments to preferred solutions. For instance, is Political commitment made to preferred solutions, by making issues a part of the National Environmental Policy Plan (NEPP) (Klemmensen,1996).

The history of environmental protection is seen as important for both the agenda setting and the goal setting. An outline of different phases in the development of environmental protection

will therefore be given. The policy goals, the principles and the instruments stated in the NEPP are the outcome of a goal setting process. They will be described here, and later analysed in the view of ecological modernisation.

### *The history of environmental protection*

The current state of environmental policy is the outcome of several influences. Ernsteins and Kudrenickis (1999) mention how a long historical and cultural interaction with nature, the relatively late possibility to establish a national environmental administration, and the following urgency of policy initiatives as part of the economic transition, all have influenced on the state of environmental policy. The current environmental protection system and policy are seen as 'path-dependent'. By 'path-dependency' I mean that emphasise should be given to the former experiences and systems, in the analysis of the current environmental protection system and policy (Ernsteins&Kudrenickis,1999 & Holm-Hansen,1999).

The pre-Christian area of manifestation of nature can be identified as a first stage in environmental protection. The impact of this period on current environmental protection should not be overestimated. But today the heritage of this period can be found in the sacred springs, groves, trees, caves and stones, there are 2554 noble trees in Latvia, of them are 1269 recognised to be of national importance. The second stage, in the history of environmental protection is connected with an understanding of an economic necessity of natural materials. During the 'Swedish area'<sup>5</sup>, laws in order to limit hunting and cutting of hardwood trees appeared. It was seen as economically sound to make them last for as long as possible, and let them regenerate. The third stage is connected with an understanding of nature protection as preservation of elements of nature. In 18<sup>th</sup> century limitations were set in regards to specific objects, sites or territories. Until the second world war environmental protection followed much the same pattern as in other European countries. For instance, the first nature reserve, Moricsala, was established in 1912 (MEPRD,1995 and Ernsteins&Kudrenickis,1998).

The fourth stage is the years during Soviet occupation. The Soviet development strategies of large-scale agriculture, rapid industrialisation and uncontrolled urbanisation were harmful to the environment. However, succeeding the passing of a law on nature protection in 1968 the area

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<sup>5</sup> Riga and the north west of Latvia (Vidzeme) were under the Swedish king for 87 years in the 17<sup>th</sup> century (Kolbergs,1998).

of protected territory expanded. Also, the policy of extensive agriculture contributed to extending the forest areas, which now cover 44 per cent of the territory as compared to 25 per cent in 1923. Gradually, during the time as a part of Soviet Union other elements of environmental policy were introduced. Laws were adopted on water utilisation in 1972, on underground resources in 1976, and on air pollution in 1981. All of these laws were based on command and control instruments. Even though laws with the aim of environmental protection were developed, the enforcement of the legislation was weak (MEPRD,1995).

In the mid 1980s the public protests were extensive against the environmental harmful Soviet development strategies. The pressure from the public was important for the independence of Latvia, and also for the development of the current environmental discourse. Environmental protection was set on the political agenda in 1988, when the State Nature Protection Committee of the Latvian Soviet Union Republic was established. This was the first state institution in the environmental protection sector. After the independence in 1991, the Environmental Protection Committee of the Republic of Latvia was established. This committee was directly subordinated to the Supreme Council. During the years between 1990 and 1993 an independent administrative system for environmental protection was developed. The Ministry of Environmental Protection and Regional Development (MEPRD) was established in 1993 (MEPRD,1998). Seven years have passed since the establishment of the MEPRD, during these years the environmental protection system has been under development, and environmental policy have been formulated. Latvia is in a period of transition, the development in the environmental agenda is influenced by the general transition of economic, political and administrative system. It is important to underline that the environmental protection system and policy described here is not set, but will continue to change and be redefined.

#### *The Ministry of Environmental Protection and Regional Development*

The major priority of MEPRD is environmental protection, but issues concerning regional development, construction, tourism and local government issues are also a part of their responsibility. The MEPRD system have different departments, as well as subordinated and supervised institutions (Appendix three - Organisational chart of MEPRD). The environmental protection sector is managed by the Environmental Protection Department. The responsibilities of this department are development of environmental protection policy, and monitoring of the

implementation of the policy according to international agreements. They set, for instance, the requirements for the integration process to the EU (MEPRD,1998).

The Regional Environmental Boards (REB) are implementing the state policy on a regional and local level. There are eight REBs that administrate several municipalities and regions (Appendix four - Map of REB). The REBs have similar organisational structure and functions. The main tasks are to give permits and to control. Permits are needed for the use of natural resources, for collection and disposal of waste, for emission to soil, water and air, e.g. from waste water treatment plants. Permits are also needed for fishing. The REB also has the responsibility to control that the permits are followed, as well as state legislation. The REB has to have full information on environmental quality in the regions of the REB (Madona REB,1999).

The main environmental protection activities of the MEPRD are formulated in the NEPP. The NEPP was approved by the Cabinet of Ministers in 1995, and is the first strategic document at the national level in the history of environmental protection in Latvia. Policy goals, principles and instruments, as well as national environmental priorities are declared in the NEPP. In the process of developing the NEPP more than 80 specialists from numerous Latvian institutions contributed. Consultations were also sought from the Ministry of Housing, Physical Planning and Environment of the Netherlands and experts from the Swedish Environmental Protection Authority (MEPRD,1995).

In the foreword of the NEPP the state Minister of Environmental Protection; Indulis Emsis, draws a connection between the NEPP and what he calls 'modern' environmental protection policies. In the explanation of modern environmental policies he emphasises a comprehensive protection of ecosystems, maintenance of the quality of the human environment, and implementation of environmental politics that guarantee sustainable development (MEPRD,1995). The concept of sustainable development is here emphasised as important for the Latvian environmental policy. Sustainable development is defined in the NEPP as *"development that ensures satisfaction of present day needs without jeopardising the satisfaction of needs of future generations"* (MEPRD,1995:12).

### Policy goals and principles

The policy goals are based on two main considerations. The first is that the present quality of the environment in Latvia is generally high compared to a majority of European countries. The acute problems are mostly in 'hot-spots'. The second consideration is that the country is in transition towards a market economy. Resources are limited, the living standard is low, and the social structures are changing. In the NEPP the result is seen as a public unconcerned towards the environment, and a tendency towards an excessive use of limited resources. The legislative acts, the regulations and the mechanisms for implementation are described as incomplete and changing rapidly (MEPRD,1995).

The NEPP sets out four main policy goals. The first is to improve the quality of the environment and stability in the ecosystems in the 'hot-spots'. In other places, a worsening of the environmental quality is to be prevented. The second goal is to protect the biological diversity and the characteristics of the landscape. There is a tendency to substitute the inefficient use of natural resources with an excessive use of existing resources. This can lead to an exhaustion of natural resources, like for instance forests. Therefore, the third goal is sustainable use of natural resources. The fourth goal is to integrate environmental policy into *"all branches and fields of life"* (MEPRD,1995:12). In order to fulfil this goal the concept of sustainable development is thought to be made known to the society and the decision makers.

The formulation of the policy goals are based on policy principles. Two groups of policy principles are set out. The first are for development of the environmental policy. The second group is connected to the formulation of specific measures and choice of appropriate instruments, and based on an integrated approach to problem solving. The idea is to solve several problems at one time. The policy is thought to be decentralised and based on polluter pays principle and the principle of precaution. The 'cradle to grave' principle and use of the best available technology is also important principles.

An important principle is to maintain a balance between the environment and the national economy. According the NEPP this means that the capacity of ecosystems should be taken into account in the development of the economy. An other principle of policy elaboration is prevention of pollution at the source. The principle of pollution prevention means that attention has to be given to prevention instead of cleaning up after pollution, at the 'end of the pipes'. A third principle is that all individuals have to take responsibility for the environment where they

live. A fourth principle is that environmental protection activities shall be derived from historical experience that are acceptable for the nation as a whole, and suitable for implementation on a local level. A fifth principle is that people have the right to be informed and to take part in the formulation of decisions. This is meant to cover the whole society (MEPRD,1995).

### Environmental policy instruments

Modern environmental policy instruments base themselves on their ability to engage a broad range of relevant actors to protect the environment. Instruments are built on the belief that actors will be influenced in a way so that they make decisions that are environmentally friendly. A policy instrument can be seen as the ways in which an actor, like MEPRD, can shape a policy game in order to obtain desired results. An instrument is simply the way an actor can influence on the actions of other actors (Holm-Hansen,1999).

The legal system is seen as one of the most important instruments for implementation of the environmental policy (MEPRD,1995) (Appendix five -.The main legislation for environmental protection). Latvia's environmental legislation consists of many individual statutes, rather than an integrated environmental legal system. The individual statutes are adopted at different times (UN,1999). The Latvian environmental legislation was initially connected with regulation of natural resource use, one group of laws on environmental protection are therefore regulating this. The Law on Environmental Protection of 1991, the Law on State expertise of 1990, with its Environmental Impact Assessment instrument and the Law on Natural Resources Taxes of 1995 are examples of laws in this category. Another important group of laws are the laws not directly connected with environmental protection, but necessary in order to administer the enforcement of the other laws. The Law on Local self-government (1994) specifies environmental tasks of municipalities (art.15). They are responsible for organising water supply and sewage networks, supply of heat, collection and disposal of household waste, and collection, disposal and purification of sewage (Ladzdina,2000).

During the last years there has been an extensive work in drafting and adopting new laws, and many environmental issues have become regulated. The single factor influencing most on the changes in environmental legislation, is the political orientation towards the EU. The legislation, including standards and norms, are under co-ordination with the EU directives. The plan is to



complete this work by 2005 (MEPRD,1995). Signing of international agreements are also influencing on the environmental legislation.

Economic instruments are seen as increasingly important by the MEPRD. The growth of production and consumption, as well as the increase of pollution abatement costs are reasons for this. The main principles behind economic instruments, referred to in the NEPP, are that polluters should pay, and that the economic instruments used to promote activities to abate pollution should be simple and flexible. The most widely applied economic instrument are the tax on natural resource. This tax was introduced in 1990 in order to conserve natural resources and limit environmental pollution, as well as collect funds for financing environmental activities. 40% of the money collected through natural taxation ends up in the municipalities. Apart from the natural resource tax subsidies, state loans, guarantees, tax relief, administrative charges and the State Environmental Fund are other available economic instruments (MEPRD,1995).

National programmes are seen as the main instrument for stimulation of development. The main national environmental programmes are '800+' and '500-'. In order to solve water supply and wastewater treatment problems in small towns a state programme, called *Water Supply and Waste Water Treatment in Small and Medium Sized Towns of Latvia* - 800+, was initiated in 1997. Now all towns and rural territories, excluding the large cities, are considered as target groups<sup>6</sup> of this National Programme. In order to reach the policy goal of improvement of environmental quality and ecosystem stability the municipal solid waste management has to be improved. Mismanagement of solid waste has caused serious impact on environment and public health. The programme '500-' is an action plan for improvement of solid household waste management, and for reduction of waste load to environment (MEPRD,1995).

Environmental education is identified in the NEPP as one of the main instruments in order to raise the public awareness. Education is thought as necessary in order to increase the level of public knowledge and interest about environment and environmental protection. The sense of responsibility and practical public support for the solutions of environmental problems is thought to increase with education and knowledge. Several surveys of public opinion on environmental issues, conclude that the main source of information, for many people are personal observations and the mass media. Most people is seen as insufficiently informed

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<sup>6</sup> There are two main actors, the policy actor - environmental authorities and the target group - those whose activities are to be altered in a more environmental friendly direction (Holm-Hansen,1999)

about environmental problems and about opportunities for participation, and they generally confine their interest to local environmental issues and specific activities in the neighbourhood and in the family (Ernststeins&Kudrenickis,1998). Surveys like this illuminates that the knowledge level is generally low, and that there is a need for strengthening of education and information.

Agenda setting and goal setting is here described as important processes of the environmental discourse. The focus has been on the Ministry, as an agenda and goal setting actor. An analysis of other actors, could have been interesting. But since the Ministry seems to be the most active and powerful actor, other actors are not included here. A relatively weak position of the civil society, and especially the environmental NGOs can be a reasons for the domination by the Ministry. The changes in almost every level of the society can also be a reason why environment is losing out against economic and social transitions. A lack of knowledge and a low level of education on environmental issues can be another reason for the low participation in agenda setting and goal setting process. In the development of the NEPP, actors from different Ministries, research institutes and NGOs were invited to contribute. This can be seen as a first step for a broader participation in the agenda setting and goal setting.

The crucial test of the policy is seen as the implementation. The more empirical description of elements of the agenda- and the goal setting stages will next be further analysed in the light of ecological modernisation. The case study in chapter five, will illustrate the impact of the national discourse through a study of the environmental practises at the municipal level.

### Environmental discourse and ecological modernisation

The environmental protection system is developed with departure in an existing environmental agenda. With reference to the history of environmental protection, I will argue that there is a continuity, not a break in the development of the environmental discourse. The manifestation of nature, the understanding of the necessity of natural materials, and the preservation of elements of nature as well as nature protection during the years of Soviet occupation, is a part of the development of the environmental discourse of today.

The engagement in environmental issues from the green movement and the public before the independence have become quite silent after the independence. The Soviet system as the 'enemy' does not exist any more. The public seems to be more focused around economic development, and other daily problems (Broka,2000). Research from Lithuania shows that some of the former activists now have positions within the Ministry system (Rinkevicius,2000). Also in Latvia some of the former activists probably occupy posts in the public authorities or other public and private organisations. I don't have empirical evidence for this assumption, but it seems reasonable to think that some of the environmental activists now are found within the system of the Ministry. A good reason why these former actors of the green movement have moved into the Ministry are their pre-knowledge and interest in environmental protection.

### *Ecological modernisation as reflected in the NEPP*

In the forward of the NEPP, the Latvian policy is described as a 'modern' environmental protection policy. The concept of sustainable development is also introduced as the main foundation for the Latvian environmental policy formulation. Sustainable development was re-introduced by the World Commission for Environment and Development in 1987. According to Hajer (1995) there are at least forty working definitions of sustainable development. The definition of sustainable development in the NEPP is similar to the one adopted by the World Commission for Environment and Development. The concept of sustainable development differs in how it insists on the complex interrelationship between the social and the physical. When ecological modernisation, from the mid-1980s, conquered the environmental field, the concept of sustainable development was important in the rhetoric. The focus on sustainable development as important for 'modern' Latvian environmental policy can be seen as a first indication of the influence by ecological modernisation on the Latvian environmental discourse.

With point of departure in the theoretical chapter, and especially table one, the policy goals, principles and instruments of the NEPP will be analysed. The main aim is to show that they are influenced by features of ecological modernisation.

Environmental protection seen as a source of growth, is reflected in the NEPP principle of balance between economy and environment. According to the NEPP, this means that the capacity of the ecosystems should be taken into account in the development of the economy. This is in line with the idea of finding ways to reconcile economic restructuring with economic

care. One of the tracks in the development of ecological modernisation was the argument for a strategy based on efficient resource utilisation. The OECD was emphasising the relationship between economy and ecology, and a conclusion from them was that environment and economy are mutually reinforcing when properly managed (Hajer,1995). The economic instruments in the NEPP has its roots in the idea that economic sanctions can have regulating effect, and the idea that economy and ecology can be mutually reinforcing.

The policy-making principles of anticipation and prevention are reflected in the NEPP through the principle of prevention of pollution at the source. The policy-making organisations in western European countries started in the 1970s to ask for policy-strategies that focused on precautionary solutions. One of the changes identified in the content and style of environmental policy, is a shift from reactive 'end-of-pipe' solutions to more anticipatory and precautionary solutions. A changed re-conceptualisation of nature is reflected in the NEPP principle of individuals as responsible for the environment where they live. The nature is seen as a public good and resource, and not as a free good. Also the environmental legislation reflects this principle. The Law on Natural Resource Tax (1995) is an example of regulation of natural resource use. Through economic instruments the use of natural resources has to be paid for.

The opening up of policy making is reflected in the NEPP principle of the population's right to be informed and to take part in the formulation of decisions. This is in line with the view of a new role of participation. A feature of ecological modernisation is that new actors has been acknowledged in policy making processes, and in the NEPP, participation and education is seen as important.

One of the NEPP principles seems to reflect wisdom from the past. This is the principle of environmental protection activities as derived from historical experience. This principle reflects how decisions unacceptable to the society were taken and carried out through the system of centrally planning during the Soviet period. The goal today is to establish a decentralised environmental protection system. This goal can probably be linked to the Soviet experience.

The national programmes are seen as one of the most important instruments for development. Both the national programme '500-' and '800+' seem to have an "end of pipe" approach. The aim is to clean waste water and to take properly care of waste. The source of the pollution is not emphasised in these programmes. An interesting question in the light of ecological

modernisation is if the right approach is to build waste water treatment plant instead of focus on prevention of the pollution. In the case of Latvia, it seems necessary to build these waste water treatment plants because all buildings are generating waste water, and to change the system in already constructed buildings, is difficult as well as expensive. An idea is to integrate the anticipatory and preventive principles in the construction of new buildings. Different solutions exist where both waste water and waste production can be limited and reused.

The generating of waste has grown after the independence, due to economic growth and new trade patterns. Many new products are imported from other countries, and the packaging are different and more extensive than what it used to be. The former recycling systems do not seem to function, for all the new products and packing (MEPRD,1995). The '500-' does not aim to limit the amount of waste, only to secure the handling. In the NEPP the environmental impact of waste is seen in the increase of both the quantity of household waste and hazardous waste. Even if the establishment of landfills are the first priority, through 500-, minimisation of waste is also seen as important. Reuse of waste is also emphasised. Limitation of waste production and a strengthening of recycling systems are both in line with the precautionary and anticipatory principles.

### NEPP and green planning

With inspiration from an article by Jänicke and Jöergens (1998), the NEPP will here be seen in a broader context. Jörgens and Jänicke describe what they call a policy innovation, that has been established in most industrialised countries. This is a new and more comprehensive planning approach, argued to result from the idea of sustainable development. They call this green planning. In these plans long-term goals are set on broad political and societal basis. There is an emphasise on integration between sectors. The most visible expression of this new planning approach is the adoption of strategic and integrative environmental planning at a national level. Problems of long term degeneration are focused, rather than protection from acute dangers or risks. In order to set the problems of long-term degeneration onto the environmental agenda, to overcome the resistance of heavy polluting sectors and to make the goal of sustainability more realistic, strategic long-term planning is described by Jänicke and Jöergens as a promising approach.

Jänicke and Jöergens pose some key questions on green planning. The questions are if the plans include concrete quantitative targets, if the goals are relevant for the context and if the goals are realistic and scientifically based. They also wonder if the political systems and the target groups have capacity to achieve these goals. They argue that the success of the environmental plans depends on the answer of these questions, and the realism of the content.

The NEPP does not include concrete quantitative targets, they rather seem to remain quite unspecified and vague. After the NEPP, a National Environmental Action Programme (NEAP) was developed, in the beginning of 1997, by employees of environmental protection system. This is a document only for the MEPRD system. The NEAP sets out actions corresponding to the environmental problems in the NEPP. The types of actions discussed are actions directly solving environmental problems, implementation of environmental policy instruments and establishment of pre-requisites for environmental protection. Some targets seem to be visible, but my main impression is that the NEAP is quite vague and difficult to understand. The NEAP is planned to be in a process of regular development. It is stated in the programme that it is a vital pre-requisite for both getting help from Western countries and for the general co-operation with Europe to develop national environmental action programs. How this has concretely influenced the development of the NEAP is difficult to see, but later I will discuss more generally the influence of the European integration and the international assistance on the environmental discourse.

An interesting question is if the policy goals and the instruments are formulated with regard to existing political and societal capacities for environmental protection. Whether the capacity of the political system and the target groups to achieve these goals is taken into account, or not, will be illuminated in the next chapter. The national policy as part of a more international planning approach, and as influenced from abroad also has a 'top-down' element when meeting the municipalities. Since the implementation is the stage where the policy is put into practice it is essential to create the material and other resources needed for implementation. How and if this is done in Latvia, will also be illustrated through the case study.

### European integration and international assistance

The environmental discourse can also be seen as influenced by the process of European integration and international assistance. Here some important features of the assistance and integration process will be analysed.

Latvia receives both direct bilateral assistance, mostly from neighbouring countries, and assistance from international organisations like EU or NEFCO (Nordic Environmental Finance Corporation). According to Aage (1998), there is a tendency for concentration of bilateral support to neighbouring areas. This is presumably because of the interest in reduction of transboundary pollution. Transboundary pollution is also probably the main reason why the EU has taken interest in the environment in the Baltic states. Most of the environmental support to Latvia goes to the energy sector. Water protection also gets a significant contribution. Co-operation concerning environment also takes place within a number of international organisations. An example is the Helsinki Convention signed in 1974 by neighbouring countries to the Baltic Sea. The Baltic Marine Environmental Protection Commission - the Helsinki commission (HELCOM) is an intergovernmental body with ministerial meetings every fourth year. The main aim of HELCOM is to restore the Baltic Sea to a sound ecological balance (Aage,1998).

A number of international conventions for improving the environment are signed by Latvia. These also have an impact on the national policy. As well as support from individual countries, Latvia gets support from international financial institutions. The international financing institutions that have contributed with mainly loans for environmental investments are the World Bank, the European Bank of Reconstruction and Development, the Nordic Investment Bank and NEFCO. The main contribution to Latvia is given by the EU Phare programme. The EU Phare programme is a financing instrument supporting the economic restructuring process in Central and Eastern Europe. Latvia became a member of this programme in 1991. Since the aim of EU Phare is to support the integration process, the funds are directed towards areas which EU sees as important. These areas are mainly the strengthening of institutions, the implementation of the EU legislation and technical investments (MEPRD,1998).

In the process of developing the NEPP, Latvia got assistance from the Netherlands and Sweden. The assistance might have had an influence on the NEPP. The Netherlands also have a NEPP, the structure and the content of seem somehow similar to the Latvian NEPP

(Jänicke&Jöergens,1998). Since the impact of foreign experts and researchers is not the main focus, this will not be further analysed. The main point here that the employees of the MEPRD, other ministries and research institutes seem to be influenced through their contacts with fellow experts from other countries.

In 1995, the three Baltic states officially applied for membership of the EU. The process began in March 1993 with Agreement on Trade and Commercial and Economic co-operation. In 1994 the Free Trade Agreement was signed and in 1995 followed the Association Agreement<sup>7</sup>. The agenda 2000<sup>8</sup> states that it is requested for Latvia to develop environmental policy that works towards sustainable development. This policy should be based on the integration of environmental protection into sector policies, preventive action, the polluter pays principle, fighting environmental damage at the source, and the principle of shared responsibility (EU,1997). It is argued that ecological modernisation form the basis of EU environmental policies (Pepper,1999). Harmonisation of the legal system with the EU system is an important issue. Since the EU environmental policy is harmonious with ecological modernisation this is also reflected in the EU legislation. Through an harmonisation features of ecological modernisation will probably be adopted.

### Institutions as the regulating mechanisms

As already stated, the institutions are seen as the mechanisms regulating the activities within the environmental discourse. Since the environmental discourse have changed significantly since the independence, institutions have also been created and changed. The theoretical frame developed earlier will here be the point of reference for the analysis of creation and change in institutions (see table 2).

The transition from a centrally planned Soviet system to a system build on principles of democracy, are a main change in the administrative and the political system. The independence of Latvia made it possible to establish a national environmental administration, and with the establishment of the MEPRD system the creation and change in institutions

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<sup>7</sup> The legal basis for relationship between Latvia and the EU, came into force June 12, 1995.

<sup>8</sup> Agenda 2000 is the opinion of the EU Commission on Latvia's application for membership of the EU.



seemed to culminate. The creation and change in the institutions of the environmental discourse can be described in different ways. As we remember, Braaten (Rostgaard,1996) identifies different possibilities for institutions to be created and changed. I will first show how the institutions have been, and are changing in different ways. Then I will identify mainly regular and cognitive elements of these institutions.

The MEPRD system is the main policy actor. Within the MEPRD system there are different actors. Some of these actors are 'new', while others were working with environmental issues also before the independence. Examples of previous actors can be the actors from the environmental movements, environmental researchers and actors from the State Nature Protection Committee. It is possible to believe that previously latent institutions have become visible and important after the collapse of the Soviet system. These different actors have probably contributed to make these latent institutions visible. Since the actors from the environmental movement were strong, they have probably by moving their actions into the sphere of the Ministry contributed most. Latent institutions can have different elements. An example can be normative elements that the new actors most possibly have brought with them into their new sphere. The view on nature as something that needs protection, and to be managed properly was fundamental for the protests from the environmental movement. This Normative elements were carried by the culture of the movement. This normative institution is now also carried by the social structures of the authority system. When the new actors came into play within the existing institutions, they pursued new goals that contributed to a change in the institutions.

The actions of the Protection Committee were based on command and control instruments. Even if these instruments differ significantly from the instruments of the current environmental discourse, some emphasise should be given to the institutions and actors of the Protection Committee. These actors were working with environmental protection, at the level of the national authority, before the establishment of the MEPRD system. Together with the new actors they have seemingly adopted new means and ideas during the years since independence. An example is how the adoption of legislation, based on new and different principles, through the EU integration process have contributed to changes. These new means have been adopted within an existing institutional system of environmental legislation. Environmental legislation existed of latent, but not active institutions. After the collapse of the

Soviet system and the development of the environmental discourse these regular institutions became more visible and important.

Even if changes in the regulative elements are most visible, it seems possible that changes also have occurred in the cognitive elements. Cognitive institutions constitute what is seen as reality, and are the frames through which meaning is created. First of all, if we go ten years back in time, environmental issues were almost absent from the political agenda. The environmental movement was, more or less, the only actor working in order to maintain and regulate environmental harmful activities. As shown in the beginning of this chapter the view on nature has changed during the history of environmental protection. During the last ten years, as already argued, the development of environmental discourse has taken a similar direction as in many countries in Western Europe. This is shown through an analysis of the policy goals, the principles and the instruments of the NEPP. The cognitive institutions are linked to the way principles for solution of environmental problems are defined, and it seems reasonable to assume that there has also been a change in the cognitive elements of the institutions. How fundamental these changes are, is harder to say. It is not possible in this study to answer if the whole culture has changed, or if only some of the employees have created a new picture of themselves and a new self-understanding by internalising the ideas of ecological modernisation into their mind. The interview with Broka, working at Madonas REB can give some indications. Broka seems to have internalised features of ecological modernisation. According to her, integrated environmental knowledge is important, and anticipation should be crucial for the activities of the municipalities.

The most visible changes are in the regular elements of institutions. These are newly established institutions that constrain and regularise the behaviours of target groups. Examples of target groups, that to a limited degree earlier have been constrained in their actions, are industry, municipalities and private actors. New regulative elements are for instance the newly adopted environmental laws and economic policy instruments. Economic instruments are mostly in the hands of state institutions or units of de-concentrated state power, like the REB. According to Ernsteins (2000), fines are generally very small and it is questionable whether they can discipline the polluters in their actions.

Many of the changes in the institutions are 'top-down' or 'outside-in'<sup>9</sup> initiated. The 'top-down' changes have started mainly with creation of new regulative institutions at the Ministry level. Research show that municipalities don't participate actively in the definition of their role, and that it is given from the 'top' (REC,1999). The goals and the instruments are defined and developed predominantly at the national level. De-concentrated state units, like the REBs, are responsible for most of the implementation. According to a report on the assessment of environmental protection system in Latvian municipalities, the system is highly centralised (REC,1999). The environmental protection system is also influenced by 'outside-in' factors. 'Outside-in' factors are the influence by foreign actors on the development of institutions. How the agenda is created in other countries, which issues that are defined as emblematic, and the construction of the discourse in other places, are all influencing on the creation of the Latvian discourse. Also the priorities of different donor programmes, funding and foreign aid are influencing. The integration process into EU and international agreements and conventions signed by Latvia do also influence on the discourse formulation. The picture seems to be complex with many different factors influencing on the development and creation of the discourse and the institutions. It seems as if the NEPP in particular is influenced from abroad, and not really developed in accordance with the situation in the country, but rather on a conception of what could be. As already argued, it seems as if the NEPP is influenced by, or similar to 'green plans' from other countries.

The strength of the new institutions depends on whether there is a success in the establishment of new roles and norms. Normative institutions can be seen as supporting or not supporting the regulative and the cognitive institutions. As argued the cognitive and regulative institutions at the national level are based on ecological modernisation, it is interesting to see if these institutions are supported by normative institutions at the municipal level. Support by municipal institutions is seen as important for the implementations of the national policy.

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<sup>9</sup> The meaning of the concept 'outside-in' is that there is an influence from outside the Latvian society. This influence is mainly from foreign actors.

## **Chapter 5 - Environmental Practises in Madona Municipality**

Through the implementation of national policy, the municipal activities/actions are altered into certain directions. An understanding of the municipal context is important when studying the impact of the national environmental discourse on the environmental practises. During my stay in Madona I gained knowledge of the municipality that makes it possible for me to make an analysis. Also my prior knowledge about the Latvian society is an important basis. It is seen as important that the national policy goals are relevant for the context, and that the Political system and the target groups have the capacity to achieve these goals. In the analysis a distinction will be drawn between the municipality as a target group and as a policy actor. The national environmental authorities sees Madona as a target group, where the goal for them is to change the activities of the municipality into a more environmental friendly direction. As policy actors, the municipality has the possibility to act as local environmental authorities, and to initiate changes and actions for environmental protection.

Based on personal impressions, I will start this chapter by describing the town of Madona, and the surroundings. Before the independence, environmental protection and management was not an issue for the municipality. I will therefore secondly describe how they started to work with environmentally related issues, and what they see as their main tasks today. The description of the practises will serve as a point of reference for an analysis of Madona as target group and as a policy actor. As stated in chapter four, it is important for the strengths of the regular and cognitive institutions at the national level to get support from normative institutions at the municipal level. Elements of the institutions regulating the environmental activities will therefore be analysed. An aim is to see how the institutions at this level supports the institutions identified at the national level, as well as the direction of influence from the national level.

### **Madona and the surroundings**

Around mid summer, one of the most important celebrations for Latvians, I travelled by bus from Riga towards Madona in the eastern part of Latvia (Appendix six - Map of Latvia). The distance of 157 km took me more than five hours, a long trip in two senses. It felt long both because the old and uncomfortable bus stopped often in small villages for up to ten minutes,

but also because of the vast differences between the countryside and the capital of Riga. The dusty roads passed through agricultural landscape, and small villages and towns. The landscape in this part of Latvia is hilly, and seems very soft and gentle. The soil is rich, and the fields and the woods are very green at this time of the year. Even if the fields are green, it was quite sad to recognise that there were almost no production. Before the occupation by the Soviet Union Latvia was producing and exporting corn, butter and meat to other European countries. Along the road I noticed farms that once have been quite big and rich, but today it seems as if many of them hadn't seen a paint brush for 50 years. Even if it was Monday morning, some of the men I saw were drunk, and they corresponded to my image of real alcoholics. Since most of the former collective farms are closed down and the agricultural production very low, the unemployment rate is high. The social security system is also weak, and many people have economic and social problems. Later Broka at Madona REB told me that many people in the country-side survive on what they can cultivate themselves, and the money they earn selling products on the markets in nearby towns. I felt that there is a contrast between the poverty of the people and the richness of the surrounding. During the trip, I was thinking that environmental problems and concern had to be secondary when people have to struggle to survive economically. It didn't surprise me when Broka told me that one of their tasks is to prevent people from illegal fishing in the lakes and rivers. She told me about incidents where people killed the fish in a small lake by electric shock. There is obviously a contradiction between economic survival and protection of resources.

I arrived in Madona with all these impressions and I felt very curious to explore the town. I had a good feeling, Madona seemed to be a nice town. I was walking up and down the four main streets of the centre. This Monday evening Madona was almost empty and very quite, but when I heard some people sing and play folk music it made me feel welcome. The song traditions in Latvia are strong, and almost "everybody" are singing in choirs or folk song groups. I found a hotel situated in the same building as the municipality. The building was built during the Soviet Union occupation, as many of the buildings in Madona. This building is part of a square with buildings for municipality and for Regional authorities. It all seemed to be standardised, as well as overdimensioned for this small town. I imagined how the statue of Lenin used to have full control over this square.

The first evening I found myself stumbling around because of all the holes in the streets. I noticed that some buildings had got new windows, and how these now were contrasting older

windows. Madona is in the highest parts of Latvia where the winters can be quite cold and snowy, the old windows didn't seem to give much isolation. I got the impression of private investors establishing new shops, restaurants and upgrading buildings. One of the newest and nicest building in Madona is a bank. I also saw houses in a state of decay, with water pumps by the streets. Later I got to know that these pumps are being closed, and that water will be installed for these almost 100 houses.

The unemployment rate in Madona is lower than in the countryside, around 9 per cent of approximately 10.000 inhabitants<sup>10</sup> are without a job. The inhabitants are mostly employed in private and public services and light industry. There are many different enterprises working with wood processing, this range from basic processing to furniture production. Bread production enterprises are also important employers. Since Madona is the administrative centre of the region as well as the trade centre, this gives important employment. The municipality is an important employer in the municipal enterprises, the municipal administration, the schools and kindergartens. The district authorities (Madona Region) have their base in Madona, and employ approximately 30 people. Also the national authorities employ more than 30 people at Madona's REB.

My impression of the economic situation was reflected in the answers of Vilskeris. He told me that the budget of the municipality is 1.5 million Lats<sup>11</sup>. The income of Madona is tax from employed inhabitants, property tax and duties. They also own a market place, which gives some additional income. The economic situation is difficult, as Vilskeris described it, they only have money to cover basic needs, and to 'keep the head above the water'. One of his example is that they don't have money to change windows and repair the roof of the school building. The result is very high energy consumption in the winter, and damages on the building by rain. They don't have resources to prevent damages and problems that they see will come in the future.

### Environmental tasks in Madona municipality

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<sup>10</sup> Latvians approx. 77%, Russians approx. 18%, Belorussians, Hebrews and Poles approx. 5%.

<sup>11</sup> 1 Lat is approx. 0.5 – 0.6 Euro (www.bank.lv, 22.09.2000)

### First initiative in 1992-93

It seems as if the first initiative, for working with environmentally related tasks, was taken in 1992-93. It was Andis Mesapuke, at the Public Works Department, who first started with a search for waste water treatment equipment. Letters, where Madona asked for used parts and equipment to the waste water treatment plant, were written to Swedish and Danish municipalities. The construction of a sewage system was started during Soviet times. This system covered approximately 58% of the population. The system consisted of an old network of pipes, and a treatment of sewage by a simple manual mechanical screen. It was not possible to reach the recommendations set by HELCOM for water purification. Emission of some particles in the sewage outlet was measured to be approx. 30 times higher than the specifications from HELCOM. The technological solution of this old plant was not sufficient (Viborg,1997). The initiative of Mesapuke ended up with a project under the national programme 800+. The project was initiated in 1994 when a contact between municipality of Madona and BioPlan A/S<sup>12</sup> was established. They worked together on a definition and identification of a project. NEFCO was also involved in the preparation of an investment program. NEFCO required the establishment of a separate water and sewage company, and in July 1995 'Madona Udens' (Madona Waters) was reorganised from the Public Works Department. 'Madona Udens' is a separate profit-making unit, where 100 percent of the capital is owned by the municipality. The ties to the municipality's decision-making structures are secured by their subordination to the senior executive officer of the town, and through the ownership by the town. 'Madona Udens' got the responsibility for the construction, implementation and running of the sewage treatment plant, and a drinking water supply system. The waste water treatment plant has been operating since June 1998, and the drinking water cleaning system are currently under construction (Leite,2000, Mikkelsen,2000 & Vilskerts,2000).

The construction of the waste water treatment plant and a drinking water cleaning system has been supported with 2.369.400 US dollars. The support that has been transferred through this programme are loans from NEFCO (24%), grants from EU Phare and Denmark (19% and 20%), a contribution over the state budget and municipality contribution (11%) (MEPRD,1998).

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<sup>12</sup> BioPlan A/s is a Danish construction company, working with waste water treatment technology.

### Drinking water cleaning and treatment of sewage

According to Vilskerts, the most important environmentally related tasks for the moment are the construction of the drinking water cleaning system, and efficient running of the waste water treatment plant. The water supply has been fully based on water from deep wells. Approximately 65% of the population are served by the municipal water supply network. The main problem of the drinking water is a high content of iron and ammonium. To fulfil the EU-norm for quality on drinking water, the ammonium has to be reduced by approx. 95%, and the iron by 83%. There are also a relatively high content of bacteria, and a bad condition of the water supply network causing leakage of approximately 50% of the water. The leakage is the reason for a waste of energy used to pump the water up from the ground (Viborg,1997). The construction of the cleaning system has started. The EU Phare programme is the main financial contributor, covering almost 100% of the costs.

Another important project, identified by Vilskerts, is a reconstruction of the heating supply network. The goal is to transform the system from a liquid fuel based system, to a system based on burning of wood (both processed pellets and raw material). Wood can be bought in Latvia, and it is important for the municipality to support the local industry, and also to become less dependent on supply from other countries, especially Russia. The main incitement for the changes in the heating system is economic, but Vilskerts also mentions the decrease of emissions to the air. For the moment, they are working on changes in the payment system. As it is today, the inhabitants don't pay for the amount of energy they use, and the goal is to change the routines and the structure of the system in order to make the consumers pay for their consumption. The municipality have installed measure equipment in almost all apartment buildings, but the main problem is to develop and implement a system that will give equal conditions for all inhabitants. The quality of the buildings differ very much, and a measure of energy use per square meter will make the system unfair. They are prioritising this project, because approximately 70% of the rent for apartments are heating expenses. This project is financed through foreign donations and loans, the National Environmental Fund, money from environmental tax and municipal financing. E.g. for the reconstruction of heating system the Natural Resource Tax has contributed approximately 10 percent of the costs.

Vilskerts also mentioned a waste management project, under the national programme 500+. The plan is to establish a regional waste site. I didn't get exact information on what they are



doing, but according to Broka, this is an issue where Madona REB are working in order to make the municipalities co-operate and agree on where to establish a common site.

### Municipality as a target group

Latvian municipalities are according to Law on Local Self-Government 1994 (art.15) responsible for the organisation of water supply, sewage networks and the collection, disposal and purification of sewage. Supply of heat and collection and disposal of household waste are also municipal responsibilities. All these activities have potential environmental impact, and are connected with the national environmental priority problems. Priority problems, as stated in the NEPP, are eutrofication and degradation of water ecosystems, excessive use of natural resources, accumulation of household and industrial waste and transboundary pollution. The municipalities run municipal enterprises to fulfil their tasks. As owners of municipal enterprises they are target groups for the national environmental policy. They are supposed to be moved into action by the policy instruments, stated in the NEPP. The main instruments for national policy implementation are National Programmes, as well as legislation and economic instruments.

According to the Law on Natural resource taxes 1995, municipalities have to pay for the use of natural resources, like water. They also have to pay for the outlet of waste water, if the outlet of damaging substances are higher than the requirements from the national authorities. Madona REB is taking regularly samples of the outlet of the waste water treatment plant. If they find the values to be too high, they can give Madona Udens a fine. Madona Udens is running a very modern plant, and they are controlling themselves regular. The emissions are seldom above the limits. Without the waste water treatment plant, Madona municipality would not be able to fulfil the requirements from the national authorities, and they would be constantly fined. Since Latvia is a part of HELCOM, and has signed several international agreements in order to rise the quality of the Baltic Sea, the construction of waste water treatment plants under the programme 800+ is crucial for the national environmental authorities.

### National programme 800+

Prevention of degradation of the water ecosystems are the national priority set in force through 800+. An important instrument in the management of projects are the principle of co-financing in investment projects. The implication of this is that all governmental levels have to participate in the financing. In practice this means that the local municipality has to provide at least 10 percent, the national budget up to 30 percent, loans up to 30 percent and grants at least 30 percent (Ernsteins,2000). According to Leite, 'Madona Udens' had many "fights" with the politicians during the project. Money had to be allocated or borrowed, and with the tight economic situation it was sometimes difficult to make the politicians understand the necessity of this investment. They also thought they could allocate money from the projects to other tasks in the municipality. 'Madona Udens' never had money available in 'their pockets' that could be transferred, and used for renovation of streets, schools or other necessary tasks. According to Leite, the contradictions had its background in the knowledge of the politicians. The politicians did not always understand how the national programme and international donations function. The knowledge of the politicians was a barrier since they had to take important decisions, and they didn't initially have the knowledge and understanding in order to do this. Also, knowledge on environmental issues can be a barrier. According to Broka, the environmental knowledge is generally low among both politicians and administrative employees.

According to Vilsckerts, the most important environmental task for the municipality was this project. I asked if waste water was the most important environmental problem for the municipality, because I saw the impact of waste water emission to be in other places than Madona. As I see it, the treatment of sewage has most impact on the quality of the water in the river of Rieba. Rieba is connected to the Daugava river that passes through Riga, and has outlet in the Baltic Sea. Cleaning of waste water is very important for the quality of the Baltic sea, but it is maybe not as important for the inhabitants of Madona. As a target group, the municipality has been altered into the conception of this as the most important issue, and the practises in Madona related to sewage and waste water treatment are changed. The influence of agreements under HELCOM, the priorities of EU and other neighbouring countries have contributed to these changes.

During the interview with Vilsckerts and Leite, I got the impression of environmental activities as linked mostly to projects. The municipal practises in relation to environment seems to be highly connected to the municipality as a target group. The money seems to be predetermined for

tasks and problems that are defined at the level of the Ministry and the international agenda. The research on the municipality as a target group gives an impression of the environmental protection system as centralised.

### Municipality as a policy actor

In most Latvian towns there are not any environmental protection institutions, but as a policy actor the municipalities are free to set up commissions to work with specific policy areas. Even if they don't find it possible to do this, the municipalities can create new actors by assigning environmental tasks to other departments. In Madona, the departments working with environmental tasks, identified by Vilskerts, are the Socio-economic Development and Municipal Accounting Department, the Department for Building and the Municipal Architect. Through these departments, the municipality involve themselves in matters important for the environment. But the information I got when I asked more specifically about environmentally related tasks centred around the activities of the municipal enterprises, and the municipality as a target group. The municipality as a policy actor doesn't seem to be very strong, and as a policy actor Madona has probably not developed and implemented many new practises related to environmental protection and management.

There can be several reasons for the weak position of the municipality as a policy actor. An explanation by Ernsteins is that municipalities don't have many policy instruments in their hands. Another reason for the low rate of creation and implementation of local environmental policies, can be the tight economic situation, and a lack of environmental knowledge. The understanding of local environmental situation and problems, among politicians and administrative staff are also generally low (Lagzdina,1999). According to Broka municipalities define that they don't have problems and that the high environmental quality makes environmental management something municipalities are not too interested in. She told me that: *"they don't care yet, the first question for them (municipalities) is the budget, we don't have so bad environmental situation so municipalities don't feel need for action"*. The areas with activity seem to be mostly connected with big projects and foreign financing.

## Changes in environmental practises

The main overall change at the municipal level is the establishment of a democratic system, with local self-government. It is important to remember that during Soviet period environmental protection, both at the national and the local level, where almost absent. Ten years ago environmental problems started to be officially recognised in Latvia, and modern environmental protection to be adopted. Even if the main changes can be identified at level of the Ministry and its subordinated organisations, establishment of a national environmental protection and policy system moved the municipalities into action.

As stated in the NEPP, there is an aim to establish a decentralised system, where the municipalities have significant responsibility for the environment in their territories. In Madona it seems as if the municipality takes the responsibilities as stated in the Law on Local Self-Government 1994 seriously. Broka describes the municipalities as incompetent for the full responsibility of environmental protection and management. My impression correspond to this view, it seems as the municipality sees its environmental practise as connected to projects. According to Vilskers once the implementation of these new systems for wastewater and drinking water cleaning and the system for heat supply are finished then the municipality has more or less solved its environmental “problems”.

The main real changes in environmental practises are connected to the projects and the activities of ‘Madona Udens’. The implementation of a systems where inhabitants pay for the sewage treatment, supply of clean drinking water and the energy consumption are significant changes in environmental related practises. These systems, when implemented, have some similarities to systems in Western European countries. The systems are based on polluter pays principle, and a conception of natural resources as public, and not free goods. An establishment of a ‘twinning’ agreement between ‘Madona Udens’, and a partner in Western Europe was a requirement for getting loans from NEFCO. A ‘twinning’ agreement was established with the Danish municipality of Viborg. The aim of the twinning was to secure the quality of the project. Staffs from Madona were trained both in technical skills and management skills, and knowledge was transferred. According to Leite, they are very satisfied with the outcome of the twinning agreement.

The establishment of 'Madona Udens' can be seen as a result of national environmental priorities and international donations and aid. The decision to establish a separate municipal enterprise led to organisational changes in the municipality. 'Madona Udens' is, according to Leite, the best and most modern equipped office in the municipality. Also the wastewater treatment plant is a very modern plant with the best available technology. The reason for the good equipment and resources has direct connection with the priority in national policy, and the foreign investments. It seems as if they find their resources sufficient for their tasks.

Environmental gains for the population of Madona is for the moment connected to the modernisation of infrastructure in the hands of the municipal enterprises. The inhabitants are mainly gaining through supply of clean drinking water.

As already stated, the role of Madona as a policy actor has not changed significantly, and is for the moment weak. Ernsteins (2000) identified instruments, in the hands of municipalities, where the municipalities have a possibility to be more active as policy actors.

Merges or joining are an instrument set in force by some municipalities, that have signed agreements for merging. In accordance with a territorial reform, municipalities can choose their partners during a period of four years. This is an attempt to stimulate action from the municipalities, action from the bottom. Few municipalities have so far decided to merge. Establishment of municipality co-operations are a more frequent instrument. The co-operations are established around common interest or development questions. The main part of these co-operations have its point of departure in questions concerning nature protection. The title of the associations often contains the word "green", and environmental concern is often the background for the co-operations. Examples of names are "Green belt", "Green Aivikste" (river) or "Green tourist". These co-operations are not formally established, but more loosely organised. Ernsteins sees these co-operations as an important change in the environmental practises of some Latvian municipalities.

Some municipalities have established formal associations. Examples are environmental co-operation centre and business companies, established after shareholder principle. Inter municipal management companies, established in order to manage municipal services, are an example. The municipalities own these companies. When small municipalities are co-operating like this, an outcome can be that they also after some time can co-operate in other areas. And

in the longer run, they may even merge. In Bartava region, in the south west of Latvia, 9 small municipalities (perishes), with 15.000 inhabitants, have established a formal association. Also in the north-western region of Kurzeme, an association of 10 municipalities (perishes) are established. Some of these associations are thinking about hiring an environmental employee. The co-operations are in some cases stimulated through MEPRD, often in connection to the programme 800+. If small municipalities are co-operating, they can get support for projects together.

The time perspective is important for the knowledge level of the employees in the system, as well as politicians and inhabitants (Broka,2000). Environmental education as an integrated subject has only been offered for five years. There are many experts in fields like biology, chemistry, geography, geology, economy, technical science and ecology, but they are not trained to work with environmental protection and management. According to Broka, the lack of knowledge of environmental management is a big problem. Employees and politicians need integrated knowledge, and to understand that management of environment and resources are as important as technical installations with the aim of cleaning.

### Institutional elements regulating the environmental practises

Environmental practises in Madona are, as illustrated, regulated through the enforcement mechanisms of the national environmental discourse. It is mainly the regular institutions that are a part of the incitement structures, and creating the incentives and enforcement mechanisms. The cognitive elements of institutions are the “glasses” through which meaning is created. At the national level, features of ecological modernisation are reflected in the cognitive elements. At the municipal level there is an interaction between the ‘national’ institutions and the local context.

In Madona, the most visible regular element is the practise of fees for municipal services, like wastewater treatment and cleaning of drinking water. Since these are new services, the practise are new for people, as well as for ‘Madona Udens’. If we study the regular institutions at the level of the municipalities more generally, municipalities have, in accordance with the Law on Local Self-government, the right to issue taxes, and to make legally binding regulations.

This is often done on very local matters, like where to place cemeteries, or other minor regulations of areas. The municipality can pay local police for inspections. Another possible instrument for municipalities is found in the Law on Specially Protected Nature Areas (1993). When land is privatised the new owners of land with natural or cultural monuments, like trees or stones etc., are “forced” to agree to protect the monuments. If the owner wants to sell the land, the municipality has the first right to buy. If the owner sells to somebody else, the municipality can decide on environmental protection requirements (Ernsteins,2000). Information from Vilskers, did not give any information on these kind of regulative institutions in Madona. Even if I spent only five days in Madona, and my study was limited in number of interviews, I think there are not many regular institutions in Madona. Also the more general information on instruments in the hands of municipalities from Ernsteins (2000) and Lagzdina (1999) support this interpretation.

Cognitive conception of institution stress the central role played by socially mediated constructions, for a shared framework of meaning. The interpretation of the good environmental quality in Madona can be an example of a subjective interpretation of objective conditions. The interpretation of good environmental quality is also reflected in the NEPP. At the level of the Ministry this is a precondition for the policy goals of precautionary and anticipatory actions in order to preserve the quality of the environment. At the municipal level, this view does not seem to be adopted. The municipality as a policy actor is not working in accordance with the principles of precaution and anticipation. It seems as the good environmental quality rather is a reason for limited activities. This is also reflected in the answers from Broka: *“the municipalities don’t feel the need for action because they don’t have such bad environment.....they also don’t have knowledge about limitation of natural resource use and integrated environmental management”* (Broka,2000). The interpretation of the good environmental quality can be argued to be a cognitive element functioning as a mechanism regulating the environmental management practises of Madona as a policy actor.

The interview with Vilskers reflects that there are changes in how the municipality sees environment. I will argue that the national programmes, foreign loans and donations combined with initiative from some individuals in the municipality have contributed to changes in the cognitive elements of municipal institutions. Even if many other tasks and problems need to be solved, environmental protection is now an issue. Waste handling, limitation of energy consumption, limitation of emission from sewage and provision of clean water are, according to

Law on Local Self-government, municipal tasks. These new tasks are example of 'top-down' initiated change, that started with creation of new regular institution at the Ministry level. The normative and cognitive institutions on the local level seems to support this tasks regulated by national legislation.

The decision to establish a separate municipal company specialising and working only with waste water treatment and drinking water supply, reflects a change both in regulative, cognitive and normative institutions in Madona municipality. The objective was to decrease the emission of environmentally unfriendly substances from sewage, and to provide the population with water not causing a risk to health. Even if these activities are initiated mainly from outside the municipality, they have contributed to changes in the institutions. Sewage is now seen as something that needs treatment before reaching the river, and provision of clean water as an important municipal responsibility.

The interpretation of these tasks as important for the municipality seems to have created new cognitive elements. These elements are carried by routines, in the performance of these activities. These new practises also seem to be regulated by normative institutions. In the normative systems both values and norms are included. Values are conceptions of what is preferred or desirable, and norms are specifying how things should be done. The normative systems define goals of objectives. New values and normative framework structures these practises, these normative element are carried both by the authority system and the performance of a duty. These changes are connected to the municipality as a target group.

The national authorities and the municipality are interacting both locally through Madona REB and the municipality, and through projects under the national programmes. It seems as if the culture of the MEPRD system building on ideas of ecological modernisation, is not present in Madona. The interviews and conversations with employees in Madona reflected that they don't speak about environment in the same language as in the national environmental discourse. My impression of environmental protection seen as solved through the projects, strengthen this argument. There can be several reasons why the municipality does not reflect the rhetoric of the NEPP. One explanation is the time dimension, ten years ago environmental protection was not an issue at all for Madona. It will take time to development an environmental protection system and policy at the local level. The goals, principles and instruments of the NEPP are developed with reference to a contexts and systems that are different than Madona. Madona,



as well as all Latvian municipalities, have a background from the Soviet system. During Soviet time, there were no local self-government. The heritage from all these years are also having an impact on the developments of today. an example are the knowledge about, and level of education in environmental management. There is a lack of both human and financial resources. But, a step is taken, even if it is mostly connected to the municipality as a target group.

## Chapter six - Concluding remarks

The starting hypothesis was that the national environmental discourse is influenced by ecological modernisation. The National Environmental Policy Plan (NEPP) was the main source of information. In the NEPP, the Latvian environmental protection policy is described as 'modern'. I analysed the formulated policy principles, goals and instruments in the light of ecological modernisation, and found these elements of the national discourse to correspond with features of ecological modernisation. The features of ecological modernisation identified in the national discourse were the new policy making principles of an integrated environmental concern, the polluter-pays principle, the precautionary principle, cost-benefit analysis and pollution charges and taxes.

After the independence, a different environmental discourse has been created, based on different pre-existing factors. The national discourse has changed in the same direction as in most other European countries. There can be several explanations why the development of a national environmental discourse is influenced by ecological modernisation. explanations can be the impact of international agreements, the interaction with employees of the environmental protection sector in other countries, and contact between researchers from Latvia and other countries. The process towards EU membership makes harmonisation with the EU policy important. EU membership is thought to be important mostly for security- and economic reasons. Before Latvia can be accepted as an EU member, they will have to fulfil requirements in different sectors. One of the requirements is harmonisation with EU environmental policy.

One of the goals stated in the NEPP is to establish a decentralised environmental protection system, where the municipalities are thought to have responsibility for environmental protection in their territories. Whether or not the policy goals and instruments are formulated with regard to the existing political and societal capacity, is an important question when studying the impact of the national environmental policy discourse on the municipal practises.

The impact on the municipal practises are different whether you study the municipality as a target group or as a policy actor. The main changes are connected to the responsibilities as defined in the Law on Local Self-government 1994 (art.15). The municipality is a target group for the national environmental authorities. Madona has, with support from the national

programme 800+ and foreign donor programmes, fulfilled the tasks of waste water treatment and water supply. New systems are going to be, or are, implemented. It seems as if environmental issues are seen as solved through projects and technical installations. My impression is supported by research done by REC (Ladzdina,2000), on the assessment of environmental protection system in Latvian municipalities. A conclusion from this research is that environmental policy at the municipal level is directed towards solutions of short term and visible problems.

Madona municipality as a policy actor seems to be weak, initiatives others than the ones connected to Madona as target group is low, if not absent. It seems as if the centralised environmental protection system is not giving the municipalities much room to manoeuvre, as a policy actor. As stated in the REC report, the Latvian law does not request obligatory development of Environmental plans or action programs, neither Local Agenda 21 activities nor processes. Consequently, financial support to activities like these are very limited.

It seems as if the policy goals and not are formulated with regard to the existing political and societal capacity at the municipal level. The concept of ecological modernisation is not reflected in the local context, and it seems to be a miss-match between the national discourse and the local context. It is difficult for the municipality to act as a policy actor within the frames of the national discourse. Several reasons for this miss-mach can be identified, and these can also be seen as barriers for change at the local level.

Development of local environmental policy needs support from local Councils. As shown in the case of Madona there were a lack of knowledge among the politicians. Knowledge is important for raising the political and societal capacity. After ten years of local self-government, the municipality have learned how to work with environmentally related tasks, as decided as priority from the Ministry. The level of knowledge is higher, but the new knowledge is mostly connected with the implementation of new practises and tasks of the municipality as a target group. The research by REC (Lagzdina,2000) shows that there is generally a low level of environmental knowledge among politicians, and a lack of understanding about local environmental situations and problems.

Resources are crucial for the possibility of the municipalities as policy actors. As shown in the study, the municipal enterprise 'Madona Udens' are the best equipped office in the municipality,

and they don't feel that they lack any crucial resources. Resources available for tasks not defined as priorities by the Ministry are limited. The financial support for the work with environmental tasks are predetermined, it means that the municipality don't have money they can use for self-initiated activities. A lack of human resources is also a reason why the municipality don't see its role as a policy actor clearer. This is connected with the level of knowledge. Environmental protection is new, the municipality don't have training or practise in environmental management. The ideas of ecological modernisation have developed since the 1960's, in Latvia this concept have been adopted the last years. It takes time to change the mentality and the practises, it is quite natural that we can't find the same language at the municipal level. It might also be that a case study at the Ministry level will show that the changes are mostly on the paper, and not a change in culture and the minds of all the employees.

Another element is the conception of the good environmental situation. This, combined with economic and social elements, makes it quite reasonable that the municipality as a policy actor is weak. There are so many other 'problems' to solve, and as a general policy actor the municipality has only been active for the last ten years. It is a new role to be a policy actor, and as a target group they have prior experiences.

The assessment of the environmental protection system in Latvian municipalities states that the current institutional system does not correspond to new tasks, the role of municipalities in implementing environmental protection is reflected in numerous national documents, strategies and plans, e.g. the NEPP. But the NEPP does not define clear roles and tasks for the municipalities. Research reveals that the municipalities didn't participate actively in the definition of their role, it was given from the Ministry level (Lagzdina,2000).

Currently, the political leadership, in a majority of Latvian municipalities, are not supportive of stable implementation of environmental policy (Lagzdina,2000). An important question is how to raise the political and societal capacity of the municipalities, and strengthen their role as policy actors.

In order to strengthen the role of the municipalities as policy actors, the aspects explaining the weak role of the municipality as policy actors need to be addressed. If the knowledge and financial resources remains at the same level, they can be seen as barriers for change. The Ministry and its subordinated units need to stimulate the municipalities, to develop

environmental policy. This is crucial for the establishment of a decentralised environmental protection system, based on 'modern' policy principles.

The main conclusion is that the environmental discourse, as expressed in the NEPP, does not correspond to the municipal reality. In order to decrease this gap, the level of knowledge and the human and financial resources must be increased. The focus of international aid and support also needs to be altered into an understanding of municipal capacity as crucial for the implementation of an environmental protection system based on 'modern' principles. After a period with mostly technical assistance, it is time to also focus improving the capacity of the municipalities as policy actors.

## Bibliography

- Broka, S. 2000. Oral information at Madona's Regional Environmental Board, Madona, Latvia
- Bruckner, SA 1995. *Beyond Soviet Studies: The New Institutional Alternative*, in Orlovsky, D (ed.) 1995. *Beyond Soviet Studies*, John Hopkins University Press, Baltimore, USA
- Campbell, J & Pedersen, O 1996. *Theories of Institutional Change in the Post-communist Context*. COS-report NR. 2/1996, Centre Public Organisation and Management, Copenhagen Business School.
- Christoff, P. 1996. *Ecological Modernisation, Ecological Modernities*. Environmental Politics Vol.5 No.3, Frank Cass, London
- Enroth, B. 1984. *Hur mäter man "vackert"? Grundbok i kvalitativ metod*. Natur och Kultur, Göteborg
- Ernsteins, R. 2000. Oral information at Institute for Environmental Science and Management Studies.
- Ernsteins, R & Kudrenickis, I. 1998. *Latvia: The Environmental Policy Plan, Resources, and Public Awareness*. in Aage, H (Ed) *Environmental Transition in Nordic and Baltic Countries*, Edward Elgar Publishing, UK
- Gilje, N. & Grimmen, H. 1993. *Samfunnsvitenskapens forutsetninger. Innføring i samfunnsvitenskapens vitenskapsfilosofi*. Universitetsforlaget, Oslo, Norway
- Hajer, M.A 1995. *The Politics of Environmental Discourse. Ecological Modernisation and the Policy Process*. Clarendon Press, Oxford, UK
- Hajer, M.A 1996, *Ecological Modernisation as Cultural Politics as Cultural Politics*, in Lash, S., Szerszynski, B & Wynne, B. *Risk, Environment & Modernity. Towards a New Ecology*. Sage Publications, London, UK
- Hammersley, M. & Atkinson, P. 1995. *Ethnography. Principles in practice*. 2. Edition. Routledge, London & New York
- Holme, I.M & Solvang, B.K 1991. *Metode valg og metode bruk*. 2. Utgave. TANO, Otta, Norway
- Holm-Hansen, J. 1999. *Actors and environmental policy instruments in an Latvian town*, EADI, Paris
- Jamison, A. 1999 (Red.). *Public Engagement and Science and Technology Policy Options (PESTO) Final Report*. Aalborg University, Aalborg, Denmark
- Jänicke, M & Jörgens, H. 1998. *National Environmental Policy Planning in OECD Countries: Preliminary Lessons form Cross-National Comparisons*. Environmental Politics Vol.7 No.2, Frank Cass, London

- Johnston, R.J, Gregory, D & Smith, D.M (Eds.)1994. *The dictionary of Human Geography*. Blackwell Publishers Ltd, UK&USA
- Klemmensen, B. 1996. *Research and Policy implementation in the Nordic-Baltic Region*, in Dietz, J., Klemmensen, B., Kragh, P. and Aasland, Aa. (eds.). 1996. *Baltic-Nordic Rendevous - The Politics of Environmental Cooperation*. Fafo report 204, Oslo, Norway
- Kolbergs, A. 1998. *The history of Riga - history of Riga old town*. Jana seta Publishers & printers Ltd, Riga, Latvia
- Lagzdina, E. 1999. *The assessment of environmental protection system in Latvian municipalities and ways of optimizing it..* REC, Latvia
- Leite, I. 2000. Oral information at Madona Udens, Madona, Latvia
- Madona REB, 1999. *Madonas reģionālā vides parvalde, publiskais gada Pārskats, Madonas REB, Years Review*, Madona Regional Environmental Board, Madona, Latvia
- MEPRD, 1995. *National Environmental Policy Plan for Latvia*. Ministry of Environmental Protection and Regional Development, Riga, Latvia
- MEPRD, Environmental protection department, 1998a. *Environmental Protection Policy in Latvia 1999*. Riga, Latvia
- MEPRD, Investment Department 1998b. *Environmental and sustainable development projects in Latvia*, Riga, Latvia
- MEPRD, 1998c. *The ministry of Environmental Protection and Regional Development – Overview*, Riga, Latvia
- MEPRD, Investment Department, 1998d. *Vides investīcijas Latvijā – Eiropas savienības programmas (Environmental investments in Latvia – EU programmes)*. Riga, Latvia
- Mikkelsen, E. 2000. Oral information in Madona, Latvia
- Pepper, D. 1999. *Ecological modernisation or the 'Ideal Model' of Sustainable Development? Questions Prompted at Europe's Periphery*. Environmental Politics Vol.8 No.4, Frank Cass, London
- Reitan, M. 1998. *Ecological Modernisation and 'Realpolitik': Ideas, Interests and Institutions*. Environmental Politics Vol.7 No.2, Frank Cass, London
- Rinkevicius, L. 2000. *Ecological Modernisation as Cultural Politics: Transformations of Civil Environmental Activism in Lithuania*. Environmental Politics Vol.9 No.1, Frank Cass, London
- Rostgaard, M. 1996. *OPLÆG TIL FATS SEMINAR, 23.10.96*. Mimemo
- Scott, W R 1995. *Institutions and Organisations*. SAGE Publications – USA

Seippel, Ø. 2000. *Modernitet, politikk og miljø*. Institutt For Samfunnsforskning (IFS) Sammendrag 2/2000, Oslo, Norway

EU, 1997. *Commission opinion on Latvia's application for membership of the European Union*, Bulletin of the European Union, supplement 10/97

UN, 1999. *Environmental Performance Reviews - Latvia*. Economic Commission for Europe, Committee on Environmental Policy. New York and Geneva.

Vilskerts, A. 2000. Oral information at Madona municipality, Madona, Latvia.

WWW.bank.lv, 22.09.2000

Aage, H. 1998. *International Assistance and European Integration*, in Aage, H (Ed) *Environmental Transition in Nordic and Baltic Countries*, Edward Elgar Publishing, UK



## **Appendix 1 - Informants**

### **Madonas Regional Environmental Board (REB)**

Interview and conversations with Sandra Broka working at in the department of Regional Service, division of Expertise and Cadastre. She has a degree in Geography, and a recent master in environmental science studies.

### **Municipality of Madona**

- \* Interview with Ēriks Vilks, he is the Executive Director of Madona municipality.
- \* Interview and conversation with Irīna Leite, she is the Project Secretary at the municipal enterprise 'Madona Udens'.
- \* Conversation with Guntis Sahno, he is Manager of waste water treatment plant of 'Madona Udens'.

### **Regional Council of Madona**

Interview with Austra Gailāte, head of Development Department.

### **Institute for Environmental Science and Management studies, University of Latvia**

conversation with Raimonds Ernste, he is the director.

### **Regional Environmental Centre for Central and Eastern Europe (REC)**

conversation with Erika Lagzdina, she is the director.

### **The ministry of Environmental Protection and Regional Development of the Republic of Latvia**

- \* Conversation with Normunds Broks, he is Deputy Director of Regional Development Department.
- \* Conversation with Diana Kronberga, she is project coordinator in State Project Agency for the National Programme "500+".
- \* Conversation with Beata Trusele, she is project coordinator for in State Project Agency for National Programme "800+".
- \* Conversation with Gatis Pavils, he is Local Project Manager for the Danish Environmental Protection Agency.

### **Viborg municipality, Denmark**

Conversation with Eilif Mikkelsen, he is the manager of the Department of Waste Water Treatment.

## **Appendix two - Interview guides for Madona REB and the municipality of Madona**

### **Interview guide for Madona Regional Environmental Board**

#### ***History***

1. Can you give a short outline of the history of Madona Environmental Board?
  - When where you established?
  - How where you established?
  - Who where requited to work at the board?
  - How where the organisational structure decided?
  - Did former institutions like the committees have an impact/influence on the creation/  
organisation of the Board?

#### ***Activities***

1. What are your main tasks?
2. Where are your tasks defined?
  - Other documents than “The statutes of the Regional Environmental Departments”?
3. Do you find your tasks clearly specified?
4. Do you feel a need to make priorities?
  - If yes:
5. How are your possibilities for making priorities?
6. Are there things you would like to focus on, but you don't have the possibilities?
7. What are the most important issues you are working on for the moment?
8. What do you see as the most important case last year?
9. What do you find the most important environmental question in your region?
  - What part of the environment is according to you most important to focus on?
10. What do you mean by environment?
11. What do you mean by nature – how is the organisations view on nature – what is nature for the organisation?

#### ***Organisation***

1. Are you still organised like shown on the organisational structure?
2. Is the organisational structure different from when you where a committee?

- How?
- 3. Have the organisational structure changed after the Board where established?
  - Why?
- 4. Do the different sections co-operate with each other?
  - If yes:
    - 5. Are there any routines and frequency in the co-operation.
    - 6. What kinds of information are exchanged?
- 7. Do you think you have enough resources in order to fulfil your tasks?
  - Employees?
  - Finances?
- 8. How will you characterise your organisation, do you find it flexible or not?
- 9. Can you give an example on a success in relation to your work?
- 10. Which part of the organisation was responsible for this?

### ***Qualification and personnel***

1. How many employees do you have?
2. What kind of education and qualifications do they have?
3. How is it to recruit new employees?
  - Do you find people with the education and qualifications you need.

### ***Innovative activities***

1. How do you find your possibilities to acquire new knowledge?
2. Where do you search for knowledge?
  - What do you do in order to acquire new knowledge?
3. Is there a need for new knowledge?
  - If yes:
    - 4. What kind of knowledge do you need?
5. Do you feel there is a need to change any routines or practices in the organisation?
6. How are your possibilities for making changes?
  - Do you have independence to make changes?
  - Do you have any example on recent changes in the organisation?

### ***Networks / partner / collaboration***

1. With who do you co-operate within the system of the Ministry of Environmental Protection and Regional Development (MEPRD)?
  - Other Regional Boards?
  - Other environmental protection institutions?
  - Departments of the Ministry?
2. On the relationship between you and the ones you cooperate with:
  3. How will you describe the relationship between you and the ones you collaborate with
    - good or not so good?
  4. Are there any routines and frequency in the co-operation?
  5. What kinds of information are exchanged?
6. Do you collaborate with the Regional authorities – the district governments?  
If yes:
  7. What are the focus of your collaboration?
8. How many municipalities are there in your Region?
9. What are the most common issues in relation to the municipalities?
  - Can you give an example on an issue where you frequently are in touch with municipalities?
10. Is it easy or difficult to co-operate with the municipalities?
11. What do you see as the most important challenge for the municipalities in relation to environment?
12. Do you have any partners outside the governmental system?  
If yes:
  13. Who are they, and what are the reason you are partners?
  14. Are the co-operation good?

### ***The last question:***

1. Have you after the changes in your organisation, the general changes in Latvia (independence) changed your view on nature and environmental management?  
If yes:
  2. How do you think it has changed?
  3. Why do you think it has changed?

## **History**

1. can you give a short outline of the history of local self-government in Madona?
  - How was local government organised prior to independence
  - How where the organisation of today established?
  - Did you recruit many new employees, or did the former employees work in the municipality also before independence?
  - What are the greatest changes from before?

## ***Activities in general***

1. What are your main tasks as a local self-government?
2. Where are your tasks defined? (Law on local self government 1994)
3. Have you implemented all your tasks?
4. What are the most important issue for you right now?
5. How do you find your possibilities to make priorities between tasks?
6. Are there things you would like to focus on, but you don't feel you have the possibilities?

## ***Activities related to environment***

1. Do you in Madona have your own environmental officer?
  - If yes:
    - What is his/her tasks?
2. What are the departments involved in activities directly important for the environment?
3. What are the most important environmental issue / task in Madona?
4. Which municipal enterprises in Madona are working with environmental related tasks?
5. How are the tariffs for municipal services like waste water treatment, heating and waste collection decided?
6. What are your possibilities to act if you want to change some of your work in relation to environment?

## ***Organisation***

1. How are you organised?
  - How many departments?
  - Who work with environment?

2. Have your organisational structure changed after the independence of Latvia?
  - Committees
  - Tasks
3. Do the different sections co-operate with each other in order to take care of environmental related tasks?  
If yes:
  - Are there any routines and frequency in the co-operation?
  - What kind of information is exchanged?
  - What are they doing?
4. Do you think you have enough resources in order to fulfil your tasks in relation to environment?
  - Employees?
  - Finances?
5. Where do you get your financial resources for environmental work, do you get any money from the Environmental Fund?
6. How will you characterise your organisation, do you find it flexible or not?

### ***Qualifications and personnel***

1. How many employees do you have?
2. Approx. how many of them have jobs related to environmental issues
3. What are the qualification of the employees working with environmental issues?
  - Natural science
  - Economy
  - Social science
4. How is it to recruit new employees?
  - Do you find people with the education and the skills you need?

### ***Innovative activities***

1. How do you find your possibilities to acquire new knowledge, in general?
2. How do find your possibilities to acquire new knowledge related to environmental tasks?
3. Where do you search for new knowledge in relation to environmental tasks?
  - What do you do in order to acquire new knowledge?
4. Is there a need for new knowledge in relation to environmental tasks?  
If yes:

5. What kind of knowledge do you need?
6. Do you feel there is a need to change any routines or practices in the organisation in relation to environment?

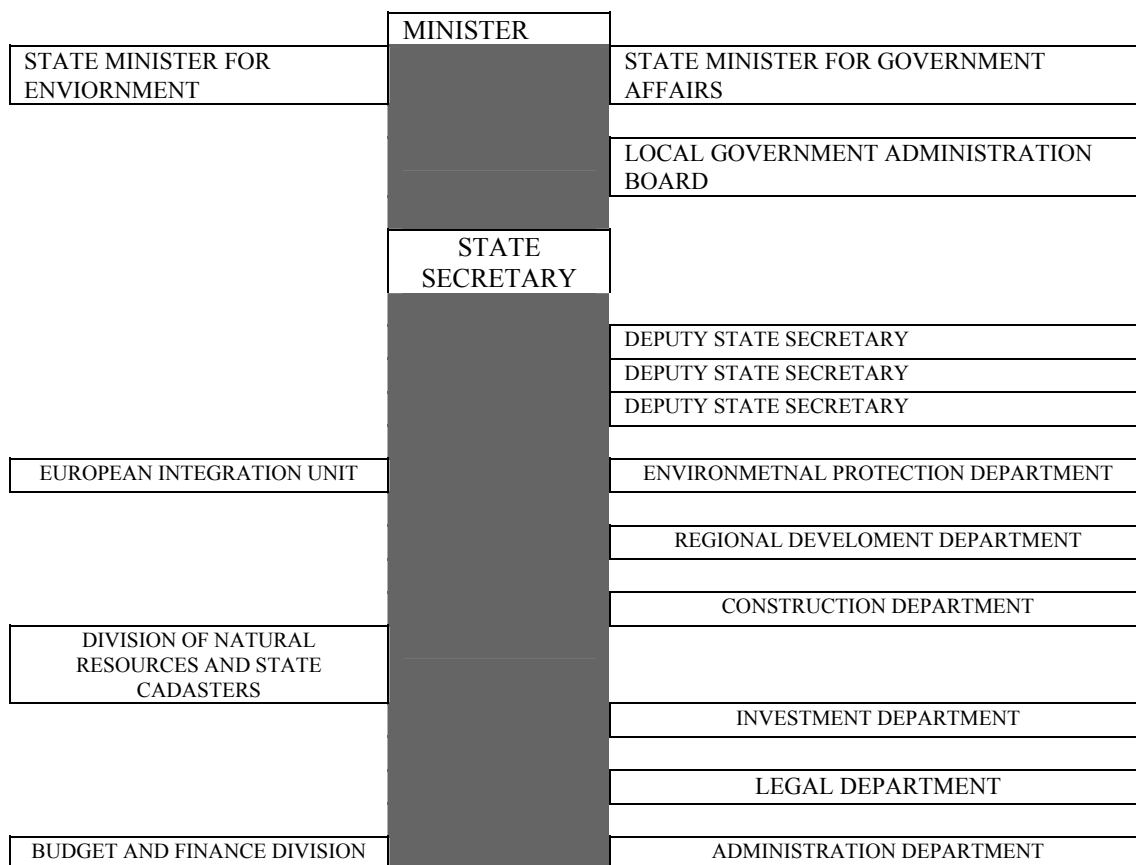
### ***Networks/ partners / co-operation***

1. Do you co-operate with national authorities when it comes to environment?  
If yes:
  2. On which issues do you co-operate?
3. Do you co-operate with district government in relation to environmental tasks?  
If yes:
  4. On which issues do you co-operate?
5. Do you co-operate with other municipalities in Latvia?  
If yes:
  6. With who do you co-operate?
  7. On which issues do you co-operate?
  8. Are there any routines and frequency in the co-operation?
9. Do you have other foreign partners than Viborg?  
If yes:
  10. Who are they?
  11. What are the focus of the co-operation?
12. What is the most important "thing" / assets you gained from the relations with the foreign (western) partners?
  - Finances
  - Technical know-how
  - More widely international perspective
13. What would you like to change / what to do different if you were having co-operation with other foreign partners? (Hva de ville gjort annerledes)

### ***The last question***

1. Have you after the changes in the municipality and the more general changes in Latvia (independence) changed your view on nature and environmental management?  
If yes:
  2. How do you think it has changed and why?

### Appendix three - Organisational chart - MEPRD system





**Subordinated units:**

<b>MEPRD*</b>		
ENVIRONMENTAL STATE INSPECTORATE		ENVIRONMENTAL STATE IMPACT ASSESSMENT BOARD
ENVIRONMENTAL CONSULTING AND MONITORING CENTRE		LATVIAN ENVIRONMENTAL PROTECTION BOARD
LATVIAN HYDROMETEROLOGICAL AGENCY		LOCAL GOVERNMENT ADMINISTRATION BOARD
LATVIAN TOURISM BOARD		LATVIAN ENVIRONMENTAL PROTECTION FUND
STATE CONSTRUCTION INSPECTORATE		MARINE ENVIRONMENTAL BOARD
<b>REGIONAL ENVIRONMENTAL BOARDS</b>		LIVOD RANDA
LATVIAN GEOLOGICAL SERVICE		STATE ENTERPRISE RADONS
KEMERI NATIONAL PARK		STATE ENTERPRISE VIDES PROJEKTI
		LATVIAN ENVIRONMENTAL INVESTMENT FUND
SILTERE STATE RESERVE		SKRUNDAS FUND
NOTRH VIDZEME BIOSPHERE RESERVE		TEICI STATE RESERVE

\* Ministry of Environmental Protection and Regional Development

## **Appendix four - Map of Regional Environmental Boards**

## **Appendix five - The Main Legislation referring to environmental protection**

### **Before 1991**

- Water Code (28.12.1972)
- Law on the Protection of Air Atmosphere (04.12.1981)
- Law on the Use and Protection of Animals (04.12.1981)
- Council of Ministers Regulations on Particularly Protected Nature Objects in the Territory of LSSR (10.04.1987)

### **After independence**

#### **1991-1995**

- Law on Environmental Protection (06.08.1991)
- Law on Specially Protected Nature Areas (16.03.1993)
- Law on Hazardous Waste (30.03.1993)
- Law on Radiation Protection and Nuclear Safety (01.12.1994)
- Law on Fishing (12.04.1995)
- Law on Hunting (01.06.1995)
- Regulations of the Cabinet of Ministers on Hunting (08.08.1995)
- The Law on Natural Resources Tax (14.09.1995)

#### **1996-1998**

- Regulations of the Cabinet of Ministers on the Procedure of Lease of Water bodies and Commercial Fishing Rights and the Use of Fishing Rights (16.01.1996)
- Law on Subsoil (02.05.1996)
- Regulations of the Cabinet of Ministers on the Order of Preparing Documents for Activities with Hazardous Waste (17.06.1996)
- Regulations of the Cabinet of Ministers on Licensing and Permitting Actions with Radioactive Substances and Other Sources of ionising Radiation (20.06.1996)
- Regulations of the Cabinet of Ministers on the Order of Adoption of the Norms of Nature Resource Tax (20.06.1996)
- Law on Shelter / Protected Belts (05.02.1997)
- Regulations of the Cabinet of Ministers on Water Use Permits (22.04.1997)
- Law on Kemer National Park (12.06.1997)
- Regulations of the Cabinet of Ministers on the Fishing (25.06.1997)
- Regulations of the Cabinet of Ministers on Subsoil Use (08.07.1997)
- Regulations of the Cabinet of Ministers on the Procedure of the Use of Minerals, Deposits and Subsoil Areas of State Importance (08.07.1997)
- Regulations of the Cabinet of Ministers on Protection Against Harmful influence of ionising Radiance (12.08.1997)
- Regulations of the Cabinet of Ministers on General Protection and Use of Specially Protected Nature Territories (19.08.1997)
- Regulations of the Cabinet of Ministers on the Ozone Layer Protection (09.12.1997)
- Law on Reserve of Ziemeļvidzemes Biosphere (11.12.1997)
- Regulations of the Cabinet of Ministers on the State Environmental Monitoring (16.12.1997)
- Law on Chemical Substances and Chemical Products (01.04.1998)
- Regulations of the Cabinet of Ministers on the Establishment of Hygienic Requirements in Bathing Areas (11.08.1998)
- Law on environmental Impact Assessment (31.08.1998)

**Appendix six - Map of Latvia(Administrative units and main cities).**

