



ESST MA

The influential power of ENGOs: The case of Bellona and the CCS debate in
Norway

Mariya Simon
2011

23 674

Acknowledgments

I would like to express my gratitude to the people, who made this project possible. Firstly, I would like to thank my supervisors Mads Dahl Gjeften and Göran Sundqvist, without whom this paper would never see the daylight. Mads thank you for your “tough love” and detailed comments, which were invaluable; Göran thank you for making me believe that master thesis was a feasible task.

I thank everyone at the TIK centre, but three people in particular. Jane Summerton for optimism and for believing in me; Tina for telling me “its going to be fine” every time I met her; and Hege for being at the right place at the right time.

I am especially grateful for all the help and information I got from my informants at Bellona, and Bellona’s former employees who agreed to interviews; all these interviews has made this thesis.

I also thank Irene, Sara and Lene, fellow ESST students, who made me feel like I am not alone in this difficult process; lunches, forced walks around the campus and wild dancing in the reading hall helped a lot. My friend Monika Salmivalli also deserves thanks for being happy on my behalf every time I made a slightest progress.

Last but definitely not least, I want to express deep gratitude to my dearests, my mother and Lars. I thank my mom for therapeutic walks in the forest and always being there when I needed her; and I thank Lars for believing in me even more than I did myself, always listening and just being who he is. I could never make it without you two!

Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it's the only thing that ever has.

Margaret Mead

Abstract

There are significant gaps in previous research on the influence of ENGOs in Norway. My case of ENGO Bellona and its power and influence in the debate on the carbon capture and storage (CCS) technology for gas-fired power plants (GPPs) shows that a closer look at particular cases regarding the ENGOs influential strength is needed.

The literature rooted in the field of political science, the two publications from “Power and democracy” report, did not draw a comprehensive picture of how an ENGO Bellona could become so powerful, that it was given a role of *policy entrepreneur* several times in the political CCS debate by Tjernshaugen (2010). Thus I attempted to illuminate the ways in which Bellona could have gained its power and influence.

As a theoretical foundation, I chose a framework from the interdisciplinary field of STS, called “an idiom of co-production” by Sheila Jasanoff. Its perspective on how knowledge-making and policy-making are co-dependant helped me to identify unofficial and untraditional ways of influencing one hybridised decision-making like CCS. Such undermined ways of gaining the power as use of rhetoric, following special values and structure, use of unofficial channels of power, were central for explaining Bellona`s role in the CCS debate.

I also used a critique of another STS contribution by Collins and Evans (2002; 2007), which was provided by Jasanoff (2003) and Wynne (2003), in order to argue that although Bellona is not an expert in a traditional way, the organisation does produce valuable knowledge and expertise, which is frequently used by different actor. In that way I could present a different perspective on the role of experts and expertise in decision-making processes that could enrich the traditional classifications of expertise presented in the one of the publications from the “Power and democracy” report.

There were two aims with this thesis, one theoretical and one practical. On the theoretical level my findings could contribute to reconsider the traditional networks and structure of power and its executers. On the practical level, there is a need to be aware of the complexity of such hybridised decision-making, and a need for including more untraditional actors and expert for better understanding of these processes.

Table of Contents

Abstract	V
1.0 Introduction	1
1.1 <i>Why choose the case of CCS technology?</i>	6
1.2 <i>The Bellona Foundation</i>	9
1.3 <i>What do I want to achieve?</i>	11
2.0 Methodology	14
2.1 <i>The data collection</i>	14
2.1.1 Interviews.....	15
2.1.2 Other interpretations of the CCS case.....	17
2.2 <i>Limitations</i>	19
3.0 Power and democracy report.....	20
3.1 <i>The summary publication</i>	22
3.1.1 Observations.....	24
3.2 <i>The publication about ENGOs in Norway</i>	25
3.2.1 Observations.....	28
3.3 <i>How can these descriptions be enriched?</i>	29
4.0 Theoretical part.....	30
4.1 <i>The idiom of co-production</i>	31
4.1.1 The role of experts in co-production	32
4.2 <i>Collins and Evans and their critics</i>	33
4.3 <i>Contribution to the case</i>	36
5.0 Four-step analysis	39
5.1 <i>Gas-fired power: a long-time political dilemma in Norway</i>	39
5.2 <i>Policy window I (1995-1999): Gas-fired power controversy</i>	42
5.3 <i>Policy window II (2000): Parliamentary crises over gas-fired controversy</i>	48
5.4 <i>Policy window III (2005): Establishment of centre-left coalition Government</i>	53
5.5 <i>The dispute on amine technology in the cleaning procedure of the CCS (2011)</i>	58

6.0 Discussion	64
6.1 <i>Bellona's values and structure</i>	65
6.2 <i>Bellona's rhetoric</i>	67
6.3 <i>Is Bellona an expert?</i>	68
6.4 <i>Some unmentioned channels of influence</i>	69
6.5 <i>Answering the research question</i>	71
6.6 <i>The contribution of this study</i>	74
7.0 Conclusion.....	75
Bibliography	77
Academic sources	77
Interview sources	79
Internet and media sources	79
Appendix 1: Interview guide	82

1.0 Introduction

In 2005 during the press conference about making of the red-green coalition, the leaders of the three co-operating parties presented the important cases the coalition planned to implement while governing in Norway. One of the most important cases has been the controversial issue in Norwegian politics for many years, the issue of power plants fired with natural gas. Finally, after many years of struggling to achieve a compromise, the parties in the coalition found a solution they had agreed on, a pioneering technology called Carbon Capture and Storage (CCS). CCS technology has been supposed to be built as a part of a power plant with a purpose of cleaning the natural gas of carbon dioxide (CO₂) and injecting the extracted CO₂ into the ground under the surface of the sea (Tjernshaugen and Langhelle 2009, 116-118),(NRK 2005).

While presenting CCS as one of the important commitments in the future governing period, the Prime Minister Jens Stoltenberg pointed to one man in the crowd and told the press that the implementation of CCS was basically “his fault” (Sæther 2011,I). The man's name was Fredric Hauge and he was a leader of an environmental non-governmental organisation (ENGO) in Norway, the Bellona Foundation “that had played a key role in introducing CCS to that controversy as a potential compromise.” (Tjernshaugen and Langhelle 2009, 107).

The honest concession from the Prime Minister to the media crowd describes the essential influence Bellona has exercised during the pre-governmental negotiations. At the same time, the findings of one of the most important researchers in the history of the CCS technology in Norway, Andreas Tjernshaugen, proved what an important role the organisation has played by putting the CCS debate on the map in Norwegian politics. These two observations, combined with frequent media articles regarding the same

issue, woke my interest in Bellona's role in Norwegian political life in general and in the CCS debate specifically. At the same time I asked myself; what do we know about influential strength and political power of ENGOs in Norway?

I realised that the issue of one ENGO's influential strength and power is not something frequently discussed in the academic literature in Norway. Filled with curiosity, I decided on looking up that particular topic in the most comprehensive and acknowledged series of academic reports in Norway on the notion of power, called the "Power and democracy" report from 2003. By narrowing down the publications to the two most relevant books on the matter of ENGOs and their influential strength, I went through them in order to extract the most important argument of the authors and use them in order to understand the role Bellona has played in the whole political debate on CCS technology. Both of the publications mention the Bellona Foundation and both of them concentrate on rather the organisational structure and institutionalised connections to the government; the publications use basically the traditional approach from political science and try to illuminate the power within the official and stable political and societal institutions.

My choice of the "Power and democracy" report had a second reason though; my background in political science has played an important role in that choice. However I have specialised myself in a different interdisciplinary discipline on the master level; during my master degree I have been provided with the theoretical and analytical tools from the field of Science and Technology studies (STS), which is known for its interdisciplinary and versatile approach in explaining the complex controversies, involving science, technology, and expertise notions. Thus, I had some assumptions that the "Power and democracy" report, dominated by the perspectives of political science, would not supply me with all the needed equipment for comprehensive analyses of the

role Bellona has taken in the political decision-making and debates regarding the case of CCS. The publications from the “Power and democracy” report have gone further into the power research than political science publications, researching on the power structure within distinct societal fields, NGOs and ENGOS among them.

This notwithstanding, my observations from the two publications did not give me a proper explanation on the power structure of such a complex political debate like CCS and the role of Bellona in that debate. The publications provided me rather with the set of institutionalized connections and practises between ENGOS and political institutions, instead of the analysis of a complex political case like CCS and the role of ENGOS in such cases. However my data sources, interpretations of Norwegian CCS debates by Tjernshaugen and Langhelle (2009) and Tjernshaugen (2010) and the six interviews with present and former members of Bellona staff, supplied me with the examples of other ways of gaining the power and influence that have not been mentioned in the publications from “Power and democracy” report.

Therefore I compose my research question in the following way:

In which ways have Bellona influenced the case of the CCS technology in Norway?

With this research question I am required to research several ways Bellona used for gaining the influence and for executing their power, both official and unofficial. By summarising these ways of influence and power, and reflecting upon how Bellona has shaped the whole CCS political debate, I wish to point out the importance of so-called untraditional and unofficial ways of gaining the power. The combination of all distinct

ways will supposedly draw a more comprehensive and clear picture of the role Bellona has taken in the CCS debate.

I need however a concrete analytical approach, which will help me to emphasise the importance of mapping these ways of influence in such cases, but also show why there is a need for acknowledging which influence and power one ENGO like Bellona can have. Consequently, I chose two sets of theoretical approach from the field of STS for this case study. One called “the idiom of co-production” by Sheila Jasanoff. The other approach is the review of reflections upon the role of experts in the decision-making processes, provided by Collins and Evans (2002; 2007). These reflections have been criticised by the author of co-production Jasanoff and another STSer Wynne; I will use these critical arguments to build the discussion between the field of STS and the two publications from the “Power and democracy” report.

Through the use of the idiom of co-production, I wish to emphasise that Bellona represents a significant knowledge producer, which has helped to shape the politics the same way as the political and industrial actors have in the case of CCS technology. This framework will help me to look at the CCS debate as a hybridised decision-making process, where the process of knowledge-making, like science and expertise, is interwoven with the process of politics and policy-making; that is basically what co-production represents. In this way I will be able to look at Bellona as an equally important actor in the CCS debate as the political and industrial actors involved, which is not the case if I use the two publications of the “Power and democracy” report. Through the use of the second approach on the expert role in the decision-making processes, I wish to illuminate that Bellona can be identified as a valuable expert, even though it has not been explicitly argued by the publications from the “Power and democracy” report.

The last aspect brings me directly to the discussion of what I wish to achieve with this case study; that can be presented in two dimensions, one theoretical, and one practical.

In essence I wish to build the bridge between the political science and the field of STS on the theoretical level. By pointing out that Bellona has had an essential role in such political and technological dispute as the case of CCS, I want to bring the attention of the political science on how actually valuable different, presumably insignificant, actors and networks are in the shaping of politics. On the other hand, I want to raise the debate on the categorisation of the experts in the politics of Norway and if it should be reconsidered. In my particular case, the politicians, industrial and scientific actors, have frequently used the publications and advice from Bellona. The organisation has however not been explicitly identified as an expert. That could be argued with by usage of the STS contributions, which I will proceed to in the theoretical part of the thesis.

On a practical dimension, I wish to get the attention of those politicians and other actors, which have used Bellona's work in the debates and decisions. First of all, as one can see in my case, the organisation has had a fair share of influence in the case of CCS, and therefore should have been acknowledged officially as an important actor. This however is not the case; it is rather the opposite, because as my informants confirm, Bellona's words and work are often not credited within the official institutions. However some politicians, like the example of Stoltenberg in the beginning of this thesis, have referred to Bellona as an important contributor in the CCS debate; maybe it is time to institutionalise the organisation as the part of Norwegian political sphere? By that I want to open a debate about whether the contributions from the similar organisations should be somehow institutionalised within the Norwegian political system in some kind of platform or forum.

Secondly, if it is the case that the organisation is an actual influential actor, taking part in the policy-making, public and all the politicians should be aware of it. Should the decision have the unfortunate outcomes, it should be crystal-clear who is standing behind the decision-making. The history shows that many poor decisions have been made regarding technology and science, many times those that were responsible did not experience any consequences. Many agree that in our modern world with fluent changes in the technological and scientific spheres, the clear patterns of responsibility should be drawn in order to avoid the same types of mistakes. At the same time, the ENGOs often represent the only clear voice pro the environment, and their participation is significant within the international negotiation regarding the climate, although they usually have less practical power compared to the leading industries of the world and the country leaders. One might consider to integrate the ENGOs into such negotiations in order to outbalance the other actors and networks; admitting their contribution and competence might be the first step to that integration.

In the following parts of the introduction, I will expand my reasons for choosing the case of CCS, before I move on to the next chapter. I will also present the content of the case in discussing the history of Bellona and its connection to the CCS debate. The thorough reflections in the end of the introduction will present arguments to the reader about the relevance of the chosen case study and build further interest before the discussion of empirical findings.

1.1 Why choose the case of CCS technology?

I was interested in the CCS technology and its implementation in Norway since the New Year's speech by the Prime Minister Jens Stoltenberg in 2007, in which he mentioned the

development of the CCS solution for the future of gas-fired power plants (GPPs) and referred to it as a Norwegian “moon landing” (Tjernshaugen 2007, 194).

The CCS, which means carbon capture and storage, is a combined solution for extracting the CO₂ gases from the other gases, in the Norwegian case during the production of energy on GPPs. The same solution is considered for other industries such as oil, coal, and cement industries, and bio energy production. After extracting CO₂, it is supposed to be transported, by pipes or ships, to the places where it should be stored in the previously natural oil and gas reservoirs in the sea (Tjernshaugen 2010; Solomon 2007). Basically the main point of the technology is to capture the gases and store them for many hundreds of years, instead of releasing them into the atmosphere, where the gases influence the environment. This method is supposed to help the countries of the world to reach the environmental goals and stop the rapid climate change.

After reading more about CCS, I started to realise how it represents two usually conflicting solutions for the future; on one side it is a solution for reducing CO₂ emissions, which helps to achieve the sustainability, but on the other, the technology prolongs the life of different industries, fossil fuel industry included. Needless to say there is enough critique of this solution; especially within the traditional environmental movements, the solutions have been looked at as the contributor to “carbon lock-in”, given the prolonging of lifetime of such industries as oil, gas, and coal (Tjernshaugen 2010, 13). Even though I will not concentrate on disputing the conflicting issues with CCS, according to Tjernshaugen (2010) and Tjernshaugen and Langhelle (2009) the case of CCS in Norway stands out from the other countries exactly because of the content of this dispute.

By researching the influential factors, which have resulted in the strong CCS support in Norway, Tjernshaugen (2010) has differentiated the Norwegian case from

the cases in the other countries where the CCS technology has also been considered. Norway stood out because of the early and strong conflict between the energy and climate policy; this conflict has given space for the promotion of the compromise solution like CCS (Tjernshaugen 2010, II: 25).

Consequently, due to the lack of scepticism from the ENGOs¹, but rather support of the CCS by the environmental movements like Bellona, and afterwards Zero and Naturvernforbundet, there has been a strong political will for building the CCS in Norway (ibid, II: 25). Tjernshaugen (2010) continues:

Another factor that shaped the policy process in Norway was the presence from a relatively early stage of what I will call “clean fossil fuels activists” as a distinct branch of the environmental movement. Bellona pioneered this brand of environmentalism, and learned how to effectively exploit the recurring policy windows (Tjernshaugen 2010, 24).

Tjernshaugen has given Bellona much credit for promoting the CCS and shaping the political debate on this technological solution. His work on researching the role of CCS in Norwegian politics is one of the few, and the most important researches made on this issue. Therefore I will follow his research in my paper and present four particular time-periods in which the CCS debate has strongly been shaped by Bellona’s influence. Tjernshaugen presents three of these time-periods as policy windows, where Bellona has played a role of policy entrepreneur, in other words the organisation that has strongly and effectively promoted the CCS policy (Tjernshaugen 2010, II: 22). The fourth

¹ Especially the weak position of the strong sceptic among ENGOs, Greenpeace, has played a contributing role in the almost absence of criticism for the CCS solution in Norway (Tjernshaugen 2010, 25)

time-period, presented of my own initiative, will mention the recent events regarding the technology installation at one of the GPPs, which again have been postponed, and where Bellona has acted actively. But first I want to give a proper presentation of the Bellona Foundation and complete my motivation for this case.

1.2 The Bellona Foundation

Bellona was founded in 1986, right after the Chernobyl accident, by earlier members of the ENGO called "Nature and Youth", Fredric Hauge and Rune Haaland (Bellona 2011,I). The aim of the founders was to create "a "flexible", "solution oriented" and "scientifically based" (organisation) without the "ideological pretensions" of other environmental organisations" (Ihlen 2004, 243). The organisation does not have a democratic structure as the traditional ENGOS in Norway do. From the very beginning it was important for the founders not to adapt the bureaucratic and heavy organisational style, but rather operate as a flexible and independent actor within the environmental movements (Bortne, Selle, and Strømsnes 2002, 37-45).

The organisation is also the first one to use the phrase like "environmental crime" and similar; by using strong rhetoric while speaking of the environment, the organisation has criticised various industrial actors as well as political parties. This sharp style of dialogue and good connection to the media are the tools, which made Bellona famous and successful in Norway (Ihlen 2004, 243), (Bellona 2011,I).

All these factors put Bellona on the map in the Norwegian environmental debates at first, and political debates afterwards. Although some qualities of the organisation are particularly interesting for my field of studies; as Tjernshaugen describes "Bellona has embraced a pragmatic, technological-optimist brand of environmentalism..." (Tjernshaugen and Langhelle 2009, 108). The belief that the technology can solve most

of the environmental problems has resulted in Bellona's long-term support of the CCS technology and makes it a particularly interesting case for STS studies.

I would like to justify the choice of my case by summarising into the three most important points:

- I. Scholars like Tjernshaugen (2010) and Tjernshaugen and Langhelle (2009) identify Bellona as an important policy entrepreneur in the CCS debate. In his PhD dissertation, Tjernshaugen even mentions a need for further research in the role Bellona has played in the shaping of policies and political debates on the CCS case in Norway (Tjernshaugen 2010, 50).
- II. The two publications from the "Power and democracy" report, which I have selected, use mainly traditional tools from political science discipline in order to explain the power of ENGOS like Bellona. I will try to present an alternative framework, which can presumably explain more about the influence Bellona has exercised in the CCS case.
- III. It is important to illustrate the evidence of Bellona's influence on the CCS case in order to understand the complexity of the modern political decision-making process and policy outcomes, as well as the role of ENGOS in the shaping of those processes. As I will illuminate in the theoretical part of this thesis, there is a need for the alternative comprehension of the links between technology, science, expertise, and society, which the traditional disciplines can't always provide.

1.3 What do I want to achieve?

The aim of this thesis is to show that people and institutions with a legal authority of making political decisions are not necessarily the only ones who influence and shape the actual decision. Phenomena like power and politics are complex, the institutions and interests involved in every political process, represent actors and networks, which shape and frame the processes of a decision-making. Until some point the field of political science recognises the involvement of other actors into political debates; however most of the recognised ways and channels of involvement are just the ones, which are provided by the democratic order, like consultative statements, lobbying and similar.

There are many other ways of gaining power and influence that exist in modern societies like Norway, both official and unofficial. By providing political institutions with expertise, knowledge, science and different opinions, the non-governmental actors play an important role as the governmental political actors, but that fact is often undermined or forgotten (Wynne 2003; Jasanoff 2004; Asdal 2011).

There are two important reasons from the STS point of view to reconsider the role of those, sometimes invisible, actors in the decision-making processes. The first one tells us that by admitting the influence of experts, scientists, and organisations, and including them fully into political debates, some politicians might get a more complete picture of the issue, before taking an important decision with limited accessible information (Collins and Pinch 1998; Callon, Lascoumes, and Barthe 2009). The other reason is the importance of being aware of the strength different actors and opinions represent; politicians shouldn't take every expertise or scientific report for granted without questioning the outcome or the end result. To be symmetrical in the assessment of different expert results and truths of science are central values of STS,

mostly because of the argument that the science or knowledge may not be taken for granted, but rather thoroughly assessed and compared to the alternatives (Ashmore 1996).

The use of a similar methodology, where the factors of influence are fully understood and assessed, can also provide politicians with more comprehensive picture and a bigger list of possible outcomes. Thus the admitting of possible actors with the power of influence, like experts, scientists, different companies and organisations will help the decision-makers to realise the complexity of the modern issues regarding technology and science.

There is however another aim with this paper, the theoretical one. By illuminating how unbalanced the view on the decision-making processes regarding technology and science can be shown in the publications rooted in the field of political science, I want to emphasise the benefits of using the STS perspectives in such cases. Its interdisciplinary approach to complex cases like environmental politics, help to identify the important actors and networks, which also contribute to the shaping of the policies, debates, and negotiations, but are being undermined by the traditional disciplines. In the international negotiations on the environmental issues, the science, expertise, and strong opinions often influence the politics. Especially in such complex cases, there is a need for including all kind of expertise in the process of negotiations about the choices of future policies, which the countries of the world should adapt in order to fulfil the global environmental aims.

I will later in the paper continue an extensive discussion of the “Power and democracy” report’s two publications. Then I will present an alternative theoretical framework of co-production by Sheila Jasanoff, as well as different STS scholars’ view at the notion of expertise; these can help me to explain Bellona’s role and influence in the

CCS debate more comprehensively than in the publications from the “Power and democracy” report. But first I will discuss the various implications of my research methods in the next part of the thesis.

2.0 Methodology

I want to use this chapter for explaining how I identified the required data and how I collected it. I will also speak of the limitations, which can be present in my research.

First of all, I want to explain my choice of research method; I chose qualitative case study research because of its relevance and frequent usage in social science. “The distinctive need for case studies arises out of the desire to understand complex social phenomena” (Yin 2009, 4). In order to study different events in our modern society with growing uncertainty and versatile challenges, one needs often to apply the case study research to “understand a real-life phenomenon in depth” (Yin 2009, 18). I need to study my research questions in depth due to my ambitions to present an alternative understanding of the role of Bellona, compared to the picture drawn in the “Power and democracy” report. I also studied a contemporarily real-life event, with two qualitative data sources, interviews and documents. At last I will try to answer my research questions in order to bring the attention to the complexity of the environmental issues in modern Norwegian society, where the actors like Bellona seem to have an important role in shaping of the social phenomena as power and politics.

2.1 The data collection

From the beginning of my preparation for the research I knew I would use multiple data sources in order to present the most complete picture of the case. It is also common for a case study research to proceed with the multiple sources of data (Punch 2009, 145).

Yin (2009) speaks of six sources of evidence one can turn to for making the case study research; I used two of these sources, the interviews, and another interpretation of the case, which is somehow connected to mine.

2.1.1 Interviews

After agreeing with my supervisors on the case, I started to prepare the interview guide. From the beginning of the preparation I deliberately chose the type of *focused or semi-structured interviews* for my research; I chose *the in-depth interview* style in particular (Punch 2009, 169). This style of interviews gives the researcher the possibility to find out more information than a single survey; by getting more insights into the case, one can construct a more comprehensive picture of an event or case by using the ability of listening rather than talking (Yin 2009, 107). I realised early that my kind of research requires more open questions; I was also aware of the need to make clear enough questions, but at the same time not to close the access to additional information by making the questions too narrow. The semi-structured interview guide provided me with the conditions for the conversation during the interviews, instead of a strict guidance.

My previous experience with the interview method from one of the courses during the master programme has taught me to be more flexible and to reflect upon the questions after each interview, as well as to somehow adapt the questions to the person I am interviewing. First, I researched on Bellona's homepage on the people, who had worked with the CCS; I used the list of employees, as well as I researched the authors of the publications about the CCS. In the end I made a list of around 10 people. It was suggested I call the chief of PR and information at Bellona, Anne Karin Sæther, and ask her whether I have the right list of informants. She was very helpful and impressed me with her knowledge of my case, which resulted in me interviewing her on the topic later.

Her insights were decisive for my case, mainly because she recommended getting in touch with two former colleagues significant for the case. One of them, a former vice-CEO of the organisation Marius Holm, another is a scientist, specializing the CCS

technology, Aage Stangeland, who had provided Bellona with many scientific reports on CCS and its installation at gas-fired power plants. The “snowball method” has worked in my case and I got two valuable sources by asking the chief of PR.

The fourth, the fifth, and the sixth informants, all working currently for Bellona, are: an adviser on the energy and climate Gøril Tjetland, the leader of the CCS department at Bellona Erlend Fjøsna and the juridical adviser on CCS and co-writer of some reports, Laetitia Birkeland. After recommendations from my supervisors I have interviewed all three members of Bellona’s staff together; the aim was to create a conversational situation, but also get even more insight and maybe some agreement or disagreement during the interview.

I had a list of eleven questions; some of them were more open and didn’t mention any time-period, while some were more concrete. By presenting the questions this way I could get a broad information on the topic, while I could somehow control the conversation and do not let it out of the track. (See Appendix 1)

I will use direct citations in my analysis provided by my informants, which have been approved by each of them. In that way I present my empirical findings in the most precise way possible; however before and after each of the citations I will explicitly reflect upon the discussed issues, in order to provide an analysis of the given information and how this information benefits the thesis.

My research seemed very interesting for the informants and therefore they were open about the topic and didn’t mind that I would use their names in the paper. Another reason for not making my sources anonymous is the small size of organisation; even if I used just the positions of the informants it would be already obvious whom I am talking about. I also didn’t intend to collect any sensitive information, which would require

protection of my sources. Later I will discuss some ethical issues with this kind of research and the limits the interview method provides.

2.1.2 Other interpretations of the CCS case

I chose documents as data source because it can provide me with a stable data and a broad coverage of the case I study (Yin 2009, 102). Yin calls this data source documents, in particular “the formal studies of evaluation of the same case” (Yin 2009, 103). Even though Tjernshaugen is not researching the role of Bellona explicitly, but rather on the gas-fired power controversy and CCS in Norway, his data has provided me with many findings where Bellona is mentioned as a central actor. The reason why I chose this source type additionally to the interview source was the search for the evidence, which could corroborate my case research and could therefore strengthen my discussion. As I will mention later in the limitations, the interviews with the Bellona personnel have provided me with the information on how they perceive the role of Bellona in Norwegian politics. On the other hand, the work of Tjernshaugen provides me with the perception of other actors and organisations on Bellona’s role. With the help of this formal study I will be able to present not only the reflexive opinion of the Bellona staff, but also scientific evidence supporting those opinions provided by other sources.

Tjernshaugen himself emphasised the importance of the research of Bellona’s role in the gas-fired power controversy (Tjernshaugen 2010, 50). However I do not make a comparative case study in order to point out the special role Bellona has taken, as Tjernshaugen suggested it. I’d rather start the discussion on what ways of gaining the power and influence Bellona has used, which could somehow explain Bellona’s

important role of so-called policy entrepreneur; one can use my research in the comparative case later.

Consequently I will structure my research based on the policy windows presented by Tjernshaugen. His two publications and one book, which consist a broad review of the media debate around the controversial case of gas-fired power plants in Norway, are three interpretations of the CCS case I have constantly used for my research. These three publications present an extensive analysis of the CCS policies and political debates regarding this issue; they were valuable sources for my preparation for the thesis and also partly a reason why I chose Bellona as the case. I will use these publications as an academic base for my discussion; I hope to strengthen some of the points made by Tjernshaugen with my empirical data and even present some new findings.

I do not look critically at the Tjernshaugen research for two reasons; firstly is that his usage of a complex quantitative data research would require extensive work for being able to provide some critical points. Secondly it is not my intention to criticise his work, but rather to use it as a structure for my own research.

I do however bring a different perspective on one of his policy windows in the year 2005, where Bellona is not pointed out alone as a policy entrepreneur, but one among other ENGOS. I will however present just Bellona's contribution as a policy entrepreneur, mostly because my informants provided me with the data that shows that Bellona has maybe not been alone, but very central in that time-period. I will also in the last part of my discussion present the next time-period, which one might be interested in researching. My informants and media debates have attracted my attention to the events in 2011 and I therefore open a debate on whether it could be the next evidential time-period for Bellona's influence.

2.2 Limitations

According to Yin (2009: 102), both of my data collection methods include some limitations, like reflexivity and biased answers. By using the formal case studies of Tjernshaugen, I weakened the limitations regarding the reflexive answers from my informants. At the same time the usage of formal case study can also have some limitations, like biased selectivity of the sources, in my case I chose the literature just from Tjernshaugen. On the other hand, the research by Tjernshaugen is the most comprehensive research on the politics around the CCS technology in Norway, which made it very simple for me to choose.

In conclusion the case study research in itself also some limitations, like the generalisation; the case study research also cannot provide us with the data to show the causality or correlation of some connections.

3.0 Power and democracy report

The Power and democracy report (in Norwegian Makt- og demokratiutredningen) is a comprehensive series of publications, created within the time period 1998 to 2003 with the initiative from the state institutions, the Norwegian parliament, and the Ministry of Labour and Administrative affairs in particular. The central theme was planned to be a recent development in the Norwegian democracy, and whether there have been changes in the production of power since the last similar report, the Power report carried out from 1972 to 1982. The reasons for making the new series, were significant changes in society and politics since the 1980s, like globalisation, changes within the relations between the political and other institutions, integration within the European Union institutions etc. This type of comprehensive report on the structure of power and democracy is not unique for Norway; the other Nordic states, like Sweden and Denmark, also have a tradition for similar work. (Makt- og demokratiutredningen 2011, I, II).

The work with the report took five years and resulted in many different publications as books, reports, and articles. A big part of the Norwegian heterogenic research environment was involved in the process of making the report; universities, university colleges, research institutes, and other institutions from the main societal fields have taken part in this extensive work (Makt- og demokratiutredningen 2011, III).

Therefore, when I was searching for insights in the role of the ENGOS like Bellona in the political life of Norway, I thought of many publications connected to the report. On the other hand, as I mentioned in the introduction, I was curious how the report's authors have managed to integrate different academic fields into an interdisciplinary reflection over phenomena like power and politics, as the field of STS have managed in

my view. I was especially interested in the connection between the political and the environmental issues, due to the complexity of this connection in our modern world.

To start with, I limited the amount of researched publications to around fifteen; they were related to notions like the environment, expertise, and the political power executed by different types of organisations. After reviewing all fifteen publications, my research narrowed the relevant publications in two books, which I found very suitable for analysing the role the ENGOS take in the political life in Norway. The main reason is that the other researched publications did not mention Bellona at all; the other reason is that even though some other publication researched on the environment and power structure around this issue, they concentrated on rather general aspects instead of concrete examples and cases. One book in the series was occupied with the membership within different organisation in Norway, but it illuminated rather the issue of direct democracy through membership and the trend of weakening of the organisations life, and therefore was not relevant for my case.

The two publications I chose have a different approach to the notion of power and the role that ENGOS are taking in the political life. One approach, from the summary publication for the whole "Power and democracy" report, by Østerud et.al (2003), has more theoretical perspective; while the second chosen publication, by Bortne et.al (2002), presents an institutional and structural view on the ENGOS. I will present both of the approaches and point out the parts, where I felt I lacked a comprehensive explanation of Bellona's exceptional position within the political debates on CCS.

In this part of the thesis I will mainly share my observations, and list the questions I got after I completed the review of the two publications. To answer those questions, I will have to present the theoretical framework of this thesis and the

empirical findings first; later I plan to compose a discussion, where I reveal the comprehensive picture and aims of my research.

3.1 The summary publication

Already in the introduction, the authors present a division of the notion of power into the three categories, the political, the economical, and the ideological. They use the popular definition of Max Weber and describe the political power as the “institutionalised and centralised power within regulated territories and in the relations between the states” (Østerud, Engelstad, and Selle 2003, 15). Economical power is a more recent trend, and has historical roots in the 1970s, when the neo-liberal ideology, supporting the independency of market from the state regulations, gained popularity among the political leaders of the western world (ibid, 17). The third kind of power named in the publication, is the ideological one. It lies in values, language, feelings and thoughts; it is often based in the scientific and literary works, and often used to express opposed views to the existing political believes. Voluntarily organisations, political movements, different intellectuals and academics represent the main channels of the ideological power (ibid, 18).

The authors of the summary publication for the “Power and democracy” report agree in the end of the introduction that those boundaries of different power notions have been moved, but also that those power types are being more and more connected with each other; they are trying to explain that change in the rest of the book (Østerud, Engelstad, and Selle 2003, 18). Although the publication gives valuable insights into the production of power in modern Norway, the starting point with a clear division of power types can already be looked critically at. Later in the book, the publication provides the reader with the power structure within different fields of Norwegian society. There are

many different reflections being drawn in this publication, which makes it difficult to conclude in few sentences in which way exactly the division of power has changed.

There is however few pages in the book, dedicated to the Bellona, but also the role of experts in the Norwegian politics, which are crucial for my case. While mentioning Bellona, the authors speak of the new organisational type it represents; they call it “here and now organisation”, which do not have a traditional democratic structure with the membership. This organisational type represents rather the case oriented type, which do not preserve the traditional ideas but rather works from different angles from case to case. In the end the publication’s authors argue that this type of organisation has weakened the democratic culture of organisation should be looked critically at, as it is unclear whom such organisations represent. (Østerud, Engelstad, and Selle 2003, 148-151)

As to their argument on the role of experts, the authors emphasised the changes in the recent years, where the knowledge power has taken an important role in the decision-making process. Politicians are provided with a big choice of expertise, which they can apply in different political case. The authors list different disciplines like jurisprudence, social economy, political science, medicine, engineering, architecture and so on; in that choice lies the power of the politicians. The experts also have their own power channels, in the cases where they get limited autonomy through institutionalising the professional experts in the public sector. The book is also discussing the institutions like the universities and university colleges, which are the higher intellectual power of the society. In the end the authors conclude that the social economical discipline has been the most powerful field in the Norwegian society throughout the past decades. (Østerud, Engelstad, and Selle 2003, 248-256)

3.1.1 Observations

Are there really clear boundaries between the power types? What if the power is a product of many different actors (as actors I mean not just people, but also organisations and institutions of different types), and not to the special political institutions, like the government and the parliament?

Even more importantly, according to the publication, the environmental organisations execute presumably the ideological type of power. Though my findings from interviews and another interpretations of the CCS case draw a somehow different picture; Bellona has been explicitly called a “key role” actor regarding the policies and political debates on the CCS issue (Tjernshaugen and Langhelle 2009; Tjernshaugen 2010). Does it mean that Bellona has gained a part of political power, combined with the ideological? Or does it rather mean that those two power types are deeply connected and shouldn't be classified as strictly?

Another question is what role does Bellona take in the Norwegian society, as it is clearly not identified as an expert? In the part where Bellona is being described, the authors have rather concentrated on its organisational type, and not a role in the society or political decision-making processes. At the same type, while speaking of experts and knowledge power, the organisations have not been mentioned at all. The experts are divided in clear groups according to the fields they belong to, and some of the fields are identified as superior expertise, which is frequently used in the politics.

As I will illuminate later, one contribution within the field of STS by Collins and Evans (2002; 2007) would somehow agree on the classification of expertise. Other STSers have however criticised that determinism in identifying the superior experts, as it is too easy to overlook other, also valuable contributors (Jasanoff 2003); (Wynne 2003). My empirical data shows that different political and industrial actors have used

Bellona as an expert several times. So what role has Bellona played in the case of CCS technology?

3.2 The publication about ENGOS in Norway

As I already mentioned, this publication about ENGOS in Norway by Bortne et.al (2002) concentrates on the institutional and structural sides of the ENGOS activities. When I discovered this publication, I considered it the most important insight into the environmental organisations and their role in Norwegian politics. The book makes a thorough historical analysis of the most important ENGOS in Norway, and presents the formal channels of connections to the state institutions. I will present a picture of Bellona and its role in the political life, which I got from the publication.

By referring to the special structure of the Norwegian state, the authors of the book start with emphasising that the Norwegian environmental organisations can be categorised as “state-friendly” organisations (Bortne, Selle, and Strømsnes 2002, 21). The “state-friendliness” can be divided into two dimensions, *dependency* on the state, and *closeness* to the state; the *dependency* describes how the state controls the economy of the organisation, and what legitimacy the state gives for the organisations, and *closeness* describes the frequency of contact and communication between the state and the organisation (ibid, 21-22). Even before the discussion, the authors suggest that all the environmental organisations are somehow both dependent and close to the state, but in a different way and to a different degree; the state, through the influence on the decision-making institutions, is also being influenced by the organisations (ibid, 22).

Bellona is described as a foundation with a non-democratic system; this type of organisation is rather untraditional. For many years most of the environmental organisations in Norway were based on internal democratic orders; the latter is the

most usual type of ENGO in Norway (Bortne, Selle, and Strømsnes 2002, 37-45; 122). Bellona on the other hand looks at the members rather as the problem, which slows down the effectiveness of lobbying and mobility in the organisational work (Bortne, Selle, and Strømsnes 2002, 105).

Nevertheless, the democratic structure is an important issue within the organisation of Norwegian environmental movements, mainly because the Norwegian government, the Ministry of environmental affairs in particular, encourages the democratic structure by supporting organisations financially with operative subsidies (Bortne, Selle, and Strømsnes 2002, table 5.1) As a result, Bellona is a receiver of only project subsidies from different organisations, due to its non-democratic structure; hence the obstruction of operative subsidies. According to the authors, other ministries of Norway, like the Ministry of foreign affairs, have supported Bellona with project subsidies, often due to its international profile. The organisation does not make a difference between the governmental and the non-governmental financial support, by receiving some project subsidies from the private sector.(Bortne, Selle, and Strømsnes 2002, 124-125)

Both support types used by the political institutions, like ministries, can be questioned regarding their purpose and intentions. The operative subsidies clearly favour special organisations; in this way it influences the form, but not the content of the organisation. The project subsidies however are being given with special direction for the project outcome, and have far more influence on the organisations' content (Bortne, Selle, and Strømsnes 2002, 66-67). By discussing the financial channels, which exist between the ENGOs and government, the book illuminates the power which decision-making institutions have regarding organisations and their work; financial support

types for example seem to influence both the structure and the content of the environmental organisations.

As to the influential strength of the Norwegian ENGOs, according to the authors they have traditionally had a strong connection to the Ministry of environmental affairs in the decision-making process. Their official channels of influence during many years have been participation in different political meetings and hearings, as well as in several committees on the environmental policies (Bortne, Selle, and Strømsnes 2002, 50). Bellona however differs from the traditional types, and as the authors mentioned before it does not have the same strong connection to the Ministry of Environmental affairs, also due to the lack of operative financial support from the Ministry. Although Bellona is mentioned to have some financial links to the other ministries, there is not much information on which ways the organisation uses in order to influence some political decisions within those ministries or other political institutions.

All in all, Bellona is presented as the opposite of the traditional types in the Norwegian environmental movement; it is a new generation of the efficient lobby organisation, which concentrates on the few environmental cases. The *dependency* on state financial support is smaller because Bellona gets the financial support from different governmental and private organisations, and is therefore less dependent on a particular Ministry. The *closeness* to the state is rather more difficult to measure with the data the book presents. Nevertheless, Bellona has rather more autonomy and contact to various Ministries and political institutions, and therefore more heterogeneous relationships with the state.

3.2.1 Observations

The publications seem to mostly concentrate on how the ENGOs are connected to the state, by presenting different channels the state institutions use for influencing the ENGOs, like financial subsidies. Although the publication brings up some reverse channels that can be used by ENGOs, the authors concentrate on the institutionalised ways of influence within the Norwegian political system, like participation in hearings and official reports. As a result, the discussion seems to be disproportional, where it emphasises more the influence of political institutions on the ENGOs, and less vice versa. Some of the ways that Bellona has used for influencing the CCS political debate, which I discovered during my empirical research, are not even mentioned in the publication. The unofficial contact with politicians, co-operation with the leading research institutes in Norway in production of scientific reports, usage of rhetorical power, hosting some informative conferences for different political actors, including Bellona into a special parliamentary committee for gaining more valuable information about the CCS issue, are some of the important ways of influence that were not mentioned, but which I have gained during my research.

At the same time, the somehow exceptional position of Bellona among the traditional ENGOs, but also a concentration on the Ministry of Environmental Affairs as the main mediator of the ENGOs' opinions, resulted in somehow moderation of the role Bellona has played in the political debates, compared to my findings.

Later in the theoretical part, I will continue to discuss how Bellona is interconnected with the political institutions, politicians themselves, industrial actors and other actors, which all have been taking place in the political disputes on CCS technology, by using the idiom of co-production.

3.3 How can these descriptions be enriched?

The publications have not presented particular cases, where one could observe the chain of events and Bellona's involvement in them. The purpose of the book by Bortne et.al (2002) was rather to present a general relation of the ENGOS to their members and the state. I, on the other hand, have a particular case in which Bellona has been involved for almost 20 years already. The purpose of the main publication by Østerud et.al (2003) was to summarise the reflections on the changes within the Norwegian society and politics regarding the notion of power. The authors also couldn't present some single cases, as the purpose was to present a general picture; however sometimes one needs to have a deeper look on the societal happenings before drawing the conclusions, especially on the complex issues like environment politics.

In the next chapter I intend to deepen that perspective on the power notion with the help of the STS field and Jasanoff's co-production in particular. It will hopefully help to illuminate an alternative approach in understanding Bellona's activities and its role in the CCS debate. I will frequently use my observations from the two reviewed publications for illustrating how co-production can bring additional sides to the field of political science, in which the two publications of the "Power and democracy" report are rooted, as well as make my thesis richer.

4.0 Theoretical part

As an interdisciplinary field, the field of STS, provides its scholars with the tools and perspectives from different areas; sociology, economics, political science, anthropology, history of science, philosophy are some of them (Asdal, Brenna, and Moser 2007). Adaption of different understandings and reflections from these areas shall help the scholars of STS to illuminate the role of technology, science, and expertise in the shaping of our society. As an STS scholar myself, I do appreciate the possibility to look at the major events from the alternative perspectives, like the shaping of the environmental regimes, catastrophes caused by the atomic reactors, or mass-vaccination of the world's population due to a new type of virus. I also get to “zoom in”² on the smaller scale events, for example in my case a single ENGO's role in the politics, which can be connected to the shaping of some of the most controversial political debates in Norway in the past fifteen years.

We are ought to understand the importance of the links between science, technology, and politics in order to gain a fuller picture of our complex society. Nevertheless it is even more important for the decision-makers in our world to admit the existence of these links, especially in the times of environmental uncertainty, where the countries have to adapt a common strategy to achieve important goals of sustainability (Callon, Lascoumes, and Barthe 2009). I attempt with this thesis to throw light on the network connections that the ENGOs can have to the political institutions, by exemplifying Bellona's links to Norwegian political institutions during the debates on CCS technology.

² “Zoom in and out” is the terminology which is used to explain how the STS scholars can look at the same events from different perspectives, and connect the small events to the bigger picture of changes in society (Venturini 2010).

For my analysis I will use the theoretical framework of co-production by Sheila Jasanoff in order to present an alternative look at the Bellona's role in the policy shaping regarding the CCS case. By using this interdisciplinary framework I attempt to illustrate another way of looking at Bellona's involvement in the CCS, which will not conflict, but rather contribute to the work of the "Power and democracy" report's publications.

I will also present another contribution from the field of STS by Collins and Evans (2002) and (2007), respectively "The third wave of science studies" and "Rethinking expertise". With this perspective I can show the parallel to the publications from the "Power and democracy" report; the main reflections on the role of experts and the decision-making process in the publications by Collins and Evans are not too different from the publications from the report. Collins and Evans work however has raised some interesting critique by the author of idiom of co-production Sheila Jasanoff and another STSer Brian Wynne. Together they will help me to draw the difference between the contributions from Østerud et.al (2003) and Bortne et.al (2002) and the STS perspectives on the notion of expertise and experts.

4.1 The idiom of co-production

Sheila Jasanoff presents in her book a different approach to look at formation and creation of social phenomena in our modern world. By referring to different events, where the traditional disciplines lacked the proper explanation, she joins the other STS scholars in the recognition of the need for an interdisciplinary and broader perspective in order to give a new understanding for traditional notions like power and politics. The author emphasises especially the need for explanation the making of the phenomena like identities, institutions, discourses and representations (Jasanoff 2004, 39-43).

The framework of co-production is a complex set of deliberations that try to combine different perspectives in order to explain the place, which technology, science and knowledge take in our society. Jasanoff especially occupies with the knowledge-making and “how (it) is incorporated into practises of state-making, or of governance more broadly, and, in reverse, how practises of governance influence the making and use of knowledge” (Jasanoff 2004, 3). The author wants the reader to understand that the ways of making the knowledge, like producing science, expertise and new understandings, are co-dependant with the way of producing the political debates, policies, and power in general. These two societal spheres are tightly connected to each other and should be looked at from the same perspective, rather than analysed with the tools from different disciplines.

In my case I concentrate on how Bellona takes part in the knowledge-making together with other organisations and actors involved in the CCS debate; political actors and institutions on the other hand take part in the policy production and decision-making process. I want to look at how these processes are co-dependant and therefore interwoven by exemplifying the case of CCS technology.

4.1.1 The role of experts in co-production

As Jasanoff (2004) asks herself a question about how exactly the idiom of co-production can help on explaining these phenomena differently from the existing analytical tools, she argues following:

More conventionally, though no less importantly, it (the idiom of co-production) enables normative analysis by following the power into places where current social theory seldom think to look for it: for example in genes, climate models,

research-methods, cross-examinations, accounting systems or the composition and practices of expert-bodies (Jasanoff 2004, 42).

My field of interests are described by the last part of a quotation that mentions the practises of expert bodies. The framework allows us to look differently at the role of experts, by offering them a place within political processes. Jasanoff emphasises that the knowledge production is a collective process; consequently the producers of knowledge like the scientists and experts are the important part of it. All in all knowledge is not something unimportant, not just words and formulas, it is the “engine” of our society (Jasanoff 2004, 37-39).

As I said in the introduction, I find it utterly important to illustrate the contribution of the organisation, which is part of knowledge-making; whether Bellona could be identified as an expert-body in the way Jasanoff understands is another question. Therefore, before I move on to explain how I will proceed with the idiom of co-production, I need to delve further into the meaning of the expert role and if Bellona could match that description.

4.2 Collins and Evans and their critics

Even though there is a five-year time difference between the publications by Collins and Evans, they carry very similar ideas. Both contributions from Collins and Evans offers a reflection on the expert role in politics and decision-making processes. Even though their contribution is very important for the field of STS and sociology of science, there are some reflections in their book, which other STSers have reacted critically on; that critique represents a big value for my case as it is helpful in understanding the main difference between the STS and the field of political science, which is rooted in the

publication from the “Power and democracy” report, in the questions of experts and their power.

There are two points from those publications that I want to discuss regarding my own case; both of these points have woken the dispute among the scholars in the STS society. The first point is how Collins and Evans differentiate expertise types and by that clarify which exact type of experts should be allowed in what they call “technical decision-making” process. These processes include the scientific or technological perspective that have a direct impact on the public; due to that reason there is a need to include a particular expertise in the scientific or technological matter in order to produce a judicious decision (Collins and Evans 2002, 236). The main reason for creating such “normative theory on expertise”, as the authors themselves call it, is their observation of the political decision-making processes in recent decades, where the politicians have often been obligated to take some decisions even before the scientific agreement on the issue.

Thus the authors suggest there is a need for categorising the expertise into different types, in order to help politicians to identify the valuable experts before hastening with their conclusive decisions. In especially complex issues, special type of expertise might be required; Collins and Evans call it the core-set expertise (Collins and Evans 2002, 242-248); (Collins and Evans 2007).

To conclude the first point, these core-set experts are reliable scientists, who should provide political institutions with the decisions regarding the complex and controversial scientific and technological matter. Jasanoff (2003) has seen a problem with that definition of decision-making process:

There is, too, a forced linearity in the authors' suggestion that, once the politics of a situation have been properly sorted out, the "real" science can proceed, independent of further political influence. Insulation of this kind is simply unthinkable if, wherever one cuts into decision-making processes, one finds a hybridization of science and politics as these terms are conventionally understood (Jasanoff 2003, 394).

The critique points out how simplified the decision-making is in the contributions by Collins and Evans; by setting up the clear boundaries between the scientific and political the authors somehow disregarded that the knowledge is a product of collective work and produced in the interaction of science and politics.

Wynne have reacted similarly and even compared the way Collins and Evans look at the decision-making with the term like decisionism; the term describes the political process as a series of events independent from the outside world (Wynne 2003, 410). Wynne is also looking at the process of decision-making as a more complex and versatile issue.

The second point of critique regards the experts themselves and how Collins and Evans put them simply "in charge" in the complex and controversial cases. Although the authors do understand the problems with legitimacy, where the experts are not chosen by the people to make the decisions for them, there are still no better competent substitutes for the experts in their view, especially not the lay-people, who do not possess the same type of deep knowledge on different important issues. They have drawn very clear boundaries between the people who may contribute, because of their classification in expertise types, and the people who may not. (Collins and Evans 2007) The question here is who has that important expertise and how do we sort out these experts from the others?

Wynne argues that by being so determined in what is the right set of science for the right set of problem, Collins and Evans overlook the importance of scientific negotiation, in which the science is actually being formed (Wynne 2003, 411). In Wynne's opinion such determinant differentiation of some types of experts from the other less important experts, is unacceptable (Wynne 2003, 411-413). Wynne however, by presenting the case where lay-expertise has a great value for political decision-making, emphasises the importance of a *symmetrical* approach to science, where the members of scientific community, together with other important experts, define the scientific truth in the process of negotiation (Wynne 1989, 2003).

These two important points will help to differentiate my observations within the STS field and the field of political science in the "Power and democracy" report's publications.

4.3 Contribution to the case

The arguments from the publications by Østerud et.al (2003) and Bortne et.al (2002) are rather similar to the Collins and Evans perspective. Østerud et.al (2003) draws the clear division of the politics and science as a starting point for discussion; later the authors provide us with the observations on the role of experts as the decision-makers. The decision-making process seems also somehow "mechanical" in the discussion of the publication, as in publications by Collins and Evans, and not as hybrid and heterogeneous as Jasanoff (2003) and Wynne (2003) argue. The publication uses the similar classification of the experts and recognises their influence strength due to their deep knowledge within the field. Thus the authors neglect the others, possibly valuable, contributors to knowledge-making in a particular decision-making process, in my case Bellona Foundation. In my discussion I will analyse the data for reflecting upon the last

point; I want to find out whether Bellona is a valuable contributor to knowledge-making in the CCS debate.

The publication by Bortne et.al (2002) on the other hand discusses rather the official channels of influence and links between the ENGOs and the political society in Norway and again sets up the clear boundaries between the political life and the ENGOs. That boundary setting divides the process of knowledge-making and policy-making in two rather independent spheres, which is exactly criticised by Jasanoff (2003) previously in the chapter, as she looks at these processes as hybridised.

Conclusively, according to the two publications, Bellona is not one of the experts; it is not recognised as an official member of the scientific community in Norway, so why does this organisation show the influential strength at all? Could it be that these boundaries between science and politics and the classifications of the valuable experts are more vague in reality? Could the process of decision-making be also a hybrid between politics and science, without clear definition for who represents the science and the politics? I will try to illuminate some of these points in my discussion part, mainly by showing how interwoven Bellona has been into the CCS debate and pointing out different ways the organisation has used to influence the whole debate. All in all, the debate is still on going and as I will point out in the end of the discussion, there is still no full agreement as to whether CCS is a safe technology.

This uncertainty around the debate suggests that it is an open controversy and the scientific truth is still in the process of negotiations between different actors and networks. In that case, if Bellona is a part of that process, it has been referred to and has been used as a political advisor and so on, it has taken part in these negotiations. Can this indicate that this organisation is a part of knowledge-making and therefore an expert-body? And if it is, is Bellona a more influential organisation than it is described in

the two publications from the “Power and democracy” report. I will look closer at these questions in the discussion part.

However the idiom of co-production does not provide me with particular analytical tools, but rather with the idea of an alternative way of looking at the forming of the Norwegian political sphere and how knowledge influences it. This fact makes it challenging for me to draw any firm conclusions in my analysis, but it gives me a starting point for the discussion of the role of ENGOS in the Norwegian politics. This starting point has first of all a purpose to illustrate how STS field offers an alternative interdisciplinary explanation of links between politics and science and expertise.

5.0 Four-step analysis

I will now proceed to describe Tjernshaugen's (2010) analysis of Bellona as a policy entrepreneur in three time-periods; afterwards I will attempt to contribute with my own empirical findings collected through interviews with current and former members of Bellona's staff. I will point out the observations, which are important for answering my research question, and reflect upon them with the usage of theoretical points I have in disposal. This way of connecting my empirical findings with the discussion, rather than present an empirical chapter on its own, should help me to present my data systematically according to the time-periods from Tjernshaugen (2010), also called policy windows. This way of building the discussion will also allow me to extract the most relevant observations for my case. Finally I will present recent changes in the case from the year 2011, where Bellona again has shown a significant involvement into the CCS debate.

Before I move on to the policy windows, I would like to present shortly the controversial case of gas-fired power plants (GPPs) in Norway that has initiated the whole CCS debate.

5.1 Gas-fired power: a long-time political dilemma in Norway

Norway has always been a special case regarding climate policies; even though traditionally this country is one of the most environmental friendly countries in the world, it is an oil and gas producing nation, which has most of its revenue from fossil fuel export (Tjernshaugen and Langhelle 2009, 100-103). Traditionally Norway has always had a strong environmental movement, originated in the ideology of nature preservation. Therefore when some political actors started to consider building several

GPPs on the west coast in the beginning of the 1990s, due to the prediction of the energy scarcity in the future, the reaction from the ENGOs was to abolish these plans before they could have been realised. The main reason for their resistance was the general agreement on the fact, that gas is a fossil fuel, which, in the process of energy production, causes a big release of CO₂ emissions. However, most of the European countries look at natural gas-fired power as rather an improvement for the environment, due to their high consumption of the coal energy. Additionally, many supporters of gas-fired power have reasoned that, by producing the power in Norway and selling a big part of it to Europe, Norwegian gas would contribute positively to the environmental situation there. This notwithstanding, Norway itself is traditionally a country of clean hydropower, and some have assessed the building of the GPPs in such clean countries as a huge step back on the way to a sustainable future. (Tjernshaugen 2007)

The big dispute has been centred on the question of the emission and their origin, because in the end Norway would release a significant amount of CO₂ emissions into the atmosphere, whilst somehow helping the European countries to cut theirs; for many actors in the controversy it did not make sense (Tjernshaugen 2007). Norwegian Minister of Environmental Affairs at that time has even made an analogy, which emphasises that the coal, oil, and gas result in the damaging for environment pollutions, no matter that some are less damaging than another (Tjernshaugen 2007, 28).

As a result of this deep controversy, political parties have been deeply divided on the issue across the coalition cleavages. The big parties like the Conservatives and the Progress party have been pro building, while the smaller parties have all been against; the biggest party, the Labour Party, has been divided on the issue internally, which has also represented challenges for the agreement. The main problem has been that none of

the big parties could co-operate, due to their discrepancy rooted in the cleavage-structure; they would therefore have needed the small parties to get a majority for the vote to go through, which also was problematic (Tjernshaugen 2007). This controversy has been so significant that in 2000 it resulted in the deep parliamentary crisis, which ended with the governmental resignation (Tjernshaugen 2010, II: 11). Some years after a compromise was reached when the red-green coalition was built; as I will emphasise later, the CCS technology was a reason for that compromise, and Bellona, as a devoted promoter of CCS, has been an important bridge-builder between the coalition parties.

As I've mentioned in the method parts, I will now use three policy windows presented by Tjernshaugen (2010) as a foundation for my discussion; I will simultaneously add my empirical findings and point out the examples where Bellona has influenced the debates and therefore influenced politics and power structures within the case. The last presented time-period in year 2011 would be the most recent development in the case with the involvement of Bellona.

Tjernshaugen acknowledges Bellona as a *policy entrepreneur*, which means that Bellona has been able “ to present (its) preferred solutions as a relevant answers to social problems that come to figure prominently on the agenda, and to pressing political challenges facing decision makers” (Tjernshaugen 2010, II: 4). I find it a suitable description for the role and contribution that Bellona has had in the case of CCS. I will use three of five policy windows presented by Tjernshaugen (2010), called policy window B, C and E in his publication. The main reason is because my informants provided me with the most information on those three time-periods; the second reason is that these three windows are the culminating points in the whole CCS debate.

5.2 Policy window I (1995-1999): Gas-fired power controversy

As an early promoter of CCS, Bellona had been acknowledged as a policy entrepreneur as early as in 1995. In co-operation with the most powerful technological research institute SINTEF, Bellona had produced an expert report, where the CCS was promoted as a technological solution for cutting carbon emissions and as a compromise for the GPPs controversy. During the end of the 90s, a time-period, which Tjernshaugen calls “the first climax of gas-fired power controversy”, Bellona had frequently persuaded different industrial and political actors with the CCS idea (Tjernshaugen 2010, II: 9).

As to my question of why did Bellona promote the CCS solution from the beginning, all of the informants had come with a similar answer. Bellona had at that time, and still has a very strong belief, that without the CCS technology the countries of the world will not achieve the global climate aims. In the organisations view, this is the realistic approach for today’s world driven by fossil fuels, which represent a fast achievable solution in emission cut. In combination with the growing usage of renewable energy, the CCS technology will help the world’s leaders to fulfil the 80% emission cut aim by 2050 (Holm, 2011; Fjøsna 2011; Tjetland 2011; Birkeland 2011; Sæther 2011,I; Stangeland 2011).

This deterrent view on the CCS technology has been criticised by the other ENGOS in Norway in the middle of 90s, which would prefer the full transition from a fossil fuel economy to the renewables instead of prolonging the dependency on a fossil fuel energy, which CCS clearly facilitate (Tjernshaugen 2007).

One interesting point was brought up by the earlier researcher in Bellona, Aage Stangeland who is working in the Norwegian Research Council, on the issue of public support and support by ENGOS of the CCS solution. He has mentioned the example of the Netherlands, where the CCS solution to some extent has been abolished due to the

strong protest from the local people. The major difference from the example of Norway, in the “storage” function of the CCS; CO₂ was supposed to be injected into the ground, instead of the seabed, as it was considered from the beginning in Norway. Nevertheless, the notion of public acceptance is central for such issues, and he emphasises how Bellona had contributed strongly to the public acceptance in Norway (Stangeland 2011).

Both Stangeland (2011) and Tjernshaugen (2010) also mention another reason for the lack of strong resistance for the CCS during the 90s and 2000, the weak positioning of Greenpeace, due to the major cultural dispute on the question of whaling. In their view the weak position of the biggest CCS opponent among the ENGOS, made it easier for Bellona to convince the public, other ENGOS, and political and industrial actors on the support of a CCS solution (Tjernshaugen 2010, II: 25); (Stangeland 2011).

This opens a debate on the notion of negotiation among the scientific communities and expert bodies. Bellona has taken a clear choice of promoting the technological solution, which is not problem-free in the terms of environment due to its function of prolonging the life of fossil fuel industries, but which could contribute to cut the emission in the short run, before the transition to the sustainable energy sources is completed. By taking that choice, and due to the lack of the strong opponent, Bellona had taken a role of the CCS promoter and therefore an important role in the gas-fired power and afterwards the CCS controversy.

As I said earlier, the gas-fired power controversy had divided the political parties in Norway in two conflicting groups in the late 90s; at that time it was a very inflamed political issue. Earlier vice-CEO of Bellona Marius Holm, had confirmed that and told how Bellona has “saved the day”:

The CCS is the reason why this issue had become less inflamed, it had come as a “saving angel”, because before CCS it was simply yes or no to the building of a GPP, but the CCS had been introduced as a compromise. Bellona had started very early to work on political suggestions and similar, while Statoil had started to work on the technical question with the CCS, and together we had been able to launch it as a way out of the conflict. (Holm, interview 2011)

My informant gives an insight in how Bellona had identified the path they should take in the gas-fired controversy; the organisation had identified the possible, environmentally suitable, way out of the strong political dispute. At the same time it illuminates in my view how the organisation had to be fairly sure that the GPPs would be built, one way or another, and therefore put all odds on promoting CCS; in that case it would be at least pollution-free GPPs. What does it say about an organisation in particular?

A chief of PR in Bellona has emphasised that Bellona is known for its realistic approach in the environmental battle and for being technology optimists (Sæther 2011,I). In a nutshell that means that the organisation believes that different technological solutions can help the countries of the world to become more sustainable, and therefore slow down the rapid climate changes. It seems like that belief, in combination with the deep understanding of the politics in Norway, have resulted in the conclusion that as one ENGO, Bellona could get more success in promoting a technological solution for a GPP controversy, instead of keeping the role of the opponent in that dispute. This also illustrates that the political sphere in Norway has influenced Bellona; the organisations’ approaches like being realistic and technology optimist can be a result of that influence by the political values in modern Norway. It is, in my view, one of the first signs of the hybridised decision-making described by Jasanoff, where the

political interdepends on and interacts with the knowledge-making, and another way around.

Marius Holm has mentioned that before Bellona brought CCS to the discussion table as a compromise for that political controversy, one expression about GPPs, “strongly polluting gas-fired power plant”, was frequently used in the media; according to him another expression, “pollution-free” GPP, became a positively charged opposite expression after Bellona introduced CCS to the mass media and society as a whole (Holm, 2011). Tjernshaugen (2010) speaks of the same expression and gives credit to Bellona. He also mentions that later Prime Minister Kjell Magne Bondevik already since the beginning of his governing in 1997 used those two expressions in order to show his support for a CCS installation on any GPP, which would be built in Norway. (Tjernshaugen 2010, II: 9).

In that way, the organisation had changed the rhetoric around the issue, when the expression “pollution-free” GPP had been established as the opposite of “strongly polluting gas fired power plants”. Their influential power in that case is lying in the language and the shaping of the issue in the favourable way; by becoming a popular reference among the politicians, this expression has made the possible gas-fired power plant look more positive and less dangerous for the environment in the public and media. This can be connected back to the notion of public acceptance; by shaping the issue of GPP building with the installation of CCS on it in that particular way, Bellona has contributed early in the controversy to a more positive view on building the GPP in Norway.

The organisation has an important place in the media debates during the discussed time-period. Another informant, leader of the CCS department at Bellona,

reflects upon the role Bellona took in the media debates on the emission cutting issues in the 90s:

From the beginning, Bellona was very good in creating media debates, putting things on the agenda and use media actively in general. We were always good in commenting parliamentary reports, hearings and so on. Our contribution to media debates didn't only consist of "no to CO₂", but rather the "yes to solutions which help cut CO₂", which is very results-oriented. (Fjøsna, interview 2011)

The last point that presented Bellona as a results-oriented ENGO differentiates it somehow from the other, traditional ENGOS in Norway. This kind of organisational goal represents a form for negotiations on the best outcomes in different issues, which requires the ability of meeting a compromise with negotiation partners. In my case, Bellona was constantly negotiating on the installing of CCS on the possible GPPs, which would be built in Norway. That kind of goal requires also a set of fitting suggestions, which on the other hand requires deep knowledge of the issue, in order to produce those fitting suggestions. In contrast to that, the traditional type of ENGO in Norway was rather known for its criticism towards the decisions regarding nature questions, instead of presenting different suggestions and achieving the compromises on a particular question. It seems to have a connection to the organisation's characteristics like being realistic and technology optimists; with that kind of approach to the politics, the organisation has clearly more potential for penetration power compared to the ENGOS, which concentrate mostly on creating criticism.

Tjernshaugen (2010) makes also examples of the strong impact Bellona's suggestions have had for the CCS installation at the gas-fired power plants. He mentions how the Labour party Prime Minister Thorbjørn Jagland at that time made a formal requirement for Naturkraft, the firm, which had responsibility for the eventual building

of GPPs in Norway, on including the CCS into the building project (Tjernshaugen 2010, II: 9). One of the important reasons that the Prime Minister and the leader of the Labour Party changed his mind about CCS was participation on one TV-debate programme. The long time leader of Bellona, Fredric Hauge, also participated on that programme on the national channel NRK on the 7th of May 1997 together with the earlier named Prime Minister and the engineers from Naturkraft, where they discussed the possibility of building the GPP with CCS (Tjernshaugen 2007, 125).

In that way, Hauge used the prime-time programme to reach the politicians, industrial actors, and people at home, to promote the CCS solution as a necessarily technological step in order to cut CO₂ emissions. Prime Minister Jagaland was very impressed by the suggestions made by the leader of Bellona; since already 1996 the Prime Minister wanted to include Bellona into governmental affairs as a technological adviser (Tjernshaugen 2007, 125). However, another interesting thing which happened after that decisive programme, is that Hauge emphasised that his main focus was lying not in the building or not building the GPP, but rather in the question of pollution control and how Norway was willing to handle it at that time. Many argued afterwards that Hauge “has destroyed the whole debate” by changing the focus to the pollution handling (Tjernshaugen 2007, 133).

This is the second time the rhetoric of the media debate has been changed due to Bellona, when the focus in the case of GPP building has been changed to an emission cut issue by Fredric Hauge. Hauge’s main point was that by installing CCS on Norwegian GPPs, Europe would get cleaner energy, while Norway would remain free of those emissions, the GPP without CCS would release otherwise. That shift of emphasis in the debate has somehow showed the issue of energy scarcity to the side, while the question of emissions was given more focus. After that Naturkraft would basically appear in a

negative light if they would still argue for the GPPs without CCS, even though the compromise is there in the open, again thankfully to Bellona.

My findings also list some important channels, which Bellona used for its influence; first of all co-operating with the strong technological researchers from SINTEF and Statoil in producing the expertise. At that time Bellona had not been as known for its results-oriented characteristics, and building alliances with such important research institutes, Bellona has gained a lot of knowledge and experience, and therefore expertise. Secondly active participation in the media debates, on television and so on. As Holm (2011) mentioned, the tasks that Bellona did at that time were to prepare political suggestions, research as much as possible and convince as many political and industrial actors as possible. The frequent media participation has also contributed to Bellona's reputation as a trustworthy actor in the CCS debate, because if it would be otherwise, the media would hardly illuminate Bellona positively.

All that confirms Bellona's wish to be a results-oriented ENGO, the one that come up with the solutions and not just "empty words". The last point is strengthened by both of the Prime Ministers in the late 90s, which, despite belonging to different political parties, have been convinced by Bellona's arguments and publicly expressed that opinion.

5.3 Policy window II (2000): Parliamentary crises over gas-fired controversy

As I already mentioned in the previous part, the Prime Minister Bondevik, which had belonged to the Krf (Christian Democrats) party, had been persuaded by the CCS solution for the gas-fired power controversy. The paradox of the whole situation is, that

Bondevik's minority government had to step down exactly due to the earlier mentioned controversy. In this part of the discussion, I would like to present the reason for such a dramatic happening and which role Bellona had played in the whole case.

The core of the conflict had a background in the Kyoto protocol and a general debate on the emission cuts. By the year 2000 the protocol had gained power and according to it, CO₂ should be treated as pollution, which meant that Naturkraft's new projects regarding GPPs building would get a restricted emission permit, equivalent to 10 % of the expected CO₂ emissions (Tjernshaugen 2010, II: 10). Nevertheless the majority of the parliament had been pro the GPPs building, they have not had the governmental power at that time. The government and its member parties were on contrary against the projects, as long as they would be built without the CO₂ cleaning technology, like CCS. However to officially stop building of the GPPs in Norway without the CO₂ cleaning technology, the majority in the parliament would be required, which Bondevik's government didn't have (Tjernshaugen 2010, II: 11; 2007); (Tjernshaugen 2007, 109-112).

At that conflicting moment Bellona approached the government and Prime Minister with an idea for an alternative way out of the parliamentary dispute. Fredrik Hauge had presented a competent political proposition for the Prime Minister and for one newspaper at the same time; the proposition suggested that if they installed the CCS technology during the building of the planned GPPs, Naturkraft should receive the same type of governmental subsidies as any other project favouring the sustainability of the country, like renewable energy and similar. It basically had meant that if the CCS technology would be installed at the GPPs at once, the GPPs would be treated as "clean energy" producers with all the benefits; Bellona's leader had been very convinced by his

own proposition and believed that the opposition would saddle for the proposition (Tjernshaugen 2007, 129-130); (Skard and Ellingsen, 2000).

Ultimately, Bondevik's government had used Bellona's ideas, and had written a parliamentary note, almost identical to the text shaped by Bellona; the organisation was also invited to the seminar at the parliament in order to present their proposition (Tjernshaugen 2007, 131); (Tjernshaugen 2010, 11). Despite the rejection of the note from the parliamentary majority, the mentioned event points out that the politicians assess Bellona's political work as very valuable.

My informant Aage Stangeland, an important scientist on CCS technology and a former staff member of Bellona, who is currently working at the Research Council of Norway, confirms the contribution of Bellona in given time-period:

Bellona has contributed positively by putting the CCS on the agenda and by that influenced the whole gas-fired power controversy in the year 2000; the organisation has contributed in particularly with clear goals, and suggestions for the solutions. (Stangeland, interview 2011)

The organisation seems to have used similar tools as being results-oriented and have brought several solutions to the discussion table. Bellona has again been very visible in the media, however this policy window shows that Bellona has also been assessed as a producer of valuable expertise. The government decided not only to take advice from "just" an environmental organisation, but also to use their words in making a political proposition. The government had to trust Bellona fully as a scientific expert body already at that time. But does it make Bellona an expert in a traditional understanding, as it for example described in the two publications from the "Power and democracy" report?

One of my informants, Anne Karin Sæther, has mentioned that Bellona “translates” the heavy reports made by scientists and presents them in a way that politicians, which mostly do not have technical background, would understand (Sæther 2011,I). In this case, Bellona has a valuable power resource in the way that they interpret the science and expertise into form, which is more accessible for others. This observation illuminates Bellona as some kind of bridge-builder between the science and politics; in that also lies the power of rhetoric and formulation, which should not been underestimated.

Conclusively, the final reason that Bondevik’s government stepped down, has been the other proposition from the oppositional Labour and Conservatives parties; it has suggested to give a necessary permit for CO₂ emission, which would be much more than 10 %, for the future GPPs. Basically instead of following the rules, which would restrict the building of GPPs, the majority of the parliament decided to change the rules (Tjernshaugen 2007, 109-110). Nevertheless the support from the media and ENGOS, the minority government decided to step down in March 2000, as it deeply disagreed with the proposal by the two major parties and considered it as a very anti-environmental proposal (Tjernshaugen 2010, II: 11); (Tjernshaugen 2007, 111-113).

Consequently, Bellona has taken an important role of political entrepreneur by forming the famous political proposition, made by the Bondevik’s government at that time. Nevertheless, the organisation has rarely been explicitly credited for their work, apart from media attention. My informants say that this is rather normal than exceptional:

We normally read heavy technological expert reports before we present easy-to-understand-texts and policy statements. Then others may repeat our arguments

without giving us credit. That's ok, though, since it's the political support we aim for. (Sæther, interview 2011,I)

Often we observe that some of the political parties have used our texts and reports, but we cannot trace it exactly. This is ok for us, but that fact makes our political contribution rather invisible. (Fjøsna, interview 2011)

Two of the mentioned informants, says that they were used to the fact, that the political actors seldom give Bellona the credit for their work. Part of the explanation can be that most of the relations and ways of interaction between the organisations and the political actors aren't institutionalised and therefore belong to the informal level of interaction. This notwithstanding, Bellona has got different types of credit from different political actors, like the examples of several Prime Ministers mentioning Bellona as a valuable actor on television.

The staff of Bellona doesn't seem to have the public credit for their work from the politicians as their superior aim, they rather seem to concentrate on making the actual impact. However, they frequently use other sources, like media, to emphasise their contributions to the Norwegian politics and society; maybe by using the media as the platform for the sharing of their achievement, the organisation feels to be more independent from the other actors and therefore be able to criticise these actors' work? Maybe it is rather an aim to not have any attachments to the particular political or industrial actors, and therefore remain more independent and less influenced, as they could seem if they frequently would be praised by some of those actors?

In connection to the last point, it is important to ask ourselves, whether such influential actors should take an institutionalised place in the similar decision-making like the CCS debate in the future? What would be the benefits of such

institutionalisation? These questions could represent possible topics for the further research in this area.

5.4 Policy window III (2005): Establishment of centre-left coalition Government

According to Tjernshaugen (2010) Bellona is not alone in having the role of policy entrepreneur in this time-line as opposed to previously discussed policy windows. My informants however have experienced that Bellona has had a very strong influence on the CCS case at that time and I therefore concentrate on only the contribution from Bellona.

Before the parliamentary elections in 2005, the possibility for the red-green coalition with Labour, Left Socialists, and Central Party started to be more and more real. However, the gas-fired power controversy still divided the parties and made it difficult to agree on such an important issue; it was especially difficult for the party with the strongest environmental cleavage, the Left Socialists (Tjernshaugen 2007, 171-176). Bellona had worked hard at that time in order to convince the smaller parties to agree on the CCS project and by that achieve a compromise on a very burning issue.

There were two things we in Bellona have done at that point. The first, we have started with convincing the left wing of SV (Left Socialists) that the CCS was a necessarily solution, and not just a political compromise. The leader Kristin Halvorsen did not have the whole party agreeing on accepting the CCS as a compromise. However as I said for Bellona the CCS was rather a necessarily technology for solving the climate related problems. Therefore we have formed the case in the way that the choice has been one side there is a GPP with the CCS technology or one without, and it is not the compromise, but the only

environmentally friendly alternative. Finally SV has accepted that idea, although reluctantly. (Holm, interview 2011)

Nevertheless, the Left socialists have not been the only ones, which needed to be convinced; the other two parties in the coalition were also divided on this issue. At the same time, some industrial actors have started to realize that the CCS technology can be profitable, and not only represent an expense for the government. These actors have considered the usage of CO₂ for Enhanced Oil Recovery (EOR); in that procedure the captured CO₂ could be used as the tool for extracting more oil out of the fields. It has actually been an old concept, which has been brought up by the researchers from SINTEF already in 1986 as an incentive for the CCS instalment (Tjernshaugen and Langhelle 2009, 104). Therefore, when Bellona has produced a scientific report on the usage of CO₂ for EOR with a famous economist Victor E. Jakobsen as a co-author, the main point of the report was to attract the public findings for the CCS project, which was supposed to be profitable in the oil industry returns (Tjernshaugen and Langhelle 2009, 115);(Bellona; et al. 2005).

Holm has mentioned how this report has frequently been used in the elections as good evidence for the CCS profitability:

The second thing we did was to launch a scientific report called “CO₂ for EOR in the Norwegian shelf” to show that CCS could also be profitable to operate in combination with the oil and gas industry. This led Jens Stoltenberg³ to become relaxed and realise that there could also be money made out of this project, which made it even more acceptable. At the same time the bureaucrats from the Ministry of oil and energy affairs and industrial actors had always had a strong belief in CCS; they have therefore mentioned to Stoltenberg “what Bellona says is not a stupid thought. (Holm, interview 2011)

³ Prime Minister candidate for the Labour party at that time; an actual Prime Minister since the election in 2005 to present day.

The report has also played an important role in the elections; I remember we have invited the whole energy and environmental committee along with other important politicians for the seminar regarding this report just few hours before the seminar; the old Bellona office was overcrowded. (Holm, interview 2011)

As a previous vice-CEO of the Foundation, Marius Holm has clearly been very active in the promotion of CCS in the time of coalition creation; his insights are very interesting and show the high level of commitment that Bellona has had for the CCS project for so many years. Holm's reflections over the two strategies that Bellona has adopted at that time, show the influential strength of the organisation but also that they have been aware of that strength and have known how to apply it in order to achieve their goals. The fact that Bellona has known in which way they should influence different parties shows also the deep knowledge in the political life and system of Norway.

To convince Left Socialists, the organisation has had dialog with the party members in order to get the party agree on the issue, which resulted in the party's agreement. The arguments were however environmentally rooted; the organisation has argued that the GPPs would be built in Norway in the future and it was the obligation of the strongest environmental party in Norway to support the only environmental alternative, the CCS technology.

While the biggest party in the coalition, the Labour party, with a long experience of governing and positive views on the fossil fuel industry of Norway, had to be convinced with the other argument. By connecting the CCS to the oil industry, which is the most profitable and successful in the country, Bellona has attracted the industry actors with their reasoning. The confirmation from these industry actors that Bellona should be listened to has helped to convince the Labour party; the possible profitability

of the project has made it even easier for the party to agree on the subsidising of the CCS. The oil industry is partly controlled by the government, what had meant that the subsidies would be returned by the profit from the project directly into the public finances. The last observation illustrates again how realistic approach Bellona has towards the environment; the fact that the ENGO has produced the knowledge, which would benefit the further oil extraction in Norway, is a sign of a “clean fossil fuel activism” presented by Tjernshaugen (2010), which I mentioned in my introduction.

The report, which Bellona produced at that time, was something that politicians have taken seriously, as any other kind of important scientific report or expertise. The example where the politicians come to Bellona in order to take place on the seminar, notwithstanding the short notice, shows the trust the politicians have had in Bellona’s knowledge.

Some time later the project stopped too early with the conclusion that the CO₂ for EOR was not as profitable as many thought; according to Holm (2011) the industrial actors like Statoil and Shell have given up too soon and some people in these companies still regret that haste. This notwithstanding, the political red-green coalition was established in the autumn of 2005, but the negotiations between the parties were long and heavily disputed; the leaders of all three parties had agreed on one thing: the questions of environment versus energy have been the most difficult to agree upon (Tjernshaugen 2007, 181). In the end the decision to include the CCS in the gas-fired power projects has been made and included into official documents of negotiations (Tjernshaugen 2007, 182). Holm remembers how the leader of the LO, the Labour union in Norway, has helped Bellona to lobby on the CCS issue:

LO leader, Gerd Liv Valla, was very occupied with the CCS project and lobbied strongly that it would be included officially into the Soria Moria declaration. We built a powerful alliance with the left side of the labour movement that have agreed on the importance of putting the CCS project on high priorities. I think it had played a central role and has made it easier for Stoltenberg to agree on this project. I remember Valla has been the one, who read the Soria Moria declaration in the end of negotiation; she mentioned five most important future issues and CCS has been one of them. (Holm, interview 2011)

The CCS became an issue in the heavy political spotlight in that year; my informant, who had been present at most of these events in 2005, illuminates the important place Bellona has had in the coalitional negotiations. It was their victory; the case, which Bellona had been promoting for more than 10 years, becoming finally institutionalised into the political sphere of Norway. The most impressive finding in this policy window is, in my view, the interdisciplinary structure of Bellona; their knowledge in technology, economy, politics, and society seem to be the secret of their success.

This was the point where CCS had become a political case officially, as it has been institutionalized as a future policy. Nevertheless, years later the CCS project is still not fully implemented; I will not concentrate on the details of this development, but I will mention some reasons for the postponement in the next part of my discussion. I will next present the most recent time-period, namely 2011; this part of the discussion will consist of interview findings and some media debates, and will be an opening of debate on whether Bellona still keeps its place of a policy entrepreneur in the policy windows regarding the decision-making on CCS.

5.5 The dispute on amine technology in the cleaning procedure of the CCS (2011)

I do not have the same set of tools and methods as Tjernshaugen (2010) and therefore cannot make a conclusion as to whether this dispute can be identified as a policy window or not. However I wanted to include this time period in order to show the changes in recent years, both in the case and in Bellona's activity; I will therefore open for the discussion on how influential Bellona is in this dispute, which can be useful for further research.

According to an agreement between the politicians, the company Statoil and the ENGOS, first a test centre facility would be built for the CO₂ capture at Mongstad and operate from 2010; by the year 2014 the full scale CCS technology was supposed to be completely installed and on-going (Tjernshaugen and Langhelle 2009, 118). That was the plan which Jens Stoltenberg, Prime Minister by that time, had presented in his New Year's speech as the number one environmental aim in Norway, which he compared to the American moon landing due to the ambitions to be the first out with that working technology in the world (Tjernshaugen 2007, 194).

Notwithstanding these ambitious aims, today in 2011 the GPP at Mongstad has already been functioning for almost five years, but the installation of the cleaning technology has been postponed several times due to different reasons. The latest reason for postponement was the company Statoil, one of the companies responsible for the building activities, launched a report on how the cleaning technique with the usage of a special amine technology could possibly cause a risk of cancer for the people living around the power plant (Weiby and Tollersrud 2011). I will not delve into the technical details on how the amine cleaning technology works, but it is one of methods for the cleaning function in the CCS; it is a post-combustion method what means that it removes

the CO₂ gases after the gas is being produced as the energy source (Tjernshaugen 2010, 11).

The report was launched in the February 2011 and curiously for my case caused very negative reactions in the Bellona. In their press release as a reaction on that report, one of my informants Erlend Fjøsna argues that:

Statoil is inflating the risk somewhat brutally here. It appears that they exaggerate the risk to further delay the CCS project as much as possible," he said, continuing that, "Statoil is reluctant to make big investments in CCS technology before it is outright forced to, and the government does not seem to be willing to play hardball. It makes us wonder whether the government really wants to establish a full-scale demonstration plant for CCS at Mongstad.

(Fjøsna in Sæther 2011, II)

The important change that happened since the last time period in my case is that Bellona has become an important actor and a "spokesperson" for the CCS in the European union. As an important member of the Zero Emission Platform (ZEP), an adviser organisation for the European Commission, Bellona is now an institutionalised member of the whole alliance of the companies and organisations in Europe interested in the CCS technology (ZEP 2011, I, II).

My informants also mention their international work:

We do not work just with Norwegian politics; we work a lot towards the EU institutions, mainly through our office in Brussels. Bellona has chairs in several EU platforms and is also a member of the IEA carbon capture and storage regulatory network; we try to be visible everywhere and to influence the political processes at all levels. (Birkeland, interview 2011)

Much happens at the international agenda, we contribute to EUs CCS technology platform (ZEP), we use international platforms to implement things and we cooperate with influential members of parties. (Tjetland, interview 2011)

Bellona has gained a lot of competence from outside of Norway since 2005; their recognition in the European union is a big step forward in creating a very solid knowledge base. Their acknowledgment on the EU level is also seen as an improvement of their work, which is visible to the political, industrial, and scientific actors in Norway; that factor could also have contributed to the reaction from the press on the dispute with Statoil, as Bellona now has access to the international research on CCS.

I worked very much towards the CCS issues on the EU level; the CCS is something Bellona is trying to implement not just in Norway, but also in the rest of the world. The knowledge that Bellona produces has factual foundation, scientific expertise and technological and scientific competence, in face of the researchers like myself.(Stangeland, interview 2011)

As a result, the organisation has become even more confident in their own work and the knowledge they provide, as well as Bellona has become a research facility in some way, as they hire recognised scientists like Aage Stangeland to do the research for them. It again proves a point from the previous time period; Bellona has become a hybrid organisation with the competence in different scientific fields, as well as national and now international politics and economy. This mixture, together with a very well developed communicational skills and networks have made Bellona a trustworthy, competent, and popular organisation.

The work Bellona does on the international level is now institutionalised. It would be very interesting to look at how the publications of the "Power and democracy" report would treat the organisation after these developments; the two publications that

I have presented here are dated before the actual involvement of Bellona on the EU level. However I somehow doubt that the position of the organisation would be reviewed and result in the consistent change; Bellona is still an ENGO among others in Norway, and the unofficial ways of influence are still insignificant for the publications. At last, I have reviewed two policy windows within the time-period of the "Power and democracy" report making; nonetheless the influential strength of Bellona already at that time, the publications have not discussed it explicitly.

As to position it in Norway, there are two sides to it; one can argue that the position has strengthened rapidly due to a bigger knowledge and research base that Bellona has gained from their work in the EU, and therefore has a bigger influential strength on the political decisions, especially regarding the CCS debate. On the other hand, one can rather debate whether Bellona's role could be weakened by moving their priority to the other level, especially due to their official place in the ZEP platform. Does the organisation become a global actor in the fight for environment, and therefore loses the necessity to fight for the less significant internationally issues in Norway? Or rather becomes a more trenchant actor with a bigger scientific base and confidence in the Norwegian political sphere?

In my view though, Bellona had become more confident in their scientific knowledge and their influential strength, by building an even stronger knowledge base, which now includes international expertise. Thus, according to Tjetland (2011), when Statoil sent letters to the Norwegian Ministry on Oil and Energy affairs (OED) with concerns over the lack of scientific knowledge on the consequences of amine technology, Bellona's critical press releases became hot news in the media. Tjetland (2011) adds that the head of the regulatory organ within the environmental policy, Klima og

forurensningsdirektoratet (KLIF), later refuted the issue raised by Statoil. The interesting observation from my informant emphasises most important points:

Take for example the Mongstad postponement issue; if we wouldn't have answered to the letter from Statoil, if we had reviewed it, it wouldn't be an issue and the postponement would have been accepted by the public. We pointed out why the CCS project at Mongstad had been postponed, which processes have happened previously, what information and financial incentives the project managers discuss, in this case Statoil and The Ministry of Oil and Gas affairs. By emphasising those things we create a totally different debate around the issue. Politicians therefore contact us; they ask for our opinion. We would provide them with written information and they use it as arguments in their discussion. It is not like they ask, "what should we say", it is rather "what's your opinion on the issue", because they want our perspective. (Tjetland, interview 2011)

Although Statoil launched their report just in February 2011, Bellona had already answered on 1st of March 2011; the dispute over whether the risk of cancer is real or exaggerated has been visible in the media, and Bellona has been the organisation, which media have referred to frequently. The dispute was even published in the Carbon Capture Journal, where Bellona has been named as the strongest critic of Statoil's reasoning (Carbon Capture Journal, 2011). Nevertheless the press release from the parliament confirms that the CCS project at Mongstad is now officially postponed, because of the health-related risks i.e. the report from Statoil; the financial support for the project for the year 2012 has been also diminished (Olje- og energidepartementet, 2011). Bellona's work however has not been worthless and I will argue that in my reflections next.

I have also noticed how CCS has become the independent controversy since the last time-period; the on-going dispute on the technology is a sign that the negotiations

among the knowledge-makers of controversy is still open, and Bellona is still in the centre of this happening.

My informants conclude their opinions on the organisation:

The combination of good politicians with good scientific experts that Bellona has managed to achieve has made the organisation a very important actor. (Stangeland, interview 2011)

Bellona is excellent in their communicational skills and in bringing their points to very different levels. (Birkeland, interview 2011)

Media is Bellona's most important power channel. (Holm, interview 2011)

Bellona is also a very strong brand! (Fjøsna, interview 2011)

We are both the advisers and critics. (Sæther, interview 2011,I)

All these quotations confirm somehow the reflections I have gained during my research on this case. In the next part I want to summarise my reflections, apply my theoretical knowledge more explicitly to them, and argue why Bellona should be accredited as an important actor and the organisation with influential strength.

6.0 Discussion

With this four-step analysis I wanted to present my empirical evidence, collected through the research of another interpretation of the CCS case, and through interviews. Additionally I wanted to draw my own reflections during each of the discussed time-periods and point out the significance for my case findings. With that, I wished to point out the examples of Bellona's influential strength and the channels that one ENGO like Bellona can use in order to influence the decision-making processes, as well as political and media debates. The aim with collecting these examples of influence and its channels was to argue that one decision-making process, in my case the CCS debate, is a complex event, where the politics and different knowledge-makers, like Bellona, are interwoven and interdependent.

In these processes, I have discovered that the official connections and institutions presented in Bortne et.al (2002) are not the only channels, links and networks which connect the actors like Bellona and the political institutions, industry actors and politicians themselves. I also observed that the issue of expertise and its producers can be more complex and versatile than presented in the Østerud et.al (2003); at the same time I haven't been able to distinct clearly between the political and ideological power in my case as it has been presented in the same publication. I wanted therefore to bring the case where the hybridisation of science and politics found its place and resulted in a complex societal issue, mixing the fields of politics, economy, technology and science.

Here I will list my particular observations and findings, which the publications from the "Power and democracy" report did not emphasised as important or neglected to mention; by bringing these concrete examples to the discussion table, I want to argue that there are much more possibilities and ways to execute a power and influence than

listed in the two publications from the report. By dividing my findings into different categories, I will collect different points from the whole discussion and in this way, illuminate the most significant observations.

6.1 Bellona's values and structure

Organisational values and main ideas have contributed significantly to the way Bellona has influenced the whole gas-fired power controversy in Norway. A realistic, result-oriented and technology optimistic approach has resulted in the positive view on the technology like CCS, which could also be assessed negatively from the environmental point of view, due to its function of prolonging the life-time of fossil fuel industry. Bellona have recognised early the potential of the technology and became its active promoter. It is also worth to mention how the organisation seemed to read political signals very clearly, and realise the GPPs would be built one way or another and therefore put the stakes in CCS, in order to make that political decision more environmental. At last the GPP at Mongstad is up and running, as Bellona have predicted, and CCS is still considered as a future project, although it has a postponed status for now.

In this way the organisational power lies somehow in its approach; all in all the realistic, result-oriented and technology optimistic approach has resulted in Bellona becoming a some kind of insider and policy entrepreneur as Tjernshaugen (2010) calls it. While the other ENGOS have been rather outsiders, possibly because of their rather critical and more ideological approach to the environmental questions. Interesting thing to mention here is, according to Tjernshaugen (2010), that another organisation, which has become significant for the controversy regarding GPPs building, called ZERO, is an organisation which was founded by an earlier Bellona member and which has a basically

similar realistic and technological optimistic approach. This fact emphasises how important these approaches were in the gas fired power controversy in order to influence the debates and decision-making processes.

On the other hand, I also see the impact, which the political and decision-making culture has made on the structure and values of Bellona. As coproduction says, the knowledge-making is an interwoven with the governmental and the political; Bellona's values and understanding of the political world have been a product of that political world in Norway, which is rather realistic and technology optimistic. Nevertheless, hypothetically, if the majority of governmental actors and institutions would have been strictly pro environment and nature preservation in Norway, and therefore against the building of GPPs in Norway, other type of ENGO, with the strong ideology of preservation, would be probably the one to take the influential place in the gas-fired power controversy, due to sharing the same set of values as the government. Consequently, the GPPs might have never been built and Bellona could probably not have been the influential ENGO with its today's values in that hypothetical turn of events.

I also have noticed how their knowledge in different disciplines like politics, economy, technology, society and media, has helped the organisation to build a successful pursuing strategy. In 2005, during the building of the red-green coalition, staff of the organisation convinced different parties with different arguments to support the CCS project. By creating such an interdisciplinary structure, the organisation has built a powerful resource within the official channel of influence like lobbying and also unofficial conversations. This again illustrates the strength and the power of the knowledge and knowledge-making, especially in the interdisciplinary perspective.

6.2 Bellona's rhetoric

The way the organisation has used the media in order to gain the public acceptance is also an important intermediate of power. Firstly, Bellona has contributed positively to the general picture on the gas-fired power plants, which before were called "heavily polluted". The organisation has brought another expression, which would justify the building of GPPs, but only with CCS, and therefore become "pollution free" GPPs. I think expressions like this have contributed positively to the public picture, but also to the opinion among the other parties, especially the ones, which were previously the strongest opponents of the GPP projects. As Tjernshaugen (2010) has emphasised, many party leaders in Norway have changed their view on the issue of GPPs, and CCS represented the main reason for that change, which was again promoted by Bellona.

Another example of rhetoric power is, when the leader of Bellona, Fredric Hauge, made a memorable appearance on the TV debate programme and somehow show the main emphasis of the gas-fired controversy to the issue of heavy pollutions, which would be the result of the GPPs building. In that way, the industry actors' main justification for building GPP in Norway, namely the supply of Europe with cleaner energy from natural gas, has lost its strong value, as Hauge made it clear that the emissions are a negative issue for environment, no matter where in Europe they are produced.

The third example is connected directly with the next category, Bellona as an expert. As my findings have shown, the organisation has co-operated with the best technological environments in Norway, among them SINTEF and Statoil research department, regarding the CCS technology. Bellona has also published different reports, which have later been used as a reference in media and among the politicians. The important point here is how Bellona's staff has mentioned that the organisation has

often translated the heavy technological reports to common understandable language. Consequently the organisation has used its own words, expressions and rhetoric; Bellona had basically the power in shaping the knowledge in their way and make they own emphasises. In the field of STS we have a term called “framing”, which in this case means “paring down complex issues by giving some aspects grater emphasis” (Nisbet and Mooney 2007); thus one can argue that Bellona had a possibility to frame some of the issues in the reports as more important than others, which points out another way of executing the power.

6.3 Is Bellona an expert?

The same observation could be used for debating whether Bellona could be called an expert in CCS. The translation of the technical reports into publicly understandable publications makes Bellona some kind of a bridge-builder between the technological and the scientific, and the political and the public. Looking from Jasanoff’s (2003, 2004) point of view, in the hybrid processes of decision-making, there is definitely room for such a bridge builder; thus one can hardly argue that Bellona’s place in these hybrid processes have not been important and influential.

In recent years, with hiring the important scientists and engaging on the international and global level, Bellona seem to have become an expert in a more traditional view, as would be presented by Collins and Evans and the two publications from the “Power and democracy” report. The organisational work is published in the scientific journals, as well as Bellona has proved itself as an often used adviser by the political and industrial actors and so on; it remains however an ENGO and has not an ambition to become a scientific institute, much to its wish to remain critical and independent. The organisation’s achievement notwithstanding, it does not fit into the

categories of a traditional expert. Therefore I support the criticism of Collins and Evans, provided by Wynne (2003) and Jasanoff (2003) and open for debate, whether it is a time to reconcile the traditional views with reality and review the categorisation of expertise and experts. My case shows how complex the politics in combination with technology and science can be; maybe there is a time to find room and a proper name for the actors like Bellona, or even avoid the categorisation at all, which might help not to overlook the significant contributions of previously invisible actors in the future?

6.4 Some unmentioned channels of influence

The channels of influence that Bellona has used in those time periods like the informal meetings with politicians, participation in the special working groups in the parliament, making of seminars for different political and industrial actors, writing the political proposals, participating in the political debates on the TV, changing the rhetoric around the issue, writing the recognised scientific reports and similar, was not even mentioned in the publications by Bortne et.al (2002) and Østerud et.al (2003). The ones which are mentioned like lobbying, general visibility in the media, participation on the official hearings in the parliament, and writing the summarising reports for the Ministry of environmental affairs, mainly because they are institutionalized in the democratic society of Norway.

The channels of influence, which I have gained through my empirical research, show again that another categorisation of power and influence is preferable, in order to assemble and notice different contributions made by significant actors in controversies and complex political debates. I have noticed how proud staff of Bellona is of their visible and important contribution to the EU and global levels; it clearly gives them the motivation and strength for finding creative solutions to fight for environment. In their

Jubilee Magazine from 2011 they have listed over twenty different ideas and solutions for the sustainable future, backed up with hard scientific facts (Bellona 2011,I). Although out of the information I have got from my informants, an official part in the political processes and recognition is not something Bellona is trying to gain in Norway, there is a need for general reconsideration of the ENGO's role in the state affairs in Norway and other countries.

My end-argument brings me on the international and global level. The contribution of the ENGOs for the environment in the world is indispensable; their role in the actual decision-making is often rather weak, as they do not belong to the governmental institutions. The complexity of the environmental negotiations among the world countries just shows how different industries and interests, which do not favour the environment at all, often prevent the political leaders in the decision-making for the benefit of the nature. Nevertheless, the only voices nature itself has are those environmental movements across the world, which are trying to sustain the environment in different ways. They are not mistake-free themselves, but they are trying to fight for their cause with the help of science, technologies, and ideologies. By institutionalising and incorporating those movements into the decision-making processes, the international and national negotiations would seem more in balance; otherwise these negotiations often seem as the fight against environment than the opposite.

The first step to these complicated changes could be admitting the value and competence of the ENGOs; during the hard years of fighting for the nature, they have become more confident, gained an incredible scientific base, and built the networks all over the world with different industrial and political actors. The examples of the channels of influence, though unofficial, that Bellona has used in the case of CCS, shows

how the organisation uses all the possible measures in order to influence the decision-making in my case. I ask myself, if Bellona has managed to influence the CCS debate, even through unofficial channels, rhetoric use, expertise and science, maybe it is a time to reconsider to acknowledge their influential strength and be fully aware of it?

6.5 Answering the research question

In which ways did the ENGO Bellona influence the case of the CCS technology in Norway?

From the beginning I wanted to answer this question in order to show that there is more to the notion of power in the complicated processes, where politics, science and technology interfere, than a traditional political science describe. Consequently the neglect of other ways of gaining the power and influence, which are not official and institutionalised, in the publications like the “Power and democracy” report, can create a somehow misbalanced picture of the decision-process like my case. In the end these unmentioned ways have been the one, which gave Bellona most of its influential strength and helped to build the confidence in their work. They also show how complex such decision-making processes are and, how all the actors and networks within these processes are interdependent on each other. If I turn to the Jasanoff and her idiom of co-production, in this particular case Bellona has taken a fair role of powerful actor, participating in the hybridised decision-making on the CCS technology.

Although Collins and Evans might have looked at Bellona as not a significant expert, which deserved to be an official part of the CCS case, its influence and strength

has shown differently. By gaining the trust among the politicians and media, crating a strong scientific competence and expertise in so many fields, this organisation has become a part of the CCS political debate. At the same time it proves Wynne's point that one cannot classify experts easily, as by doing so politicians can overlook the important experts, who do not represent scientific world in an traditional understanding. The CCS debate still seems to be in the negotiation phase, as the last time-period shows; there is still no agreed scientific truth on whether the CCS technology is safe and certain. It makes the whole CCS technological decision-making process an open and independent controversy, where Bellona is actively takes a place in negotiations.

During the whole discussion I tried as a true STSer to emphasise the events, in which Bellona has played an influential role. By using the idiom of co-production implicitly and explicitly, I have shown the examples where Bellona has taken an important role as a knowledge-producer. At the same time I have pointed out that Bellona's main values and choices are directly connected to the political world in Norway; they have been co-produced in the set of interactions, many of which have found a place during the time-periods that I have discussed. Conclusively Bellona and political institutions have constantly shaped each other in the process of close interaction during the CCS debate; this is called a process of co-production. In the summary I pointed out some observations, which, if looked from perspective of political science, have not been necessarily important. For my case however each small detail and event have been an important signs of Bellona's heterogenic influential power, although executed through informal and often invisible channels.

All in all, Bellona has influenced the CCS case in many different ways, which I mentioned in summary of my reflections. Some of the most important ones are the usage of a specific set of *values*, like a realistic, result-oriented and technology optimistic

approach, and building a specific interdisciplinary **structure**; strategic use of the **rhetoric** in order to shape the debates in the favourable for the organisation way; being an untraditional bridge-builder between the science and politics and first, and afterwards becoming a new kind of **expert** and therefore trusted actor in the CCS debate; using unofficial set of **channels** in order to influence the whole CCS political debate. I could identify these ways by using co-production; I have with it sought some unusual ways of gaining the power in unusual places in the CCS debate, as Jasanoff (2004) wants us to do. The approach of co-production have taught me to look at all the actors, networks and links in one debate or decision-making process and assess them equally, as they all are contributing to the debates and decision-making processes in different and valuable ways.

At last, there was never a question whether the organisation has influenced the process at all, because my findings together with the studies of a similar case by Tjernshaugen (2010) has shown that Bellona has been influencing the process for many years and continues to do so. My findings helped however to point out most of the ways the organisation have used in the given time-periods, and most of them have been unmentioned in the publications by Østerud et.al (2003) and Bortne et.al (2002) from the "Power and democracy" report. My findings also show that Bellona have taken a place as an important actor, expert and knowledge-producer in the whole political process on the CCS technology according to Jasanoff (2003; 2004) and Wynne (2003), as well as in that process it has been influenced by the values in the political domain of Norway. Others, especially political actors, seldom admit this type of influential power of one ENGO. Co-production points out, that exactly this kind of neglect of important details can result in overlooking important contributors to such decision-making.

However, as I have shown here, it can still be identified with the usage of the interdisciplinary framework, which the STS field gives to us.

6.6 The contribution of this study

As I mentioned in the introduction, the aim of this thesis is two-dimensional. Firstly, I wished to point out how the field of STS often presents the richer set of tools for understanding the complex decision-making processes on the technological and scientific issues. In our modern world most of the political issues are rooted deeply into science and technology, which makes almost every decision-making process complicated in many dimensions. The field of STS, in my case the idiom of co-production, presents an interdisciplinary view on such issues and help to identify often unseen, but still important networks and connections between the actors within the issue. In my case it helped me to identify distinct ways that one ENGO like Bellona can use in order to execute their influential power.

Secondly, I wanted to bring to the attention the influential power of an actor like Bellona. The organisation's competence and expertise had played an important role in the CCS case, which only shows that there are many different actors, which are able to contribute positively to the complex societal and political issues. Nonetheless their status of untraditional experts, their contribution can be as valuable as any other; such actors can play a role of correctors for the institutionalized expert groups as well as for the bad decision-makers. On the contrary, the politicians are out to realise the influence that different actors can have on the decision-making and debates in order to know how to handle them. Especially in the case of mishandling of some political issues it is important to know the full palette of the actors and networks involved and the reasons for their involvement.

7.0 Conclusion

In this thesis I have tried to illuminate the ways in which the ENGO Bellona have influenced a decision-making process, exemplified with the CCS debate in Norway. The main reason for such case study has been the attempt to enrich the view at the ENGOS in Norway, presented in the two publications from “Power and democracy” report, with the perspectives from the interdisciplinary field of STS.

I used the idiom of co-production by Sheila Jasanoff and the critique, produced by Jasanoff (2003) and Wynne (2003), of the contribution by Collins and Evans, which is fairly close to the perspectives in the two publications from “Power and democracy” report, especially in their classification of experts and mechanical view at decision-making processes. Co-production, together with those critical contributions, helped me to identify several ways, in which Bellona has influenced and executed a power in the CCS debate during four different time-periods. These ways are Bellona’s **structure** and **values**, Bellona’s **rhetoric**, Bellona’s role as an **expert**, and the set of unofficial **channels** that Bellona has used in order to influence the CCS debate.

The two reviewed publication by Østerud et.al (2003) and Bortne et.al (2002) from “Power and democracy” report have not mentioned those ways of influence and gaining the power in their work explicitly, which can be somehow explained by undermining the unofficial and untraditional ways of influence due to the report’s roots in the field of political science. Additional explanation could be that the publications have not presented particular cases and debates, but rather concentrated on illustration of official institutions and structures of ENGOS, and their official connections to the governmental institutions. My case of Bellona has in my view showed how important the contributions of such organisation can be, although executed through unofficial ways.

Next step in the research on influential power of the ENGOS in Norway could be the comparative case of Bellona and an ENGO with different set of values. That comparison could throw the light at the heterogeneity of the ENGOS in Norway and present another set of ways of influence and power gaining in Norwegian environmental politics.

Bibliography

Academic sources

- Asdal, Kristin. 2011. *Politikkens natur - naturens politikk*. Oslo: Universitetsforl.
- Asdal, Kristin, Brita Brenna, and Ingunn Moser. 2007. *Technoscience: the politics of interventions*. [Oslo]: Unipub.
- Ashmore, M. 1996. Ending up on the wrong side: Must the Two Forms of Radicalism Always be at War? *Social Studies of Science* 26 (2):305.
- Bellona;, Viktor E. Jakobsen, Frederic Hauge, Marius Holm, and Beate Kristiansen. 2005. *"Environment and value creation": CO2 for EOR on the Norwegian shelf : a case study*: Bellona.
- Bortne, Øystein, Per Selle, and Kristin Strømsnes. 2002. *Miljøvern uten grenser?* Oslo: Gyldendal akademisk.
- Callon, M., P. Lascoumes, and Y. Barthe. 2009. Acting in an uncertain world. *An essay on technical democracy*.
- Collins, H. M., and Robert Evans. 2007. *Rethinking expertise*. Chicago: University of Chicago Press.
- Collins, H. M., and Trevor Pinch. 1998. *The golem at large: what you should know about technology*. Cambridge: Cambridge University Press.
- Collins, H.M., and R. Evans. 2002. The third wave of science studies: studies of expertise and experience. *Social Studies of Science; Vol. 32, No. 2*:235-296.
- Ihlen, Øyvind. 2004. Rhetoric and resources in public relations strategies: a rhetorical and sociological analysis of two conflicts over energy and the environment, Det humanistiske fakultet, Universitetet i Oslo, Oslo.

- Jasanoff, S. 2003. Breaking the waves in science studies: comment on hm collins and robert evans,'the third wave of science studies'. *Social Studies of Science* 33 (3):389-400.
- Jasanoff, Sheila. 2004. *States of knowledge: the co-production of science and social order*. London: Routledge.
- Nisbet, M.C., and C. Mooney. 2007. Science and society. Framing Science. *Science (New York, NY)* 316:56.
- Punch, Keith F. 2009. *Introduction to research methods in education*. Los Angeles: Sage.
- Solomon, Semere. 2007. *Carbon dioxide storage: geological security and environmental issues : case studyon the Sleipner gas field in Norway*. Vol. [1-2007], *Bellona rapport*. Oslo: Bellona.
- Tjernshaugen, Andreas. 2007. *Gasskraft: tjue års klimakamp*. Oslo: Pax.
- Repeated Author. 2010. Fossil interests and environmental insitutions: the politics of CO₂ capture and storage, Unipub, Oslo.
- Tjernshaugen, Andreas, and Oluf Langhelle. 2009. Technology as political glue: CCS in Norway. In *Caching the carbon: the politics and policy of carbon capture and storage*. Cheltenham: Edward Elgar.
- Venturini, T. 2010. Diving in magma: How to explore controversies with actor-network theory. *Public understanding of science* 19 (3):258-273.
- Wynne, B. 1989. Sheep farming after Chernobyl, a case study in communicating scientific information. *Environment* 31 (2):10-15.
- Repeated Author. 2003. Seasick on the third wave? Subverting the hegemony of propositionalism. *Social Studies of Science* 33 (3):401-417.
- Yin, Robert K. 2009. *Case study research: design and methods*. Los Angeles: Sage.

Østerud, Øyvind, Fredrik Engelstad, and Per Selle. 2003. *Makten og demokratiet: en sluttbok fra Makt- og demokratiutredningen*. Oslo: Gyldendal akademisk.

Interview sources

Birkeland, Laelitia 2011: Interview taken on 18.05.2011

Holm, Marius 2011: Interview taken on 18.05.2011

Fjøsna, Erlend 2011: Interview taken on 18.05.2011

Stangeland, Aage 2011: Interview taken on 21.06.2011

Sæther, Anne Karin 2011, (I): Interview taken on 07.06.2011

Tjetland, Gøril 2011: Interview taken on 18.05.2011

Internet and media sources

Bellona 2011: Jubileumsweb, tidslinje. (On-line) Available:

<http://www.bellona.no/jubileum25/index.html> downloaded on 26.09.2011

Carbon capture journal 2011: Bellona- needless postponement at Mongstad. (On-line)

Available: <http://www.carboncapturejournal.com/displaynews.php?NewsID=754>

downloaded on 29.08.2011

Makt- og demokratiutredningen 2011(I): Makt- og demokratiutredningens mandat. (On-line) Available: <http://www.sv.uio.no/mutr/mandat/mandat01.html> downloaded on 26.07.2011

Makt- og demokratiutredningen 2011(II): Makt- og demokratiutredningen – et rammeplan. (On-line) Available: <http://www.sv.uio.no/mutr/rammeplan/ramme01.html> downloaded on 26.07.2011

Makt- og demokratiutredningen 2011(III): Utgivelser av makt og demokratiutredningen. (On-line) Available: <http://www.sv.uio.no/mutr/publikasjoner/publ01.html> downloaded on 26.07.2011

NRK 2005: Dagsrevyen 13.10.2005; Pressekonferanse om Regjeringserklæringen direkte sendt fra Soria Moria hotell.

Olje- og energidepartementet 2011: CO2 håndtering på Mongstad. RNB 2011. Pressemelding fra 13.05.2011, Nr: 48/11. (On-line) Available: <http://www.regjeringen.no/nb/dep/oed/pressecenter/pressemeldinger/2011/co2-handtering-pa-mongstad.html?id=643380> downloaded on 29.08.2011

Skard, Kristian and Ellingsen, Per 2000: Bellona kan redde Bondevik ut av gasskraftfella. Dagbladet 19.02.2000. (On-line) Available: <http://www.dagbladet.no/nyheter/2000/02/19/195363.html> downloaded on 23.08.2011

Sæther, Anne Karin 2011, (II): Mongstad CCS project postponed – again. Bellona. (On-line) Available: http://www.bellona.org/articles/articles_2011/postponed_mongstad downloaded on 29.08.2011

Weiby, Hans Erik and Tollersrud, Tore 2011: “Månelandingen utsettes til 2016. NRK.no (On-line) Available: : <http://www.nrk.no/nyheter/norge/1.7528165> downloaded on 29.08.2011

ZEP 2011, I: Zero Emission Platform; About ZEP. (On-line) Available: <http://www.zeroemissionsplatform.com/about-zep.html> downloaded on 29.08.2011

ZEP 2011, II: Zero Emission Platform; members and sponsors. (On-line) Available: <http://www.zeroemissionsplatform.com/our-members.html> downloaded on 29.08.2011

Appendix 1: Interview guide

1. What is/was your position in Bellona?
2. How do/did you work with CCS in Norway? How long?
3. Why is CCS an important priority for Bellona?
4. Do you feel that Bellona has been an important part of the CCS debata in Norway?
If so, how?
5. Bellona has been creating expertise and knowledge on CCS related issues since 1995. How did Bellona become one of the leading experts and advisor for the political actors in Norway?
6. Would you say that Bellona has played an important role in the political CCS debate, which lead to the planes of "moon landing" in Norway in 2007? If so, how?
7. Bellona is often referred to in the official documents through CCS history, why do you think this is a case?
8. Can you name any time in the Norwegian CCS history where Bellona took a special decisive role?
9. After I have explained what I will try to illuminate in my thesis, do you agree with that Bellona can be seen as an actor, which have influenced and continues to influence political debates and decision-making processes on CCS? If so, why?
10. Can you name a particular case, where Bellona has influenced a political decision-making directly?
11. Is it important for Bellona, to be considered an actor with influence? Why?