actors, interests and values

The norwegian emissions trading system from an institutional perspective

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Declaration

I, Thea Holten, declare that this thesis is a result of my research investigations and findings. Sources of information other than my own have been acknowledged and a reference list has been appended. This work has not been previously submitted to any other university for award of any type of academic degree.

Signature:……..
Date: May 16, 2011

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Abstract

Environmental policy is essentially about distribution. When the institutions governing environmental policy are changed, this will thus have distributional implications. There are different approaches to distributional issues, which can be broadly categorized according to efficiency or equity perspectives. Norwegian climate policy has largely been concerned with effectiveness issues, and the purpose of this thesis is to understand the implications of this for which interests and values that become protected by the Norwegian emissions trading system.

This thesis covers the Norwegian emissions trading process from the early steps in 1998-2001 towards articulating a climate policy including emissions trading, up until the integration of the Norwegian emissions trading system with the EU system parallel to the beginning of the Kyoto commitment period from 2008-2012.

The purpose of my thesis is to understand the relationship between actors, interests and values in shaping the institutional structure, and how the institutions once established influence the actors and their preferences. Through analyzing the Norwegian emissions trading process from an institutional perspective I have been able to reveal the importance of the institutional structure in influencing how certain interests and values become protected.

In this thesis I have revealed how the economic discourse's emphasis on cost-effectiveness has limited the inclusion of more general equity concerns and alternative perspectives. From a constructivist perspective, I explore how the emissions trading system has influenced the actors' preferences and values, and thus which arguments have been perceived as valid.

The main contention in Norwegian emission trading system has been between those who argue that 'emissions trading should first and foremost be an economic tool used consistently to meet an ambitious environmental target in a cost-effective way', and those arguing that 'emission trading should protect the environment while not impairing Norwegian industries and businesses competitiveness'. It can moreover help us understand how the debate has been polarized, at the expense of a broader deliberation of which environmental values we want to support.

Through my analysis and discussion I am hoping to illustrate the implications of this development and furthermore encourage a more critical scrutiny of the established truths protected by the institutional structures one of the central measures of Norwegian climate policy – the emissions trading system.

Contents

List of figures and tables

Figures

Tables

Acronyms

BAT – Best available technology

CDM – Clean development mechanism

COP – Conference of the Parties

EEA – European Economic Area

ENGO – Environmental non-governmental organization

ETS – Emissions trading system

ESA – EFTA Surveillance Authority

EU – European Union

IPCC – Intergovernmental Panel on Climate Change

JI – Joint implementation

MAC – Marginal abatement cost

MEC – Marginal environmental cost

MoE – Ministry of the Environment

MoF – Ministry of Finance

NAP – National allocation plan

NHO – The Confederation of Norwegian Enterprise

NOU – Norwegian Official Report

OECD – Organization for Economic Co-operation and Development

PIL – The Federation of Norwegian Processing Industries

PPP – Polluter-pays principle

UNFCCC – United Nations Framework Convention on Climate Change

WTA – Willingness to accept

WTP – Willingness to pay

1 Introduction

Pollution as a problem arises because of interdependencies; the choices and behavior of one actor will have consequences for the opportunities of other actors. In a world of increasing economic activity and population growth, the conflicts over competing rights to access and use of common goods and resources become more pressing. Deciding about how to approach environmental issues is about choosing among conflicting priorities and values – it is about the distribution of rights and duties. No one has exclusive rights to the atmosphere and this also makes climate policy a highly normative issue: who has a right to pollute, and who should carry the costs? These are issues that any climate policy confronts.

All human activity creates waste. Pollution, such as CO_2 emissions, is a by-product of desired activities including industrial production and transport of both products and people. Traditionally industries and private consumers have been allowed to carry out their activity without much regard for environmental impacts from pollution – especially not global ones (Hanf and Underdal 1998). Potential environmental costs related to economic activity have not been included in the economic models, and as they "appear outside the sphere of defined property rights" (Vatn and Bromley 1997: 1) allocating responsibility is difficult. Emissions have thus proven difficult to regulate. In many instances the detrimental effects of our behavior have not been visible, and it is not always clear who is responsible. With time and continuously increased economic activity the negative environmental impact has become more and more visible however and different strategies have been suggested to reduce such emissions – trade being one of them.

Creating environmental policy is about protecting the environment and this furthermore implies distributing rights and duties, benefits and losses – even more so when a market of tradable emission allowances is introduced. Moreover, environmental governance is about making priorities and making choices among conflicting interests. It is about values and interests. In this study I will discuss in what context and on what premises the Norwegian emission trading system (ETS) has been established, and analyze the implications of this for the preceding debate and how an argument, once it has been accepted as *true*, influences ensuing questions of how we create environmental policies and thus how rights are distributed.

In this thesis I study a core aspect of Norwegian climate policy – the establishing of an emissions trading system. I analyze the content of the Norwegian National allocation plan in light of the preceding process beginning with the work of the Commission on Emission

Allowances in 1998-2000, Proposition No. 13 (2004-2005) *The Greenhouse Gas Emission Trading Act,* its linking to the Kyoto Commitment Period 2008-2012 and finally Norway's formal integration of the EU Emission Trading Directive in 2009. I will analyze the role of the key actors who were involved in the process and which discourses were influential in shaping the final plan. Based on these findings I will lastly analyze the impact of this on how the Norwegian emissions trading system is articulated.

Since the early 1990's the Norwegian climate policy position has largely been founded on economic tenets, cost-effectiveness especially (Nilsen 2001). The position of economic theory in Norwegian politics has influenced how environmental challenges have been perceived and which policy measures have been considered. Economic concerns were especially influential in the decision-making process leading up to the establishing of the Norwegian ETS.

On January 1st 2005 Norway launched a national trade regime for carbon dioxide (CO_2) emissions[1] where the participants could trade in emission allowances to ensure *cost-effective* emission reductions across sectors. Since the initiation of this national trial period from 2005-2007, the second period, 2008-2012, corresponding to the Kyoto commitment period, is now well under way where the Norwegian ETS is part of the European system, fully integrating the Norwegian participants with the EU carbon market. The Norwegian ETS currently constitutes one of the most important measures to meet the reductions requirements set by the United Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol.

I will look at the implementation of the Norwegian emission trading system from an institutional perspective analyzing the relationship between institutions, values, interests and behavior. Before one can discuss and assess efficiency issues, rights must be defined. What is deemed efficient is a function of the initial rights structure. Mainstream economic theory claims that efficiency is independent of distribution thus implicitly protecting the existing rights structure without questioning the implications of this on equity and distribution. If, however, the relationship between efficiency and rights is accepted the important questions to ask become many. Who were involved in the process? Whose arguments were heard? And not least, what was the initial rights structure? In order to answer these questions we must analyze how the institutional structure influences the actors and which arguments that are perceived as valid, that is, which discourse becomes dominant.

[1] Later the system has been expanded to include other greenhouse gases; however, I will focus mainly on the establishment of a CO_2 market as this has also been the primary pollutant addressed by the regime.

Thus it becomes interesting to ask what an emission trading system actually implies, and on whose premises one is talking about efficiency. What are the implications of using emissions trading as an instrument? My objective is to understand the underlying premises that shape the Norwegian climate debate and how this affected the design and distributional effect of the Norwegian emission trading system.

I will begin with a brief historical background to Norwegian climate policy going back to the early 1990's when Norway was establishing her position in the international climate arena. In order to understand subsequent policy decisions it is paramount to establish which actors that have been involved, and which interests and arguments that shaped the early political agenda and how they have been consolidated through the institutional structures created by the emissions trading system. Through a discourse analysis we can ascertain what the main cleavages were and identify what were the prevailing perceptions, points of view and contentious issues shaping the debate about Norwegian climate politics. Essentially, economic principles and thought have had a unique position in the articulation of Norwegian climate policy. The main tenant has been that a cost-effective regime (i.e. a regime based on trade) will ensure the most rational resource allocation and least costly reductions. However, if we accept the institutional economics argument that what is cost-effective is a function of the institutional structure (Vatn 2005; Bromley 1989 and 1991) then we cannot simply accept the former premises as they will be dependent on the structure itself. Following this my main objective is to *identify the main discourse(s) and which power-structures and values it (they) support.* This leads me to my research questions that will emphasize the reciprocal relationship between discourse and institutional structures for what is perceived as valid arguments and efficient solutions;

1. Which actors were dominant in conceptualizing the discourse influencing the emissions trading system?
2. Which dynamics reinforced and upheld the dominant discourse once established?
3. Which arguments won - whose interests and values became protected in the Norwegian national allocation plan?
4. Has the Norwegian emission trading system been perceived as legitimate because it represents equity principles, or because it protects powerful interests?

I will endeavor to answer these questions by first of all describing the early steps towards creating a Norwegian climate policy. I will furthermore analyze the position of the economic

discourse, and how this has influenced the preceding debates and interest constellations in the Norwegian emission trading process.

From a constructivist perspective, accepting that climate policy is a social construct and that we as agents both influence, and are influenced by the structures of society, I am interested in revealing how our understanding of a social phenomenon, such as climate policy, will be greatly determined by our perceptions as agents, and by the social context. This will be the backbone of my analysis and interpretation of the Norwegian ETS, and I believe it will bring out some new and interesting perspectives.

The findings from the Norwegian experience can give insight into circumstances that are specific to the emissions trading process, but can hopefully also be used to make some more general remarks that might be applicable to other policy areas as well. Rational choice models are still dominant, and constructivist approaches are still treated with some skepticism. I hope my discourse analysis can highlight some of the qualities of a constructivist perspective, and the questions it allows us to raise concerning established truths and the institutional structures that protect them.

2 Background

The Kyoto agreement opens up for international emissions trading and joint implementation. These opportunities involve great advantages for Norway. It must be assumed that within few years' time there will be a well-functioning international market for purchases and sales of emissions allowances. The majority see great opportunities for cost-effective solutions across countries if the market is as open as possible (...) If Norway establishes a national system for allowances for important sectors exposed to competition relatively early we will be able to be an active participant in the international allowance exchange at an early stage.[2]

The Standing Committee on Finance and Economic Affairs (1998)

When the Norwegian national emissions trading system entered into force in 2005, it was the culmination of some 15 years of active political engagement and an accompanying interest struggle. The long duration of the process means that while the general principle of emissions trading was laid early, the ensuing bargaining process has been prolonged and open to diverging interests. Nevertheless the initial process of establishing emissions trading as the *Norwegian position* internationally have had great implications for the succeeding process nationally and will therefore be presented as a general background here.

The Norwegian decision to promote carbon trading and joint international efforts, or flexible mechanisms, to reduce CO_2 emissions must be seen in light of the foregoing debate about Norwegian interests and beliefs about what constitutes a rational climate policy. The early environmental policy process has influenced more recent developments and it is therefore important to establish an understanding of the political process preceding the actual object of research.

There are three main elements that are crucial in any understanding or analysis of the process leading up to the Norwegian emission trading system (i) the early agenda setting and the derived policy formulation, (ii) who the central actors were and (iii) which interests they represent. The Norwegian process has been influenced by both domestic factors and international relations and the main challenge encountered by Norwegian policy-makers is to articulate a policy that will be accepted both at home and abroad.

In order to develop an understanding of the early developments and background to the existing emissions trading system, I refer to and interpret existing accounts, mainly the works of Andresen and Butenschøn (2001), Nilsen (2001) and Reitan (1998). Within the limited time available these secondary accounts have given me valuable insight into the early process. Moreover these scholars give accounts for some of the fundamental historical aspects and

[2] My translation

relationships in Norwegian climate politics and thus give me a good background and point of departure for my independent research.

2.1 The early agenda setting

The perceived costs of climate change (…) are related primarily to the country's "energy culture", that is, its historical experience with fossil fuels in relation to its economic growth.

Chasek et.al. 2006: 118

The debate about climate change and subsequent calls for the articulation of a national climate policy emerged in the late 1980's as a result of the work of the Intergovernmental Panel on Climate Change (IPCC)[3]. Their first assessment report was published in 1990 stating that:

We are certain of the following (…) Emissions resulting from human activities are substantially increasing the atmospheric concentrations of the greenhouse gases: carbon dioxide, methane, chlorofluorocarbons (CFCs) and nitrous oxide. These increases will enhance the greenhouse effect, resulting on average in an additional warming of the Earth's surface (IPCC 1990: Executive Summary).

However, more than 20 years after this publication, climate change and especially climate politics are still controversial topics, in part because of its implications for economic development and social readjustments.

In the Norwegian political context there has nevertheless been a broad consensus about the scientific validity of climate change and the need for emission reductions. Hence it has rather been a question of *how* such reductions should be accomplished.

In the early phase Norway supported the creation of an ambitious international climate regime. This was true for several industrial countries and during the 1980's a "green beauty contest among some of the OECD countries" emerged (Andresen and Butenschøn 2001: 351). At this time, Norwegian prime minister Gro Harlem Brundtland was chairman of the UN Commission for Sustainable Development and was perceived as a global environmental minister. Norway experienced a 'green wave' and the general public opinion supported an environmentally progressive Norwegian position. In 1989 Norway had been "the first country to adopt a unilateral stabilisation target by the year 2000" (ibid.; 339) and in 1991 a tax on CO_2 emission was introduced.

[3] The IPPC was established in 1988 by the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP).

Once the economic costs and required readjustments associated with climate change became clearer, a more sober approach was however developed. Within the space of a few years Norway changed from being a fervent advocate of clear commitments into advocating a more pragmatic approach. Only four years after the commission led by Brundtland published what is now referred to as the Brundtland Report, she was one of the first to suggest emissions trading internationally when she addressed the World Economic Forum in Davos in February 1991 (Nilsen 2001).

While the mantra in the 1980's was a call for a radical climate regime , in the early 1990's it became replaced with a call for an international agreement with flexible mechanisms that would ensure *most reductions at the lowest cost*.

Domestically as well, the reality of the costs of emissions reduction created concern. How should the burden of costs be shared? From the inter-ministerial commission that convened from the spring of 1990 until the spring of 1991, it was clear that the main concern to each ministry was to undertake as little as the costs and readjustments as possible (Nilsen 2001). Their work and reasoning resulted in a 'climate report' from 1991 which stressed the need for an international agreement.

The climate strategy should be cost-effective across countries. Because the climate issue is of a global character the harm caused by emissions is independent of where the emissions happen. To achieve cost-effectiveness the reductions should happen where the costs are the lowest, and not be bound by state borders (Nilsen 2001: 132).

At the third Conference of the Parties (COP) to the UNFCCC held in Kyoto in 1997, Norway was "among the few OECD countries to come to Kyoto *without* a domestic target" (Andresen and Butenschøn 2001: 340 my emphasis).

The reversal of the Norwegian position can be understood from two perspectives: a socio-economic concern to ensure emission reductions at the lowest cost for society, or as a hidden protection of national interests. Perhaps it was both: "If the gas argument[4] was accepted, it meant that Norway's 'special circumstances' could justify increased CO_2 emissions, in a global context. On the one hand, this may have seemed as a rather convenient way of packaging national economic interests in 'environmental wrapping'. On the other hand, in rational and economic terms, the argument had an intuitive appeal to it; 'more gas means less coal' – in an international context" (Andresen and Butenschøn 2001: 348). Thus

[4] The argument was that it would be good environmental policy if Norway was allowed to increase her emissions through the production and export of coal to replace coal-fired European industry.

the industrial and economic structure in Norway, which is greatly based on fossil fuels, is likely to have influenced Norway's international position.

Besides the petroleum sector, the greatest contribution of CO_2 emissions in Norway comes from the processing industries. Together, this creates an obstacle to creating an ambitious national climate policy in several ways. First of all as an oil exporter, Norway has an economy dependent on income from oil which continues to be high in demand and provides high profits. Secondly, it is believed to be very costly for the processing industries to reduce emissions without reducing production, implicitly at the cost of local labor and economic activity and wealth creation. Given this relationship it would not only be especially costly to reduce emissions in Norway, but future economic growth was also dependent on increased emissions. Andresen and Butenschøn (2001) refer to this as the 'fossil fuel industrial complex'. Together, these factors made the principle of cost-effectiveness and joint efforts an attractive policy alternative that gained strength during the 1990's.

The first reference to *joint* efforts to reduce emissions found in Article 4 §2 (b) in the UNFCCC of 1992 (ratified 1994) opened up for emissions trading and would later be strengthened and broadened in the Kyoto Protocol of 1997 (ratified 2005) where the three flexible mechanisms of emissions trading, joint implementation (JI) and clean development mechanism (CDM) were included. Together the UNFCCC and the Protocol constitute the main framework for international climate cooperation.

Although there was strong national consensus behind the Norwegian position, it proved more difficult to convince the international community. Initially, the European Union was an emission trading skeptic, and Norway experienced reluctance in most international arenas in the early phase (Nilsen 2001). Within the scope of this paper I cannot elaborate on the international development, however, it is of great interest to my later discussion to note the presence of a more fundamental *moral* debate in the international negotiations, and consequent emission trading reluctance[5].

Although Norway, as a part of the US led group, JUSSCANNZ[6], managed to convince the international delegation to include provisions for flexible mechanisms and emissions trading, the future of the Kyoto Protocol was uncertain and the process of establishing a Norwegian ETS was elongated as a consequence. The initial Norwegian position and the early arguments did however continue to be influential in the subsequent national climate debate, especially regarding questions that concern the distribution of responsibilities among

[5] See for example Raymond (2003) for a discussion on the equity issues related to emissions trading.
[6] Consisting of Japan , the US, Switzerland, Canada, Australia, Norway and New Zealand.

economic sectors and distribution of costs following implementation of environmental regulations. Thus, in order to be able to answer my research questions I believe it is of great importance to understand how the climate debated was shaped during the 1990's. These are all factors that will have influenced and constrained the available policy choices and formulation of a national emissions trading system. I will therefore present the early Norwegian climate debate and describe the main actors and the prevailing arguments that shaped the process.

2.2 Consolidating the economic discourse

Economic instruments have long traditions for being used as environmental policy tools to create incentives which encourage behavior that follows the stated environmental goals. Norway introduced a tax on CO_2 emissions in the early 1990's, signaling that there is a cost related to emissions. The premises behind the CO_2 tax, a *green* tax, are similar to that of allowances: to reduce emission in a cost-effective way. It moreover signals that the polluter should carry the cost of pollution, c.f. the polluter-pays principle (PPP) which is found in the Norwegian Pollution Control Act § 2 – 5.

The early ideas of introducing a cap and trade market for CO_2 emissions was greatly inspired by the American acid rain policy which included a national trading system for sulfur dioxide allowances. When the ideas supporting emissions trading were introduced in Norway, however, they had to contend with supporters of a continued green tax. Both a tax-system and a system of tradable allowances can be cost effective, given that it is implemented correctly. In an emissions trading system, it is the total emissions that are fixed, by a so called *cap*, and the costs of reductions will depend on supply and demand in the market, while a tax assumes a fixed cost, while the emissions will vary.[7]

An initial and recurring theme in the Norwegian climate debate has been the question of reducing emission at home versus joint global reductions. The Kyoto Protocol however explicitly states that emissions trading should be used as a *supplement* to domestic reductions (UN 1998). From a normative perspective it has been argued that the industrialized countries are obliged to reduce emissions at home to demonstrate that they are willing to undergo costly readjustments and thus set a good example, and because they share a historic responsibility for anthropogenic climate change that they have a duty to solve (Chasek et.al. 2006; Raymond 2003). Although China and India have larger emissions in absolute terms, the per capita

[7] For a more thorough discussion on the use of price versus quantities refer to Weitzman (1974).

emissions in Western industrialized countries are still several times larger than in developing countries and economies in transition (Chasek et.al. 2006).

Politicians in Norway have thus had to balance between articulating a climate policy that will be perceived as ambitious by the international community, and one that the national industries, non-governmental organizations and constituencies will accept as fair. It is generally believed that reductions in Norway will be more costly and that international emissions trading will be more cost-effective, that is, ensure greater reductions at the lowest possible social cost.

Reducing GHGs will require vast economic reallocations and social readjustments, especially given the energy-culture in a high-cost country such as Norway. The political process of establishing a climate policy is thus controversial and politically contentious as it affects vested economic interests. The strong support behind emissions trading in Norway, suggests that economic interests have had a strong position. Who the central actors behind this position were and how they were able to strengthen their perceptions and interests in the negotiations will reveal what has been the dominant discourse.

In the initial work to articulate the Norwegian climate policy it was paramount to establish a strong consensus and create a common perception of the challenges posed by climate change, and how reductions should be accomplished. Once it had been established by central political figures that Norway should promote joint international efforts in order to meet the climate challenge, it was in their interest to present this as a policy based on expert advice and commonly held values. This would be more easily achieved through a closed process with few actors involved (Nilsen 2001; Reitan 1998).

Nilsen (2001) argues that economists had gradually established themselves as a powerful group in the Norwegian environmental debate and the principle of cost-efficiency was introduced early and represented a powerful argument that was used in influencing policy formation. In the literature on Norwegian environmental history, the unique role of economists in shaping Norwegian environmental politics is a recurring theme.

The climate debate has involved various political constellations, however, Jens Stoltenberg and the Norwegian Labor Party has played a crucial role in shaping the Norwegian emissions trading position throughout the process (Andresen and Butenschøn 2001). As a labor government their political base is founded on employment policy, strong economic growth and support of local industries. Combined with Jens Stoltenberg's background as an economist, emissions trading in many ways supported already existing political interests. During the 1990's there was also an internal shift from the Ministry of the

Environment to the Ministry of Finance: a shift from environmental regulations to economic instruments and market-based mechanisms (Mathisen 2003; Andresen and Butenschøn 2001; Nilsen 2001; Reitan 1998). Through expert communities and the Ministry of Finance economists have had unique access to decision-makers and to the political process. In shaping the Norwegian position on carbon trade especially Centre for International Climate and Environmental Research in Oslo (CICERO)[8] and Econ[9], played a crucial role in defining the premises underlying Norwegian climate politics. Nilsen (2001: 149) argues that "cost-effectiveness was taken from economic terminology and converted from being a purely academic approach into being a principal criterion for good climate policy."

In the early process the interests of the industries and more general socio-economic interests were convergent and the industry supported the idea of an emissions trading system that could replace the CO_2 tax and allow them to trade with allowances instead. Perhaps one of the reasons why cost-effectiveness and CO_2 trading more specifically gained such impetus in shaping the Norwegian position was its congruity with both political and industrial interests. The respective ministries wanted a climate policy that required as little readjustments as possible for their sectors, and the industries saw an international emissions trading system as an opportunity to secure equal environmental regulations as their international competitors in order not secure their own competitiveness. In face of this, an international carbon trading regime was attractive. As Reitan (1998: 132) remarks: "The industries' wish for international cost-effective agreements was hence an interest-based argument that could be lifted up to and sought legitimized at a higher level".

The expert group did not necessarily have any interests at stake in terms of economic or political means. Their interests were founded on academic convictions and ambitions, and therefore they held an interest in influencing the problem-definition, and they have proved to be a powerful supplier of terms and contributed to establishing a powerful economic discourse in the early process.

[8] The establishment of CICERO was announced by Prime minister Brundtland in 1989. It was formally established as an institution at the University of Oslo in 1990.
[9] Established in 1986 by four economists formerly employed at Statistics Norway

3 Theory – understanding the process behind institutional change

Environmental policies can be understood from various theoretical perspectives. I will base my study on several theories that are overlapping, sometimes supplementary and sometimes competing. I primarily follow an institutional theory perspective, and I will describe the formation of an emissions trading system as understood from the perspective of *designed institutional change*. Covering this, I will refer to mainstream economic theory which can describe some of the main premises behind the CO_2 market based on efficiency concerns, and contrast this with a constructivist approach to institutional change which focuses on interests and rationalities as context dependent. Lastly I will connect the theories of institutional change to governance theory in order to relate the theoretical implications of institutional change more directly to the Norwegian emissions trading processes.

By juxtaposing these different theories I will also underline the importance of theory choice in shaping our understanding of certain phenomena. By choosing any given theory we also implicitly chose to include some explanatory factors, and omit others. The theory we chose will have implications for the conclusion we reach. This is not to say that we must choose *all* theories or *none.* Rather, it should encourage both the researcher and the reader to be aware of the given theory choice and the implications of this.

My epistemological and ontological reference point is first and foremost constructivist. This implies an understanding that there are no 'objective' truths 'out there' independent of us as social actors (epistemology), and that social phenomena and categories are social constructions (ontology). We interpret and give meaning to social phenomena and there is a reciprocal relationship between how we interpret and shape these phenomena and how they, once established, will shape our understanding of them. Thus, phenomena such as institutions and cultures have a reality that shape our perspectives, "but it is not an inert objective reality that possesses only a sense of constraint: it acts as a point reference but is always in the process of being formed" (Bryman 2008: 20).

There are different degrees of being constructivist, and my thesis falls into the category of *weak constructivism,* which accepts the pre-existence of an objective reality that has certain real boundaries and influences the social actors. The constructivist perception of social phenomena is moreover closely related to *discourse analysis*, which "suggests that the social world and its categories are not external to us, but are built up and constituted in and through interaction" (ibid.).

The *issue*, climate change, is a complex and truly global phenomenon. It is a result of social and ecological interlinkages that create a complex coordination problem as climate change penetrates the traditionally distinct areas of jurisdiction. From an institutional perspective, I will argue that the existing institutions also determine how the issue is perceived and which approaches are believed to be appropriate. Thus, introducing a market-based policy will further influence what is perceived as rational behavior and which measures are seen as appropriate in solving the problem.

Reducing CO_2 emissions require vast *structural* changes, implying that it is not the issue itself we are changing, rather the institutions, structures and systems that create behavior that aggregated has a detrimental effect on the climate. Different actors, and the values and perceptions they hold, will influence decisions about policy measures. "We therefore have to accept that whatever institutional structure is formed, it implies the recognition and protection of some interests and the denial of others" (Vatn 2005: 190). How certain actors and discourses have come to dominate the political process will bring us back to the institutional structure that will have included some actors and over time their position will be consolidated and their arguments will be strengthened. Acknowledging that social phenomena are constructed, and including the domestic-international dimension will allow us to examine the impact of broad institutional structures at the international level and how this relates to the domestic processes influenced by the reciprocal relationship that exist between issue, actors and institutions.

3.1 Institutional theory

In this paper I will base my analysis of the institutional structure on the following understanding of institutions as:

> *The conventions, norms and formally sanctioned rules of a society. They provide expectations, stability and meaning essential to human existence and coordination. Institutions regularize life, support values and produce and protect interest* (Vatn 2005: 60)

In this context it is the latter part of this definition that is of specific interest as I will discuss how the preceding decision to establish an emissions trading system influenced the subsequent distribution process. I will argue, in line with the above definition, that the institutional context supports certain values and will produce and protect certain interest. A

combination of institutional robustness and path-dependency implies that the institutional structures and policy choices stemming from a given structure will influence later choices. Moreover, the institutional structures are believed to create and foster norms and values that will influence instrument choice and policy processes. The historical-institutional context influences the establishing of a common understanding of a problem and possible solutions. Moreover, acknowledging this will enable us to reveal any relationship between the arguments favoring emissions trading and how the allowances then were allocated and whose interests the allocation method protected. How environmental policy has been developed traditionally, who the central actors are, what the main interest-conflicts are and which arguments are more powerful, will all influence later policy processes.

Within the institutional structure we can think of the emissions trading system as an institutional structure and resource regime governing the access to emission allowances. A resource regime includes;

> *A property rights structure (private property, common property and so on) which governs the access to the resource, and […] a set of rules concerning transactions over the results from the use of the resource* (Vatn 2005: 252).

Paavola (2006: 94) argues, in line with the institutional perspective described above, that;

> *Environmental governance is best understood as the establishment, reaffirmation or change of institutions to resolve conflicts over environmental resources. It also explains why the choice of these institutions is a matter of social justice rather than efficiency.*

Moreover, Paavola's efficiency interpretation diverges from that of neoclassical economics, which claim that efficiency and distribution can be treated independently. Rather, according to Paavola, as institutional economists also would argue, the choice of institutions will influence whose interests get prevalence and consequently what is deemed efficient. Efficiency is not a mere technical measurement of a standard reference point based on objective criteria; rather it represents a distribution relative to the interest holders' positions and preferences (Paavola 2006). In order to make a fruitful analysis of the efficiency of a regime, it is paramount to clarify what the central arguments have been and whose interests are supported by the institutional structure.

There are different approaches to institutional economics that first and foremost diverge in their view on the reciprocal nature of the relationship between individuals and

institutions. New institutional economists look at institutions as external constrains to individual behavior that do however not influence individual preferences. I will mainly draw on classical institutional theory which takes a social constructivist perspective that emphasizes the interdependence between institutions and actors' preferences and behavior (Vatn 2005). Thus I can open up the discussion to understand how a certain policy is chosen and what implications this has for motivation and behavior. Institutional theory questions some of the main premises behind classical economic theory and opens up for a broader debate about efficiency analysis arguing that the institutional structure will define what becomes efficient (Vatn 2005).

3.2 Designed institutional change

Within institutional theory I will mainly focus on the strand of theory that deals specifically with institutional change as I believe this is well suited in an analysis of the articulation of an emissions trading system. There are two main perspectives on designed institutional change; it can be interpreted either as driven by efficiency considerations or to protect certain interests and values (Vatn 2005). These two perspectives, however, are closely related, and "the distribution of rights and duties is of paramount importance in determining what shall be regarded as efficient resource allocation" as "what is thought to be efficient cannot be defined without a prior judgment about which party to a conflict has (or ought to have) the protection afforded by a right and its correlated duty" (Vatn and Bromley 1997: 137).

In the proceeding section, I will first give a general introduction to some of the main assumptions behind the perspective of institutional change as driven by efficiency goals, and contrast this with the perspective of institutional change as protecting interests. These two perspectives have diverging epistemological outlooks regarding the relationship between actors and institutions, and how we understand what motivates and constitutes rational behavior. I will therefore also include a section on rationalities where I will demonstrate that rationalities can be plural and are context dependent. Thus, institutional change will influence what is perceived as rational behavior and moreover which arguments are accepted as valid.

3.2.1 The efficiency argument

This study is not intended as an economic analysis of the ETS; however some references to mainstream economic theory will be made to shed light on the fundamental structure of the

emissions trading system and the main economic premises that influenced the policy design. From a neoclassical economic perspective institutional change happens as a response to changed income streams (Bromley 1989 and 1991). Henceforth designed institutional change can be analyzed as driven by efficiency concerns.

In neoclassical economics literature, environmental problems have been regarded as 'market failures' or 'externalities', as the full effects of a resource user's actions are not included in the action's price (Raymond 2003). This results in a non-optimal or inefficient resource use. According to economists such as Pigou (1932) and Coase (1960), the best way to reverse this trend, at the lowest socio-economic costs, would be through marked-based policies. Coase argued in favor of establishing clearly defined property rights, while Pigou supported the establishing of taxes in order to get the right marginal cost on the polluting action, thus ensuring optimal resource allocation. This then, would require institutional change.

Within the economic literature there are different efficiency theories, among the classical understandings, we find *Pareto-efficiency*. A situation is Pareto efficient if it is "impossible to make anyone better off without making at least one person worse off. Similarly, a Pareto improvement is a change in resource allocation that makes at least one person better off while not reducing the well-being of anyone else" (Raymond 2003: 35). To understand this perspective we must also understand the main assumptions behind economic theory. The three most important premises are 1) rational actors who seek maximization of self-interest, 2) that preferences are stable and given and 3) there are no transaction costs.

Through the ETS a market for CO_2 emissions has been established to encourage cost-effective emission reductions. A total cap is set and allowances are distributed, either through auctioning or for free (so-called grandfathering) to participating industries. The allowances are made tradable to ensure cost-effective reductions. In the case of CO_2 emissions it is not of importance where the reductions are undertaken as long as the total emissions do not exceed the total cap. This way the emitters will be free to choose whether it is cheaper to undertake the required reductions to meet the emission allowance or to buy additional allowances from firms that are in excess of these. This will ensure that reductions are undertaken first where the marginal cost of reduction is lowest.

According to economic theory, whether these allowances are grandfathered or auctioned will be irrelevant for the final outcome: the cost of polluting will be internalized either as an actual cost or as an opportunity cost (Coase 1960). The core assumptions are that preferences are autonomous and stable, and transaction costs are zero. The institutional

structure will therefore not influence preferences or behavior, and equilibrium will be reached in an open and competitive market without being influenced by the initial distribution of rights. Through market transactions based on willingness to pay (WTP) or accept compensation (WTA), polluters and victims will reach the same level of pollution regardless of the initial rights structure (Coase 1960)

Moreover in neoclassical economics efficiency is treated as a purely technical issue, while distributional questions are political and independent of the economic efficiency concerns. Hence, efficiency analyses can be done based on the existing rights structure assuming that the current distribution is appropriate; otherwise it would have been changed. This follows from the positivist economic tradition that has been aiming to establish economics as an objective and descriptive science (Bromley 1991). Thus efficiency can be analyzed independently from distributional issues. This means that in economic efficiency analyses, questions of distribution and equity are refuted, although, as the critics of neoclassical theory have demonstrated, policy measures claiming to increase efficiency will inevitably have implications for distribution.

3.2.2 Protecting interests and values

From an institutional perspective, the main assumptions behind neoclassical thought are challenged, implying that efficiency is inherently a distributive issue, and that which institutional structures we support will have distributional implications (Vatn 2005; Raymond 2003). The critics of neoclassical efficiency theories argue that institutional change therefore, is foremost about protecting interests (Vatn 2005; Bromley 1989 and 1991).

When we are creating environmental policies in order to regulate access to, and use of a common resource such as the atmosphere, there will be winners *and* losers. Because of existing inequalities both equal and differential treatment will create different outcomes for the different actors. The initial distribution of rights is not irrelevant for what is perceived as en efficient outcome when we accept that transaction costs are greater than zero and that the institutional structure influences preferences.

There will be winners and losers, and this will depend on the institutional structure. Thus, deciding about which institutions we want relates to which interests and values we want to support, and then it is a question of whether these differences can be justified and are perceived as legitimate by society (Raymond 2003). The standard economic argument for cost-effectiveness takes the rights structure for granted and will thus implicitly favor the status

quo. Efficiency considerations protect specific interests and values; hence, understanding institutional change from an efficiency perspective is inherently normative.

The institutional context will have great impact on what is perceived as 'good' policy and which arguments and questions are relevant. However, "a focus on efficiency as a measure of policy success leaves little room for the consideration of equity issues" (Raymond 2003: 29). Thus, once the idea of establishing an emissions trading system is established on marked based grounds, the main concern would be related to the efficiency of the system and not the equity. This supports a strong economic discourse that focuses on the purely economic consequences of the policy, and neglects distributional concerns. The distributional elements are however inherent in any policy limiting resource use and do not disappear although they are not being debated.

The question of who should pay has been addressed by the polluter-pays principle which was first presented in a legal context in 1972 in a recommendation by the OECD which stated the following:

The principle to be used for allocating costs of pollution prevention and control measures to encourage rational use of scarce environmental resources and to avoid distortions in international trade and investment is the so-called "Polluter-Pays Principle". This principle means that the polluter should bear the expenses of carrying out the above mentioned measures decided by public authorities to ensure that the environment is in an acceptable state. In other words, the cost of these measures should be reflected in the cost of goods and services that cause pollution in production and/or consumption. Such measures should not be accompanied by subsidies that would create significant distortions in international trade and investment. (OECD 1992: 13)

The polluter-pays principle represents a normatively agreed upon principle about who bears the responsibility to pay for pollution. The general understanding of the principle is that the polluter has no intrinsic right to emit pollutants. Nonetheless, the various interpretations of the principle illustrate that despite a general understanding of the principle, there are still disagreements regarding the extent of the polluter's responsibilities.

In the context of an emissions trading system this relates to how emission allowances should be allocated, and whether they should be grandfathered or auctioned. The government can choose to say that the atmosphere is state property which society should have equal access to, and that firms may emit but will then have to pay to receive emission allowances. If these allowances are grandfathered, the polluters implicitly have a *right* to pollute. Once this right has been given (albeit not formally) it way prove controversial to restrict this right later.

Which approach is chosen depends greatly on the context in which the PPP is being applied, and how it is interpreted.

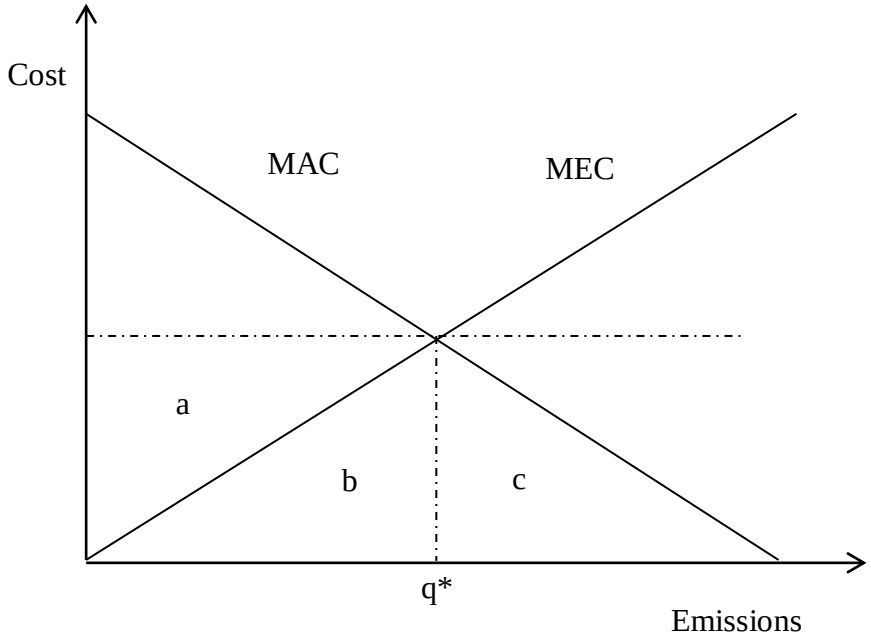

Figure 1 Polluter-pays principle

The MEC-curve represents the marginal environmental cost, while the MAC-curve represents the marginal abatement costs. Under an emissions trading system, the total cap is decided, as illustrated by q* in Figure 1. Whether a strong or a weak interpretation of the polluter-pays principle is applied will have great implications for which interests are protected and how costs are shifted. From a strong interpretation the polluters is expected to cover the full costs to society in addition to its internal abatement costs, that is area a + b + c as depicted in Figure 1. This moreover implies that the polluters do not have an intrinsic right to the atmosphere, but that this right rests with the state which has the authority to regulate its use. From a weak interpretation, the polluters have an intrinsic right to use the atmosphere, which rests on previous use and investments. According to this interpretation, the authorities have a legitimate mandate to establish regulations requiring the polluters to pay for their actual emission reductions, area c, but not for the certified reductions occurring as a by-product of otherwise desirable activity. This issue constitutes the main debate about allocation, namely between grandfathering and auctioning.

The two allocation methods are essentially based on two opposing theories of ownership; grandfathering rests on an intrinsic right's perspective, while allocation rests on an

instrumental right's perspective. How the involved actors understand and apply these two norms of allocation, are likely to create the main contention and influence how the final policy choice is perceived.

In the case of climate change, emission allocation methods will have great implications for who may shift costs upon whom. Whether the allowances are grandfathered or auctioned will determine who has an implicit right to use the atmosphere and who will bear the social costs of pollution. In my analysis I will not attempt to make a normative evaluation of the emissions trading system per se. I will however, discuss the extent of the normative debate in the process leading up to the establishment of the ETS. I will analyze which values that were expressed and which were perceived as legitimate and how this may have influenced the final outcome.

Moreover existing institutional structure, and hence the existing property rights regime, will influence the types of changes we can expect to see because institutions usually are recognized by their robustness, and change will usually time be gradual and greatly based on established norms and conventions. This can explain why, once an argument has been established and a system supporting this argument is in place, it will have vast implications for later changes and other influences. Moreover it illustrates the importance of understanding why and how institutions change.

3.3 Institutions and rationality

If all actors are assumed to be exclusively self-interested with no concern for others, then the public policy goal of making a fair or equitable policy begins to seem ill-conceived or even naïve.

Raymond (2003: 29)

A traditional individualistic rational-choice approach to politics tells us that each actor will seek to maximize its own benefits and interests. If the climate change issue is seen from this perspective, where the involved actors are expected to pursue their own strategic self-interest, the potential for cooperative solutions would be dire.

However, this individualistic perspective on rationality has been challenged empirically and there is much evidence supporting theories of plural or social rationalities, thus refuting the claim that behavior solely should be understood as individual actors motivated by maximizing their self-interest (Vatn 2005; Raymond 2003).

We are also acting collectively following certain norms of behavior that may deviate from strictly individualistic behavior. According to institutional theory, this will depend on the institutional context (Vatn 2005). In certain contexts, such as in market transactions, actors are more likely to think in terms of maximizing individual self-interest, while in a deliberative environment, collective interests may be more strongly protected (Vatn 2005). Consequently, how we chose to solve a political problem, which regimes and institutions we establish will have great implications for how we perceive the problem and how our behavior is motivated. Thus, selecting a policy measure is a normative task.

According to Raymond (2003: 26-27), a norm can be understood as "a socially created rule of behavior that prescribes or proscribes certain actions, often counter to the immediate interest of the actor following the rule".

The argument that gets political support and legitimacy will influence the right structure and what then becomes efficient will be given by this right structure. When we discuss environmental policies therefore, it is paramount to endeavor to understand which norms the actors adhere to, and how these influence the policy process. When rationality is institutionally dependent, "'which action is most efficient' is not only a technical issue. It depends on which rationality and therefore which values one wants to protect. The choice of institution defines this" (Vatn 2005: 136). Thus, the distinction between purely technical efficiency considerations and questions of distribution becomes impossible.

This requires the establishing of concepts of what constitutes environmental equity, which according to Ikeme (2003: 199) in "environmental policy has mainly dealt with distributive issues". There are two main philosophical frameworks that discuss how policies can be justified. They constitute a deontological and a consequentialist perspective.

A deontological approach will claim that "an act can be justified when it adheres to some a priori governing rule, and this alone determines whether or not an action is morally justifiable", whereas in a consequentialist vein, "actions and policies are judged in terms of an aggregate evaluation of their consequences" (Ikeme 2003: 196). Which approach is supported may cause the same outcome, however the reasoning will differ and it will refer to either procedural rights (deontology) or actions (consequential). Economic thinking moreover is usually associated with a consequentialist framework. According to this position, for a policy to gain the necessary support enabling it to cause institutional change, it is paramount that it ensures an equitable outcome. Agreeing on what constitutes an equitable outcome, however, is not an easy task.

The interests of the dominant actors will influence the process and which arguments gain most weight and thus become perceived as most valid. Given that environmental governance is about choosing among competing interests, how the different actors argue in order to gain leverage for their interests is key in understanding the process behind designed institutional change. The different actors will each have special interests that they present through various arguments in order to present their view as it were in the common interest. Behind the diverging argument there will implicitly be a conviction that this is the *better* argument. Hence all the arguments are based on normative grounds although used to serve different interests.

> *In order to understand environmental policies we must therefore know not only the structure of the problem, but also the basic values and beliefs through which it is 'filtered', as well as the structure of the political system and the dynamics of the political processes through which policy is shaped and executed* (Underdal 2000: 59).

Both existing institutions governing the policy process and the resource regime will influence who the central actors are and which arguments that are perceived as valid and relevant (Vatn 2005; Bromley 1989 and 1991). This leads me to a central element in this study, namely to understand the implications of the institutional structure on our understanding of the climate issues we are facing. Through identifying the dominant discourse that influences institutional design, I hope to encourage the reader to be critically aware of the importance of the construction of meanings in shaping our understanding of both policy issue and policy measures, and perhaps find ways of overcoming structural dynamics that omit important issues of distribution and equity in environmental policies.

While mainstream economic theories render the vested interests structurally invisible, an institutional approach encourages scrutiny of the relationship between institutions, efficiency and interests. Emission trading cannot simply be understood as a neutral tool aimed at achieving an objectively defined goal. On the contrary, it represents a certain perception of the world and how we should behave and act accordingly.

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3.4 Implications for the Norwegian ETS

Issues that have traditionally been national matters are becoming influenced by international politics through climate change. Climate change challenges the sovereignty of the nation state by demanding structural changes well beyond the classical realms of foreign affairs. Two

decisive explanatory factors behind the Norwegian position and the arguments supporting it are the dynamics of domestic politics and the international structure. Domestic politics are likely to shape the fundamental position, while the international, especially EU, dynamics will influence the final feasibility of the chosen policy. The challenges raised by global climate change are unprecedented in both complexity and scope (Raymond 2003). They thus require a fundamental rethinking of how international and domestic politics interrelate, and how these changing dynamics require us to constantly revise which interests and values should thrive, and whether we want the policy arena to be dominated by pure interest competition or communicative processes (Vatn 2005). The institutional structures we create will influence this development and thus implies that it should be reasoned over.

Traditionally, the economic discourse has been influential in shaping Norwegian climate policy. Internationally, the anarchy-discourse is prevailing. Together these two interpretative repertoires are likely to influence both state and non-state actors and encourage strategic behavior which weakens the prospects for cooperative environmental behavior.

Thus despite early Norwegian efforts to initiate an ambitious and unprecedented emissions trading system, the proceeding debate based on the character of the regime and the institutional structure, will be driven by the 'same old' reversed incentive structure where each participating state will be encouraged to seek a less ambitious regime in order to protect national interests. Instead of fostering a deliberative environment where the member states are encouraged to think in collective terms, the emissions trading system fosters competitive and self-interested behavior.

This is supported by the social constructivist tradition which "emphasizes the effect of regimes on the perspectives and interests of the participating individuals, on their possibilities to communicate and willingness to cooperate. The position is taken that the regime not only influences the formal rights structure. It also influences the understanding of the problems involved, and the kind of norms and routines applied" (Vatn 2005: 252-253). In the same vain I will argue that when creating a complex technical emissions trading system to govern CO_2 emissions based on market mechanisms, the main premises for the proceeding bargaining process are laid. Hence, given that an emissions trading system would be established, this institutional structure is likely to influence the Norwegian process in the following manner: the Norwegian policy and goals will be greatly influenced by the instrument choice. When the aim has been to establish a Norwegian emissions trading system to be integrated with an EU ETS this implies that the two main factors influencing the Norwegian process will be instrument mechanisms (economic) and policy context (European). According to institutional

and governance theory it is believed that both these factors will influence Norwegian policy formation. When an economic instrument is chosen, the behavior and solutions are likely to follow an economic rationality. Following the theoretical approaches outlined above there is reason to believe that the ETS process in Norway would strive to protect the interest of national industry and its competitive position and moreover that this will be so because of the position of the industry and their reasoning strategy and bargaining position.

In this thesis I will analyze the role of *efficiency* and *equity* norms in influencing the emissions trading process. My perspective will be based on the claim than any environmental policy choice is inherently normative, and will create distributional changes. Through analyzing the political discourse I am hoping to reveal how these issues have been treated by the involved actors and which arguments have been used to justify the various interests and values. I will illustrate why, in reality, efficiency and equity essentially are intertwined and that any distinction becomes meaningless to make. Essentially the efficiency argument is just as normative as an argument for fairness thus blurring the distinction. Then it becomes interesting to discuss how the efficiency argument has been established as a non-normative and value free argument and what the implications of this is for its strategic use and validity.

Norwegian environmental policy traditionally has been heavily influenced by efficiency concerns, and the environmental regimes that have been developed are designed to facilitate market-based transactions of environmental goods. I am hoping to reveal how this dynamics influence the involved actors and whether the strong economic discourse will inhibit any social or communicative rationality and reduce the process to a pure strategic interest struggle. Or could the characteristics of environmental interlinkages create a social rationality fostering communication, so that the process will be "about reasoning together about which solution should be sought for the collective sharing of the common good [and] about developing, criticizing and testing arguments concerning which norms or behavioral rules should be supported" (Vatn 2005: 125)?

4 Method

In my thesis I will be analyzing the political process of establishing a Norwegian emissions trading system I order to answer my research questions. Thus the objective of my research is a specific phenomenon and I have consequently chosen an overall case study design. In the process I have found it useful to combine different methods to gather the necessary data.

I have conducted my research using qualitative research methods. The complex relationship between the dynamics of politics, actors' interests and preferences and institutional structure furthermore makes grounded theory a suitable tool to understand the interrelated characteristics of a climate policy process. Moreover, I found it appealing as I as a student have an interdisciplinary academic background from an interdisciplinary environment with knowledge of different disciplines and corresponding methodological and theoretical approaches. Grounded theory supports the more open and exploring character of my research question and moreover allows me to generate theory close to experience and may give me and the readers a deeper understanding and description of the Norwegian emissions trading process (Johannessen et.al. 2004).

I will not necessarily establish a new theory in the strictest sense but rather I hope to arrive at a *substantive theory* (Bryman 2008). This means I will draw on existing theories and explore ways of combining them in order to reveal new perspectives on the relationships I study. I have endeavored to confine my focus in order to get a thorough description of the phenomenon. Therefore, seeing that the emission trading process is complex and multi-faceted, I have chosen to divide it into three distinct phases that are represented by clearly defined events, yet are part of and related to the continuous process towards the final policy outcome, namely the national allocation plan regulating the current Norwegian ETS.

I believe it is important to begin with the earliest, yet more specific, work which debated alternative allocation methods in order to answer my first research question;

1. Which actors were dominant in conceptualizing the discourse influencing the emissions trading system?

I begin my analysis with the work of the Commission on Emission Allowances which was appointed in 1998. I have identified the key actors and analyzed the arguments they put forward throughout the process in three rather distinct phases. I will assess and compare the

developments throughout the three main phases leading up to the formal integration of the Norwegian and EU emissions trading systems to answer my second research question;

2. Which dynamics reinforced and upheld the dominant discourse once established?

I refer to these phases as the events surrounding 1) the Commission on Emission Allowances, 2) the Greenhouse Gas Emission Trading Act, and 3) the national allocation plan.

Through analyzing my findings and answers to the two foregoing questions, and comparing the recommendations from the first phase with the final Act regulating the emissions trading system under the Kyoto commitment period from 2008 until 2012, I will be able to answer my final research question;

3. Which arguments won - whose interests and values became protected in the Norwegian national allocation plan?
4. Has the Norwegian emissions trading system been perceived as legitimate because it represents equity principles, or because it protects powerful interests?

4.1 Collecting the data – qualitative research and interviews

My primary sources of data have been official documents, supplemented by interviews. Following a grounded theory approach I have conducted a form of purposive sampling, namely *theoretical sampling* as a means of collecting my data. As opposed to random sampling, this does not allow me to generalize to a population (Bryman 2008: 415). This has however not been the purpose of my study as I have sought in-depth understanding of a particular contextual phenomenon.

Theoretical sampling has allowed me to keep sampling data throughout the research process as I have gained a deeper understanding of the emissions trading process. Moreover, the ability to strategically choose samples relevant to my research question enabled me to avoid unnecessarily large samples that would turn out to be redundant. Consequently I cannot boost a large sample size but through the process I have discovered subtle relationships and finally arrived at a more refined understanding of the Norwegian climate policy process related to emissions trading.

My sampling has henceforth been a dynamic and ongoing process that has led me to various sets of data. My written sources have been both primary and secondary. In the early

stages of my research I conducted unstructured interviews in order to get a broad understanding of the topic and get advice on issues that could be of interesting to my research. At later stages I chose to conduct semi-structures interviews dealing more directly with my research questions.

The official documents I refer to are open sources and I have accessed them through the official Government and Storting webpages. As it is the Norwegian Ministry of the Environment who has been responsible for the articulation of the legal propositions leading to the final Acts regulating the emission trading system, it has been natural to consult documents published by the ministry related to emissions trading. These documents reflect both the Government's more general environmental policy, and the professional and bureaucratic perceptions within the ministry. Moreover, through the related official consultations, affected actors have been able to express their opinions. These documents therefore provide an important insight into the process and reveal the different actors' diverging arguments and interests.

However, these documents will not reveal the more subtle antagonisms and may even conceal some of the underlying interest struggles. Internal governmental and ministerial conflicts are omitted and the documents portray a unified voice. In order to understand these more elusive relationships I have conducted semi-structured interviews with representatives of some of the centrally involved actors. I contacted the relevant actors throughout the process as it became clear who had been mostly involved and it which phases. This has enabled me to study the documents more critically based on the insights shared by the interviewees.

Thus, being aware of the official documents' omissions becomes an interesting object of analysis in itself: it makes us aware that an argument is always chosen at the expense of a different argument, and that this diverging perspective is not irrelevant. All classifications will be at the expense of some other classification or definition, and who manages to get their definition widely acknowledged as science or truth is related to power. Acknowledging that knowledge is socially constructed encourages us to scrutinize where this knowledge is derived from and what implications this has and raising awareness so that certain truths do not become structurally invisible.

I have consulted the Norwegian Official Report 2000: 1 *A Quota System for Greenhouse Gases* drafted by the Commission on Emission Allowances, White paper No. 54 (2000-2001) *Norwegian Climate Policy*, and White paper No. 15 (2001-2002) Amendment to White paper No. 54 (2000-2001) *Norwegian Climate Policy* , the proposition and consultation process related to the Greenhouse Gas Emissions Trading Act of 2005 and the Amended

Greenhouse Gas Emissions Trading Act of 2007, and the Norwegian National allocation plan (NAP) for the Emissions Trading System in 2008-2012 (March 2008) and its revised version (December 2008).[10]

The interviews were semi-structured around the same main questions to allow me to undertake comparisons across the different interviews. At the same time it was important for me to create an informal setting and allow the interviewees speak more freely about the topic. I believe this structure worked quite well as a means of creating openness between me and the interviewees and enabled me to touch upon more controversial topics with more ease. At the same time the underlying semi-structure ensured that the central topics were not overlooked and that at the end all the interviews had touched upon a certain set of common questions that allowed me to compare across the interviews.

I chose not to record and transcribe the interviews; rather I took notes and reviewed the interviews shortly after in order to elaborate on my draft notes. I chose this approach for two main reasons. Firstly I only began conducting interviews as I was proceeding with my research and it became clear who were actively involved in the process. Most of the interviews were consequently undertaken quite late in my research process and I would not have the time available to listen to the recordings and transcribing them. Secondly I felt more comfortable taking notes and believe this also created a more informal atmosphere and natural flow to the interviews. Only taking notes of course limits the reliability slightly and increases the risk that information is omitted or distorted. However, to ensure that my recollections and references were in accordance with the informants' understanding of what had been said, I gave them the opportunity to review the sections where they have been quoted, and make remarks if desired. I believe this practice worked quite well and that the data from my interviews represent useful and interesting results for my analysis.

I encountered two main challenges when conducting the interviews: 1) the interviewees had extensive knowledge of the different arguments and the complexities of the emissions trading process. The respondents thus provided me with valuable insights, but also made my task of identifying concealed special interests more difficult. With all of my interviewees I experienced being immediately convinced of their perspective and understanding of the process. However, as I analyzed the interviewees' arguments in retrospect and with more distance it became easier to assess them more objectively. 2) The relationships and contentions I was especially interested in revealing are still controversial

[10] I have used my own translations of the Norwegian official documents, articles and interviews. Where the original is in English, this will be acknowledged.

and regarding certain issues the interviewees were reluctant to share their insights. They nevertheless gave some indications of what the central antagonisms were and together with the written sources at least I was able to draw some assumptions that I believe to be reasonable. The deductions made by me have furthermore been accepted by the interviewees to ensure their validity.

A last source I have used in order to gain insight of the views of one of the leading actors influencing the initial references to emissions trading, the policy process and implementation, current Prime Minister Jens Stoltenberg, is the book *The Climate Paradox. Jens Stoltenberg about our time's greatest challenge*[11] where journalist Kjetil Bragli Alstadheim (2010) interviews Stoltenberg about his role in the political process and his perspective on climate change. The book is not an academic account; rather it presents climate change in an accessible manner to a broad audience. From this perspective it is interesting because although the arguments are simplified and the more complex issues are excluded, it is interesting to see exactly which perspectives and controversies Stoltenberg has chosen to omit. This can be interpreted to be the more controversial and contentious topics. I have consulted mainly the section "Price the climate"[12] where they discuss emissions trading.

4.2 Research method – discourse analysis

When analyzing my data in order to answer my research questions I have applied *discourse analysis*. This approach to both written and oral data is appropriate when endeavoring to reveal how interests and arguments relate to a political process. Discourse analysis follows a tradition greatly influenced by the works of Foucault (1972) who refers to a discourse as a linguistic conceptualization of our surroundings and how we depict them which represents how we then comprehend these surroundings. There exist a multitude of discourses relating to the same phenomena, however, one usually gets more influence and this discourse will come to constitute the very phenomenon itself. Through applying discourse analysis the researcher can reveal critical relationships between power and knowledge that are embedded in the leading discourses. According to Foucault, "Ideas are not powerful because they are true (..) they are true because of power" (Foucault as sited in Robbins 2004:109).

[11] My translation. Original title in Norwegian: "Klimaparadokset. Jens Stoltenberg om vår tids største utfordring"
[12] My translation of the Norwegian subtitle "Sett pris på klima"

Bryman (2008: 499) uses an example of mental illness to illustrate how discourse analysis can be applied, which can be applied to climate policy as well: "a certain discourse concerning [climate policy] comes to make up our concepts of what [*good* climate policy] is, the nature of the problem, how it should be solved and who is legitimately entitled to solve it. The discourse then becomes a framework for the justification for the power of actors concerned with [climate policy] and for its policy regimes." It is this framework I am seeking to understand because this will influence who the dominant actors are, how they present their interests and finally which interests, or discourse that becomes most powerful in influencing policy. Within a certain discourse the actors may moreover develop various *interpretative repertoires* in order to justify their acts and legitimize their perspective. These repertoires may be competing or sometimes even contradictory, but nonetheless reveal the actors' internal justifications (Bryman 2008; Johannessen et.al. 2004).

Discourse analysis has been accused of being too relativistic (Johannessen et.al. 2004). However, I believe this weakness with discourse analysis is less persuasive as I prescribe to a weak constructivist theoretical approach. This accepts a pre-existence of the objects and phenomenon of study, but focuses on the construction of its classification and validation. It is therefore important to clearly define the context in which the phenomenon I study is situated and proceed to analyze the reciprocal relationship between phenomenon and context through a discursive approach. Constructivism from an epistemological perspective, as a theory of knowledge, follows a tradition claiming that phenomena and institutions develop in social contexts, and discourse analysis allows me to critically analyze the implications of this.

Most of my written data and all of the interviews are originally in Norwegian. Using a research method where the meaning of language has such a central position has been challenging. For instance the terms 'sosialøkonomi' and 'samfunnsøkonomi' are used frequently when referring to what is generally translated as *economics* in English. However, I believe this expression fails to fully capture the connotations embedded in the Norwegian terms. Therefore I have chosen to use the English term *neoclassical economics* in order to emphasize its more traditionalist implications. Another interpretive challenge has been the Norwegian use of 'hensyn' to mean both *considerations* and *interests,* which I believe are not direct synonyms. In my translations of 'hensyn' I have therefore used both *considerations* and *interests* based on my interpretation of the implications of 'hensyn' depending on the context.

I believe that research criteria such as *external reliability* and *validity* are not necessarily the most appropriate means to judge the validity of my findings. This being said, alternative criteria exist. I have applied the use of *respondent validation* when giving the

informants the opportunity to revise the references I have made to them in the thesis. This way I have sought to confirm that my findings and impressions are congruent with the views of those I have interviewed (Bryman 2008: 378). I received no negative feedback and no changes to my original quotes and references were made. I have also applied *triangulation* by means of consulting more than one method and several sources of data, thus enabling me to approach the phenomenon from different perspectives (ibid.).

Lastly, from a constructivist perspective, my research is not intended to reveal the absolute truths about the Norwegian emissions trading system, rather it represents one of several possible accounts and perspectives of this socially constructed phenomenon.

5 Documenting and analyzing the process

In my research I have identified who the key actors are and which interests and values are embedded in their arguments. In the discussion I will therefore analyze the implications of the various actors' positions in shaping the discourse development, and who have been able to establish a hegemonic discourse. In the same vain I will analyze how the dominant discourse has been consolidated to strongly influence how we perceive the emission trading system and which problems it should solve and how. During my research process it has become evident that the different actors involved have different understandings of both what the goals of climate policy should be and what the best means to reach those goals are. These perceptions represent different discourses and moreover different interpretative repertoires.

I have chosen to divide the process leading up to the formal integration of the Norwegian and EU ETS into three main components. The first phase relates to the work of the Commission on Emission Allowances which commenced in 1998 and ended with an official report published in 2000 (NOU 2000: 1). The second phase refer to the process of articulating the Greenhouse Gas Emissions Trading Act (2005) and its later amendments, and the last phase deals with the design of a Norwegian National allocation plan (2008), its revision and finally the legal amendments made to harmonize the Greenhouse Gas Emissions Trading Act with the EU Emissions Trading Directive and meet reduction requirements under the Kyoto commitment period from 2008-2012.

In my analysis of the three phases from the Commission on Emission Allowances until the articulation of a Norwegian national allocation plan, I refer to sources such as official documents and consultations, my interviews, and newspaper articles and features. Which arguments gain weight is influenced by several factors and is a result of complex dynamics and processes. I therefore structure my analysis around the general chronological direction in order to contextualize how the central actors have emerged and become positioned and how this has influenced the impact of their perspective. Throughout the process it will also be clear how a dominant discourse has developed, and how this has influenced the final outcome.

5.1 A Quota system for greenhouse gases and Norwegian climate policy, 1998-2001

There will be differential treatment, either way.

Peer Stiansen, Commission member (pers.mess. 2011)

What I consider the *first phase* relates to the work of the Commission on Emission Allowances (later referred to as the Commission) which commenced in 1998 and published a report in 2000 (Norwegian Official Report, NOU), and the White paper No. 54 (2000-2001) *Norwegian Climate Policy* that established the position of emission trading as a future climate policy measure.

A Commission is appointed by the Government to give a thorough report on a certain issue and its recommendations are usually used by the Government to prepare a paper or proposition to the Storting (Parliament) who have the mandate to pass this as law (Stortinget 2011). I have therefore chosen to include the White paper No. 54 (2000-2001) *Norwegian Climate Policy* in this phase as it was the immediate outcome of the Commission's report, and also represented a step towards the suggestion of a Greenhouse Gas Emission Trading Act which is the cornerstone of the *second phase.*

The Norwegian Commission on Emission Allowances was appointed by Royal Decree in 1998[13]. Their task was to give an independent assessment of an emission allowance system as an instrument to meet the reduction requirements under the Kyoto Protocol. An important feature of this phase was that the future of the Kyoto Protocol was still very uncertain, and there was strongly voiced international skepticism towards emission trading, especially within the EU. Norway was at the time in a process of ratifying the Protocol and was part of the international coalition encouraging Kyoto ratification and emission trading. The early work of articulating a policy for emissions trading in Norway was based on the likely ratification and implementation of the Kyoto Protocol. Nevertheless, it was initially articulated as a national system that could be linked to a European and international system depending on the respective developments.

When the work to appoint a commission on emission allowances commenced, the main premises were already laid: market-based mechanisms were believed to be appropriate climate policy measures that would ensure cost-effective compliance. Thus the Commission

[13] Under the first Bondevik Government (October 17 1997 – March 17 2000), a coalition of the Christian Democratic Party, Center Party and Liberal Party

would assess how an emissions trading system could be designed and implemented in order to ensure that Norway would meet her climate policy goals cost-effectively. As consensus had already been reached regarding the core premises behind the Norwegian climate policy, the question was not whether emission allowances should be allocated and traded or not, but *how.*

The mandate given to the Commission emphasized that cost-effectiveness and steering-effectiveness would be the main guiding principles. The mandate also underlined 'other concerns', which I will discuss later, which led the Commission to remark that there might be conflict between different goals and concern. An example was the question of how allowances should be allocated (NOU 2000a: 6).

The Commission's understanding of cost-effectiveness was "that an environmental policy goal, in this context the Kyoto commitment, is achieved at the lowest cost to society." They furthermore stated that:

The impact on the climate is independent of where the emissions are taking place. A global cost-effective reduction of GHG emissions implies that the emission reductions take place in the countries where it costs the least, in those businesses and industries where it costs the least and for emissions of those GHGs that require the lowest costs to reduce. Cost-effectiveness is achieved when it is not possible to reallocate emissions between countries, industries, businesses and GHGs without an increase in the total costs (NOU 2000a: 86).

In order to evaluate how emissions trading should be designed and implemented in order for Norway to meet her Kyoto requirements, the Commission focused on the following issues (NOU 2000b[14]):

- main features of the quota (the emissions certificate)
- scope of the system (which emissions should be included)
- selection of legal entities subject to regulation by quotas
- allocation of quotas
- liquidity and organization of the quota market
- application of the Kyoto mechanisms
- phasing-in the quota system
- reporting, controls and sanctions
- legislative framework for the quota system

[14] English summary of the report

I will argue that although, from a conceptual perspective, it makes sense to distinguish these issues as separate, in reality they are highly interrelated. Especially the three elements, *scope*, *legal entities,* and *allocation,* are closely related. Common for these issues is that they will influence distribution of rights and duties and economic gains and losses for the industry. These issues thus represent the questions that are the ones most likely to cause distributional changes and thus revealing conflicting interests. The emission allowances represent millions of Norwegian kroner (NOK) in economic assets and thus the scope, legal aspects and allocation rules will have great implications for an industry's economic gains and/or losses. The former two will define who is included in the system and will have access to the allowances. The latter determines whether the companies included have to pay for the allowances or will receive them for free. This of course is of great importance for a company's decisions regarding existing operation and future investments. For companies that are facing international competition it could mean a threat to their competitiveness if they are faced with stricter requirements than their competition. And for potential investors it could exclude Norway as a country to invest in. This could ultimately lead to decreased industrial production and economic activity in Norway with a corresponding or increasing activity in countries that have more lenient, or non-existing, environmental requirements.[15]

Thus the Commission's recommendations and treatment of these issues would be of great importance to Norwegian companies and industries, and the process surrounding the Commission's work will be influential in answering my research questions regarding who the key actors were and the how their position influenced the arguments in the emerging process.

The commission was led by Eva Birkeland, an economist from Statistics Norway. Its memebers, Nina Bjerkedal represented Ministry of Finance, Lars Erik Aamot Ministry of Petroleum and Energy, Peer Stiansen Ministry of the Environment, Bent Fester Sunde Ministry of Trade and Industry and Ingun Hagesveen Weltzien Ministry of Transport and Communications. Anders Haugestad was a district court judge, Gerd Halmø came from Statoil, Øystein Dahle was Chairman of Worldwatch Institute Norden, Cathrine Hagem is also an economist, at the time she was working at Cicero, and Professor Micheal Hoel came from the Department of Economics at the University of Oslo.

[15] This is the phenomenon referred to as *carbon leakage* as the alleged emission reductions in Norway are offset by increased global emissions. An underlying debate is whether the threat of carbon leakage is real. Those supporting a more pragmatic approach will claim it is, while those arguing for a strict adherence to economic models, will claim that it is either exaggerated, or that it is the economically sound change in the economic structure.

Members who represented different ministries emphasized that in the Commission they were participating as professional advisors and would not express political ambitions on behalf of the Government. It is nevertheless reasonable to assume that their views resemble the professional perspective of their department relating to use of policy measures and implementation strategies. Thus, from such a perspective they can still be seen as representatives of a certain knowledge and value perception.

The two ministries that had been most involved in the early process leading to the Commission on Emission Allowances were the Ministry of the Environment (MoE) and the Ministry of Finance (MoF). These two ministries represent two fairly different working cultures and have a tradition for favoring different political measures. In relation to environmental policies the MoF generally supports the use of economic instruments either through taxes or quotas (allowances), while the MoE is generally known to favor regulations. It was the MoE which received the final report from the Commission, and emission trading is essentially within the *environmental* policy realm. Nevertheless, its economic character and the penetrating nature of climate policy into the economic and socio-political spheres of jurisdiction have contributed to an extensive involvement of the MoF. Peer Stiansen (pers.mess. 2011) confirms that because of the large economic value of the allowances, it is 'bound' to become a state budgetary question. Other than acknowledging this, he was reluctant to discuss how the different ministries were involved in the process and how this might have influenced the outcome.

It is difficult to access internal debates within a ministry, and between different ministries. Although it is fair to assume that there have been internal and intra-ministerial differences and debates, it is clearly in the interest of the Government that the views of the different ministries are received as consistent and fairly congruent. I have also interpreted my inability to get an interview with a representative of the Ministry of Finance, despite several attempts, to possible mean that they wish to reduce their involvement in environmental policy relations[16].

Emission trading has been a politically contentious topic, and I can only assume that this is the reason for my lacking luck with the MoF. It is unfortunate that I have not been able to get their comments as they seem to have been an important actor judging from my findings both in official documents, and especially from the interviews. The economists at the MoF have been characterized as theoretically orthodox, conservative and ideological by

[16] I contacted the Ministry of Finance on several occasions, and was consistently referred to the Ministry of the Environment.

representatives from the businesses and industries (Høibye pers.mess. 2011; Lier-Hansen 2008, March 6). It would therefore have been interesting to get their perspective on their role in the process, and their understanding of their role in the Norwegian emissions trading process.

Interestingly the Commission's committee was well represented by actors and professions who had been early supporters of emissions trading, while there were no representatives of the industries or businesses that would be affected by a potential emission trading system besides the petroleum industry. Nor were any representatives from the ENGOs included. Rather, two of the main architects behind the Norwegian position had seats in the committee: Øystein Dahle and Michael Hoel had both been among the early initiators of emissions trading and were fervent supporters of extensive international emissions trade (Nilsen 2001). The majority of the members moreover, represent a generally academic culture, a perspective that is also reflected in their majority recommendations.

The report dealt mostly with the practical, technical and economic consequences of establishing an emissions trading system. It was interpreted to be outside their mandate to discuss political aspects relating to distribution and equity. On the contrary, the mandate was primarily to consider the use of cost- and steering-effective measures to meet Norway's reduction commitment under the Kyoto Protocol. The role of cost-effectiveness represents a central discourse supported by economic actors who also represent a central group.

The recommendations the Commission gave on this issue are likely to have influenced later discussions and perceptions of the economic discourse versus other discourses, and the importance given to cost-effectiveness as a policy goal.

In the report there are only references to equity and fairness in passing, and no detailed discussion about these aspects. They do mention the "moral" issue concerning allowances as a means to pay to avoid national emissions reductions. The Commission nevertheless saw it as desirable to finance and undertake global emission reductions in countries where the reduction costs are lower than in Norway, given that these countries are interested in such reductions measures (NOU 2000a: 20, 103).

A major issue of contention was which allocation mechanism to apply under the system. The majority of the Commission members believed that in order for Norway to reduce her emissions in a most cost-effective manner, the emission allowances should in principle be sold. (NOU 2000a: 11). They did however acknowledge that there may be possible reasons to grandfather allowances. They included 1) Norwegian companies'

competitiveness, 2) readjustments, 3) carbon leakage, 4) regional political interests, and 5) possible market imperfections (NOU 2000a: 12).

Commission members Dahle and Halmø "recommend that grandfathering of allowances becomes an option that becomes a part of the system's political implementation for the part of the industrial structure that initially is exempted from CO_2 taxes", moreover, "[t]he justification for grandfathering is a recognition that economic theory and practical reality not always are ideally adapted" (NOU 2000a: 15). The majority of the Commission however, recommended and concluded that;

Everyone pays full market price for the emission allowances according to the polluter-pays principle. There should not be any grandfathering of allowances to parts of the industry. The majority believe that the advantages that may be achieved through grandfathering are not in proportion to the increased costs grandfathering will bring about for the rest of the economy. It will also be more difficult to reach more ambitious climate targets in the future if allowances are grandfathered. Grandfathering will be inaccurate with respect to reducing the unfavorable effects of necessary industrial adjustments. The polluter-pays principle is central in environmental policy. The costs related to pollution include both the polluter's internal abatement costs and society's costs of the remaining emissions. Society's cost of the remaining emission is in this case the value of the allowance. When the polluter has to pay, she will be motivated to reduce her emissions, and develop more environmental friendly technology. Grandfathered allowances to parts of the industry is against the polluter-pays principle (NOU 2000a: 13).

This is a strong interpretation of the polluter-pays principle. It is moreover an interpretation supported by the Government on principle (Solheim pers.mess. 2011). The question of grandfathering versus auctioning represents the main dividing line in the emission trading process between those supporting a more pragmatic approach and those following a neoclassical economic approach. The main opposing constellations materialized during the work of the Commission: academia and the MoF wanted to sell 100 percent of the allowances, while the Ministry of Petroleum and Energy, The Ministry of Trade and Industry and the MoE argued that it was a political question. Interestingly, those supporting full-scale sale, especially representatives of academia, had no particular interests in receiving grandfathered allowances. The MoF on the other hand, would potentially lose revenues from the CO_2-tax if this were to be replaced by emission allowances, and respectively collect revenues from allowances sold by the state.

Through the work of the Commission, Norway approached emission trading at an early stage and the recommendations published as a report provide an important reference point as they allow us to compare the actual implementation against the early

recommendation and compare which actors and arguments that have been present in influencing the process.

5.1.1 Comments from the reference group

During the work of the Commission, there was established a reference group[17] which was consulted regularly throughout the process. Their remarks have been taken into consideration in the articulation of the Commission's recommendations and are incorporated into the report without necessarily direct reference to which reference member who has expressed the view represented. The communications however, are attached to the Commission's report.

In their communications to the work of the commission, Norges Naturvernforbund[18] (referred to as Naturvernforbundet), their youth organization (Natur og Ungdom) and The Future in our hands (Fremtiden i våre hender), communicated as one reference member. Naturvernforbundet was established in 1914 and is thus the oldest ENGO in Norway. It is a membership-based organization with some 18 700 members. They seek to "protect the nature and environment so that human activities do not exceed the carrying capacity of nature" (Naturvernforbundet 2011). They moreover require that Norway both has ambitious domestic reduction targets and contributes financially to reductions globally. They stress, however, that such joint global reduction efforts must be *additional* to domestic efforts (ibid.).

In their annual report from 1999-2001 they state their aim to "Follow the climate negotiations and influence the opinion. Work against countries' opportunity to ransom oneself from CO_2 emission reduction requirements and influence the formulation of national allowance regulations on emissions trading" (Naturvernforbundet 2001: 23).

To begin with in their consultation, they remarked that "the political framework for a Norwegian climate policy has yet not been laid. Yet, a commission to report on the design of a national emission allowance system has been appointed. Thus we are in a situation where a system is to be designed without there being any guidelines for how this should work in relation to a wide specter of measures in the climate policy" (NOU 2000a: 263). This is an issue that deserves attention. The lack a broader political framework is likely to have given the Commission greater autonomy and potential for laying the foundations for the proceeding policy process. As the Commission was not restrained by an existing policy, their recommendations would set precedence and could be used to secure a strong position for

[17] The reference group consisted of 30 representatives of labor, business and environmental organizations.
[18] Friends of the Erath Norway in English, but I have chosen to use Naturvernforbundet nonetheless.

emissions trading without causing the same degree of political controversy as a White paper on climate policy might have done.

Naturvernforbundet moreover argued that "in order for us to be able to strengthen the measures internationally in the future it is important that rich countries like Norway demonstrate that it is possible to achieve actual emissions reductions" (ibid.). Unlike the economic experts and technology optimists who believe in continued increased economic growth, either through joint efforts that allow increased energy-intensive emissions to be off-set by cost-effective reductions elsewhere or through developing renewable energy sources and more energy efficient production, these three ENGOs argued that "the implementation of the emissions allowance system should not negatively impact the implementation of structural changes. Society must be prepared to accept that it is not enough to fulfill the Kyoto commitments" (ibid.), implying that more fundamental changes are required to reduce emissions adequately. In the same vein, they argued that the use of the flexible mechanisms under the Kyoto Protocol must be supplementary to national reductions and be restricted to account for a maximum of 20 percent of Norway's reductions.

The concerns voiced by this trio seem not to have been strongly considered by the Commission. It may not be fair to criticize the Commission for not deliberating more on this topic as it was only in their mandate to consider the cost- and steering-effective implementation of a national emissions trading system. The fact that this debate was effectively defined away from the Commission's mandate however is criticizable, and moreover illustrates the lacking room for discussing the normative question of climate policy in general and of emission trading in particular. The articulation of the mandate isolated emission trading from the more general debate about Norwegian climate politics, effectively marginalizing alternative perspectives and limiting the inclusion of a more deliberative approach to alternative climate policy measures.

The Confederation of Norwegian Enterprise (NHO) stressed the need to protect Norwegian industries that are exposed to international competition. NHO has some 20.000 members who consist of firm within craft, industry, service, and information and communication technology, and is the largest Norwegian interest organization (NHO 2011). According to NHO, their main objective is to "create and sustain conditions that secure the competitiveness and profitability of business and industry, and thereby maintain the basis for a good standard of living, sound economic growth and sustainable development" (ibid).

In their comment to the Commission, they advocated an active role for themselves in the process through a close dialog with the authorities. They requested that the Commission

especially would consider the "recommendations and models that Norwegian businesses prefer" (NOU 2000a: 269). NHO also emphasized that, "it is great uncertainty about the international legal framework, the coming into effect and what other countries will do in practice in climate policy" therefore "it is important that we choose robust solutions in Norway that are guyed in business and do not undermine competitiveness" so that "we get an emissions trading system that supports Norwegian interests as a provider of CO_2-effective energy and energy-intensive products in an international market" (ibid.). According to NHO achieving this was "among the Commission's greatest challenges" (ibid.). NHO argued that allocating the equivalent of 70 percent of the 1990-levels of emissions to Norwegian industries may lead to carbon leakage and thus increased total emissions and reduced economic activity and technological development in Norway (ibid.). Finally, the overarching goal of NHO has been to contribute to the fulfillment of the Kyoto commitment, without reducing the competitiveness of Norwegian industries and impairing employment opportunities (NOU 2000a: 271).

The processing industries, which were represented through NHO and more specifically through the Federation of Norwegian Process Industries (PIL) at the time[19], supported the general views of NHO, and further stressed the importance of securing the competitiveness of Norwegian processing industries. As of today, the Federation of Norwegian Industries has some 2.200 member businesses. Their "most important task is to ensure that society understands how important a viable industry is for our future welfare. Thus, the Federation's most important task is to ensure that the authorities adopt a long-term fiscal policy in which the competitiveness of Norwegian industry is given the highest priority, and in which Norwegian industrial companies are allowed to further develop their strongholds, namely an advanced and technology-intensive industry based on one of our national assets: hydropower" (Norsk Industri 2011). Accordingly they argued that this interest must lay the foundations for the allowance allocation in order to make sure that the industries in Norway would not face stricter regulations than their international competition.

Together, as of today, NHO and the Federation of Norwegian Industries represent some 633.000 employees, constituting a large share of Norwegian employment. In 2009 the total turnover for the sectors that the Federation of Norwegian Industries represents exceeded

[19] In 2005 The Federation of Norwegian Industries was established as a merger between the Federation of Norwegian Manufacturing Industries and PIL.

NOK 567 billion (NHO 2011; Norsk Industri 2011). They have long traditions of representing business and industrial interests, going back to the late 19th century, and through current economic activities and employment in their member companies, they represent strong economic and socio-political interests.

NHO supported the principles behind emission trading and were active in formulating an emission trading policy both before and during the first phase. There has thus been a general agreement between the MoE and NHO about the legitimacy of emission trading as an environmental policy measure. Stiansen (pers.mess. 2011) stresses the constructive dialogue between the MoE and businesses and industry and its contribution to facilitating the emission trading process.

Interestingly, the two research communities, Econ and Cicero, who played a crucial role in the early process of articulating the Norwegian *position* when the very first references to emissions trading were made were not included in the reference group[20]. In the early period from the late 1980's up until the work of the Commission commenced in 1998 they were however, central providers of premises and their perceptions have been very influential in establishing precedence for the premises that constituted the Commission's mandate.

5.1.2 The consultation

Once the report was published in late January 2000, it was sent out on consultation, and some 40 institutions responded within the deadline in late April 2000. A summary of these consultation responses is found in White paper No. 54 (2000-2001) *Norwegian Climate Policy* and were taken into consideration by the Government in their articulation of the White paper on Norwegian climate policy. A parallel development which the Norwegian Government was supportive of, and which contributed to the further development of a Norwegian emissions trading system, was the EU Commission's presentation in March 2000 of its Green Book on emissions trading where they suggest developing an EU-wide emissions trading system to be implemented in 2005. They furthermore included options for EU-applicants and European Economic Area-countries to be integrated in the system.

The majority of the consultations were supportive of an emissions trading system. It was only Bellona who explicitly expressed disapproval of the establishing of a national emissions trading system. They believed an emission trading system would make it difficult to develop a climate policy with more restrictive reduction requirements in later periods, and

[20] See chapter 2.1 for a treatment of this topic.

that it would reduce the incentives to develop new environmental friendly technologies (MoE 2001: 248). Bellona is an environmental non-profit organization founded in 1986. It currently employs some 75 people who have various backgrounds such as biology, political science, economy and engineering. The organization works in close collaboration with businesses and industry and believes that environmental solutions are to be achieved through the implementation of new technologies which can be realized through cooperation between businesses, industry and scientists (Bellona 2009).

The Government concluded that the discussion of grandfathering versus auctioning and/or selling of allowances seemed to be of general concern. The Government furthermore observed that those supporting grandfathering tended to be the business organizations and those industries exempted from the existing CO_2 tax, while those supporting auctioning/sales were represented by the ENGOs, expert communities and industries faced with a CO_2 tax (MoE 2001). Those arguing for grandfathering of allowances stressed a concern for the competitive position for industries exposed to international competition given that other governments were likely to grandfather their allowances. In general, there seem to have been relatively little concern about distributional issues within Norway (e.g. across and within sectors). The major concern was about external competition, and securing Norwegian business and industry a level EU-'playing field'.

According to the summary of the consultation responses the majority of the respondents to the consultation had no remarks on the Commission's interpretation of their mandate. Forum for Development and Environment (ForUM), did however argue that the interpretation of the mandate was too narrow. They emphasized that the discussion of more long-term structural changes was not given enough attention. Other ENGOs also highlighted this aspect and requested a more thorough assessment of alternative environmental policy measures. In general, the ENGO's emphasized that industrial countries, including Norway, must demonstrate that they are willing to accept structural readjustments of their industry and society in order to fulfill their long-term reduction commitments (MoE 2001: 248). Besides acknowledging this concern, the Government seemed content not to pursue the debate any further in this context.

5.1.3 White paper No. 54 (2000-2001) *Norwegian Climate Policy*

The outcomes of the first phase were reflected in White paper No. 54 (2000-2001) *Norwegian Climate Policy* which clearly stated that one of the central measures to fulfill Norway's Kyoto commitments would be a national emission trading system for the first Kyoto commitment period, 2008-2012.

The already strong position of the economic discourse, the prevalence of economic actors in the Commission, and the narrow mandate they were given, are all likely to have influenced the emphasis of cost-effectiveness in the report. The fact that it supported emissions trading thus gave the Government's position legitimacy. The report was presented as an independent presentation of objective expert knowledge. Hence it is not surprising that the recommendations given in the Commission's final report were used by the Government in their White paper to legitimize their policy decision.

The White paper on Norwegian Climate Policy generally followed the majority recommendations of the Commission, and the Government stated that its "principal view is that the allowances, to the largest extent possible, *should* be sold according to the polluter pays principle" (MoE 2001: 185.My emphasis). Subsequently however, the White paper opens up for grandfathering of allowances in a transition period to industries exposed to competition. This was believed to reduce the chances of relocation of production to countries without emission regulations and to reduce adjustment costs, given that these allowances would be conditional. This represented a clear breach with the Commission's majority recommendation. Rather they followed the views expressed by the minority and by actors such as NHO and PIL who argued for a more extensive use of grandfathering.

In the White paper, the Government indicated that the grandfathered allowances would be conditional, but did not give an exhaustive explanation or final decision on which conditions should apply, other than referring to efforts that reduce the risk of overcompensation such as limiting the tradability of grandfathered allowances and doing it only for a limited period (MoE 2001: 185-193). Thus, the policy recommendations presented in the White paper gave limited guidelines for what could be expected and how the system would be operationalized, besides giving a very general signal that emissions trading would become a central part of Norwegian climate policy during the Kyoto commitment period beginning in 2008.

5.2 The Greenhouse Gas Emission Trading Act and its Amendment, 2002-2007

Shortly after the White paper No. 54 (2000-2001) *Norwegian Climate Policy* was published under Stoltenberg's first Government[21], the work on an addition to this paper was commenced by Bondevik's second Government[22]. The main change was the urge to speed up the establishing of a national emissions trading system to be launched from 2005. There had been strong disagreements as to when the emission trading system should be implemented, and the additional White paper signaled a change towards an earlier implementation.

White paper No. 15 (2001-2002) Amendment to White paper No. 54 (2000-2001) *Norwegian Climate Policy* (MoE 2002), thus represented a change in course, introducing the *second phase.* This constitutes a more specific articulation of a Norwegian emissions trading system through the Proposition on the Greenhouse Gas Emission Trading Act[23] (MoE 2004), and following this the Proposition on the Amendments to the Greenhouse Gas Emission Trading Act (MoE 2007) incorporating adjustments to meet the reduction requirements for the Kyoto commitment period from 2008 to 2012.

This development must also be seen in relation to parallel developments in Europe where the EU Parliament had passed Directive 2003/87/EF on Emissions Trading signaling that an EU emissions trading system would be established as early as 2005.

5.2.1 The Proposition to the Odelsting, 2004-2005

The Ministry of the Environment sent a suggested Proposition on the Greenhouse Gas Emission Trading Act out on consultation late June 2004. The Proposition built on the provisions in White paper No. 15 (2001-2002) Amendment to White paper No. 54 (2000-2001) *Norwegian Climate Policy* and the Storting's preparation of this. It was moreover following the Storting resolution:

[21] Labor Party Government March 17 2000 – October 19 2001
[22] Coalition Government between the Conservative Party, the Christian Democratic Party and the Liberal Party October 19 2001 – October 17 2005
[23] In Norwegian it is referred to as a 'Proposition to the Odelsting' (historical term). The system of the Odelsting and Lagting was abolished as of October 1 2009. The Greenhouse Gas Emission Trading Act was however, according to the old procedures, first sent by the Government to the Odelsting, who considered it before they sent their decision to the Lagting who made the final resolution and passed it as law (Stortinget 2011).

The Storting asks the Government to develop the details in the early emission trading system in close dialog with the industry in order to secure the suggested emission reduction from the companies, while the system is flexible enough to secure the competitiveness of the processing industry (MoE 2004: 9).

This suggests a departure from the more conservative neoclassical approach towards a more pragmatic one. The main components of the Government proposition were to establish an emission trading system that would consider the competitiveness of Norwegian industries, which according to the Government would be achieved through the establishing of a system close to the EU system in both scope and other elements (MoE 2004). Thus, although the Additional paper on climate had indicated that the emissions from the processing industries which were not covered by the CO_2-tax should be included in the emission trading system, this did not materialize as the Government acknowledged that;

The EU ETS mainly includes emissions of CO_2 from production of electrical power, and that *the EU resolution of the Emission Allowance Directive has created a new situation for Norway. The Government believes that the consideration of Norwegian processing industry's competitiveness implies that Norwegian businesses should not be included in the emission trading system for the period 2005-2007 if competing industry in Europe not will be subject to emission allowances* (MoE 2004: 22).

The proposition suggested 100 percent grandfathering of allowances based on historical emissions from the period 1998-2001, but opened up for allocation based on emission estimates using the best available technology (BAT) in cases where the historical period provided an inaccurate picture of a firm's emission structure.

According to the proposition, the Greenhouse Gas Emission Trading Act would serve as a means to meet Norway's reduction commitments under the Kyoto Protocol. It furthermore emphasized that a central element in this context would be the Kyoto mechanisms which open up for trade with emission allowances between industrial countries and different kinds of project-based cooperation between the industrial countries (joint implementation) or between industrial countries and developing countries (the clean development mechanism). Combined, this was believed to ensure that Norway would fulfill her Kyoto commitments cost-effectively.

NHO was one of the most active actors in the first phase and in the consultation on the Greenhouse Gas Emission Trading Act, they strongly encouraged Norway to integrate and implement the EU Directive so that Norwegian emitters would be able to trade in the European carbon market directly, and face equal conditions and the same emission

requirements as their competition. According to their consultation this would secure the competitiveness of Norwegian businesses and industries, and provide them with a more predictable investment and planning environment (Bergesen Jr.[24] 2004). NHO moreover suggested that the EU directive should be implemented as Norwegian law and that the two systems should be fully integrated immediately across all sectors and replace the CO_2-tax where this was overlapping, thus expanding the Norwegian emissions trading system to covering not 10 percent but 40 percent of total emissions (ibid.).

In the process leading up to the Proposition on the Greenhouse Gas Emission Trading Act, PIL had a uniquely central position and was negotiating an understanding with the Government which covered the parts of the processing industry that would not be part of the emissions trading system. This voluntary agreement stated that emissions from the sectors aluminum, magnesium, ferroalloys, carbon products, carbides, other metals, cement, light expanded clay aggregate (LECA) and insulating, mineral fertilizers, oil refineries and petro chemistry, should not exceed 13.5 million tons CO_2-equivalents. PIL was thus initially supportive of the idea of a flexible emissions trading system concerning sectors outside of the 'understanding', and which would secure their competitive edge (Lier-Hansen 2004). In their consultations they repeatedly emphasized that "the consideration for the industries' competitiveness must be central in the formation of the emissions trading system" (Lier-Hansen 2004: 1). Similarly to NHO, PIL encouraged a direct implementation of the EU emission trading directive as soon as possible to secure equal treatment between Norwegian and foreign industries.

Cicero was positive towards the proposition and of establishing the principle of emissions trading as Norwegian law. There were however, according to Cicero several aspects of the suggested Greenhouse Gas Emission Trading Act that would impair the system's potential cost-effectiveness. Firstly, they believed that the suggested system's limited scope of sectors and gases only covering some 10 percent of Norway's total emissions may reduce the potential cost-effectiveness of the system (Prestrud[25] 2004). They emphasized that this furthermore would produce a "fragmented system with differentiated prices related to emissions which will imply low cost-effectiveness and a higher cost on society than necessary". Conversely, through "standardizing and integrating the EU and other international systems with the Norwegian system this could improve the predictability and ensure increasing effectiveness over time" (ibid.). Moreover they called for the auctioning of

[24] Director General of NHO (1999-2009).
[25] Director of Cicero (2002-d.d.).

allowances based on the argument that such a practice would be in line with the polluter-pays principle and also send important signals to the polluters about the costs of emissions (ibid.).

In their consultations, Statistics Norway[26] showed a general concern for the real cost-effectiveness of the system given the way it was being suggested implemented with particular reference to scope and allocation method (Longva[27] 2004). In order to ensure cost-effectiveness they argued that the system must include a larger scope of emissions and that allowances would not be grandfathered but sold or auctioned. Statistics Norway moreover suggested auctioning of allowances both from an economic and fairness perspective. They claimed that grandfathering favors polluting businesses and is thus in conflict with the polluter-pays principle. According to Statistics Norway (Longva 2004: 2);

It is fully possible that companies that emit large amounts of CO_2 will be able to profit from the emissions trading system if the costs related to emissions are low and the allocation is relatively generous. This could mean that the assertion in the consultation paper (p. 3) that 'the introduction of the emissions trading system [involves] a tightening of measures towards the included companies' will not be true for all companies.

From an economic perspective, they argued that the costs related to emissions trading could be reduced substantially if the allowances were auctioned. One of the main reasons for this according to Statistics Norway was that the state would receive income which could be used to reduce other distorting taxes. They also opposed the use of estimates in allocating allowances as this meant that the behavior of the companies would influence the allocation directly: if a company increased emissions it could assume a larger emission allowance in the future. Thus, the combination of grandfathering and an endogenous allocation method would maintain the existing sector distribution and do little to change the incentives to invest in polluting companies (ibid.).

Both in its consultation to the report in 2000 and again to the Proposition to the Greenhouse Gas Emission Trading Act in 2004, Bellona expressed a certain reservation against emissions trading. Bellona's main argument was that cost-effective measures such as emissions trading must be combined with other measures to encourage the development and *implementation* of new technologies. They stressed the need for new technological solutions and the use of an array of measures to reduce emissions (Holm[28] 2004). They recognized that

[26] Statistics Norway is a governmental department under the Ministry of Finance but they can also be perceived as a more autonomous expert community given their professional independence. They produce official statistics and conduct research projects independently of the MoF's political governance.
[27] Director General of Statistics Norway (1991-2004).
[28] Various positions at Bellona, including Manager from 2006 (2000-2011).

emissions trading however was a reality and thus stressed the need to combine it with other measures. Bellona moreover stated that they "supports the principle that no polluter shall have reduced incentives to reduce emissions compared to their current situations and is therefore satisfied that sectors with CO_2-taxes are kept outside the emissions trading system" (Holm 2004: 4).

This was an approach similar to that of Naturvernforbundet. They expressed concern that the future emission allowance price may be less than the current CO_2-tax thus weakening the incentives to reduce emissions. They demanded a more ambitious policy that would require larger and more specific emission reductions. In the consultation, they required a system of selling the emission allowances and moreover requested ambitious reduction targets and a lower total quantity of allowances.

They were also concerned with the agreement between the MoE and the industry and stressed that this agreement covered larger emissions than the actual emission trading system and that the low ambitiousness of the understanding would reduce the overall ambitiousness of the ETS and Norwegian climate policies more generally (Killingland[29] et.al. 2004). They requested a more ambitious system that should work as a supplement to the existing Pollution Control Act and thus be combined with other measures to secure Norwegian emission reductions.

As the Greenhouse Gas Emission Trading Act entered into force in January 2005 it would cover a national trading scheme over a two year trial period leading up to the Kyoto commitment period commencing in 2008, when Norway would face quantitative reduction requirements. It is the Ministry of the Environment who decides the total cap, based on Norway's international commitments[30], determining the total amount of emission allowances under the Norwegian ETS. It is then the Climate and Pollution Agency (Klif) who determines the allocation of allowances based on the Regulations relating to Greenhouse Gas Emission Trading. It is also Klif who supervises the system, gathers necessary data from the participating industries and ensures compliance.

The Act included the provisioning of a 100 percent grandfathering of allowances and of including only sectors that were exempted of the CO_2-tax and would have been part of the EU system. The sectors to be included in the Norwegian emission trading system were (MoE 2004):

[29] Secretary-general of Naturvernforbundet (2002-2006).
[30] According to the Kyoto Commitments, Norway's average emissions are restricted to one percent above 1990-levels, which means that Norway can emit 52,5 million tons CO_2 equivalents, amounting to 262,5 Mt CO_2 equivalents during the first commitment period (2008-2012).

- energy production (in practice first and foremost use of natural gas for energy means including in gasworks and in the sectors; landing of petroleum and gas, gas refining and petro chemistry)
- petroleum refining
- coke production
- production and processing of iron and steel, including calcining and sintering of iron ore
- production of cement, lime, glass, glass fiber and ceramic products

This would then constitute 6.1 million tons CO2-equivalents, or some 11 % of Norway's total GHG emissions in 2003.

5.2.2 The amendment of the Act, 2006-2007

In order to adapt the Greenhouse Gas Emission Trading Act to the first Kyoto commitment period when Norway would be subject to a quantified reduction requirement, the Act was amended[31].

The main revisions related to the scope of the system through including new sectors and reducing the grandfathering of allowances. In line with the process to formally integrate the EU Emission Allowance Directive, emissions that were subject to the CO_2-tax would now be included in the emissions trading system. This would entail the inclusion of the petroleum sector, the wood-processing industry and some land based energy installations from 2008. Thus, the system from 2008 would cover more than 40 percent of Norwegian GHG emissions. Furthermore it was signaled that Norway would reduce the grandfathering of allowances substantially to comprise only some 30 percent of the projected emissions in the included sectors. In the proposal, off-shore petroleum installations were suggested to pay for all of their emission allowances. It was also suggested to establish an entrants reserve for new gas installations, but not to include a general new entrants reserve intended for expanded capacity or new establishments in other sectors.

Common for most of the consultation responses was that they generally reinforced the views and interests expressed in previous statements in addition to giving opinions on the

[31] This process was undertaken by the second Stoltenberg Government (October 17 2005 –) a coalition Government of the Labor Party, Socialist Left Party and Center Party

more specific suggestions in the amendment. The main dividing line between neoclassical economists and pragmatics was also maintained.

NHO's response to the amendments was more critical of the manner in which the government had processed and developed the ETS. Because of prolonged negotiations and attempts to establish Norwegian exemptions the system had been less predictable and the position of Norwegian enterprises had been weakened compared to their EU competition according to NHO (Bergesen Jr. 2007).

NHO stressed the importance of fair and equal treatment of Norwegian industries compared to EU competition. This would mean using allocation methods that were similar to the EU ones, that is, more widely use of grandfathering. According to their consultations, "grandfathering of allowances is an important contribution to secure competitive interests, at the same time as the companies will have the same motive to reduce emissions as competition in other countries. Grandfathering prevents Norwegian businesses and jobs from being affected unreasonably harshly, risking that built up markets are lost" (Bergesen Jr. 2007). According to Geir Høibye (pers.mess. 2011) who has been working in NHO with articulating an emission trading system acceptable to NHO and its member businesses, firms who have made long-term investments and established economic activities have an intrinsic right to receive grandfathered allowances. Grandfathering secures fair treatment of Norwegian businesses, especially when their competition receives the allowances free of charge.

NHO strongly disapproved of the suggested removal of a new entrants allowance reserve in the Kyoto commitment period and the consequent requirement that new entrants must buy any needed emission allowances. According to NHO this would discriminate Norwegian industries and business and impair future developments of Norwegian industry (Bergesen Jr. 2007). Generally they expressed a concern that the imposing of unreasonably restrictive emission requirements would harm Norwegian businesses and industries and also increase total global emissions through the relocation of production to countries without such regulations.

The Federation of Norwegian Industries[32] expressed satisfaction with the implementation of the EU directive and the phasing in of Norwegian industries as an equal partner in the EU system. They did however, similarly to NHO, voice discontent with the delay in this process because of Norway's attempt to get special provisions. In the future, the Federation of Norwegian Industries requested that Norway would follow EU procedures in

[32] See footnote 11

order to ensure equal treatment and a more predictable investment environment for the Norwegian actors who were involved.

Following this their attitude towards the government had somewhat hardened. This related especially to the Norwegian ardent reference to economic theoretical principles and a lacking understanding of the realities faced by the industry, who risked weakened competitiveness as a result of the Norwegian government's attempt to secure special provisions and exemptions from EU practices. In their consultation response they voiced their discontentment vocally;

The consultation paper is apparently based on basic economic welfare theory stating that optimal resource allocation is achieved when all actors are confronted with the actual environmental costs which again requires that the actors are imposed with an allowance requirement without the allocation of free allowances ("polluter pays).

No other country in the EU or the rest of the world has nonetheless deemed it relevant to apply basic economic welfare theory as a basis for the climate policy. The reason is of course that there not exist equal market conditions/rules for the actors within and outside the Kyoto area and that an uncritical use of economic theory leads to the closure of industry exposed to competition without the global greenhouse gas emissions being reduced, but rather increasing (Lier-Hansen 2007: 2).

This view is also resonated in a later article by Stein Lier-Hansen (2008, March 6), where he accuses the economists of dominating Norwegian climate policy. He strongly criticizes the prevalence of conservative economic theory in Norwegian climate policy and argues that the economic perspective creates disincentives for Norwegian industries to develop more environmental friendly technology, results in carbon leakage and thus increased global emissions (ibid). This perspective was also confirmed by Marit Holtermann Foss and Ronald Fagernes[33] in interview (Foss and Fagernes pers.mess. 2011).

This view is also resonated within NHO. In my interview with Geir Høibye (pers.mess. 2011) he expressed frustration with the MoF and their ideological approach to emissions trading as a fiscal instrument. He describes them as an orthodox institution mainly concerned with maintaining their tax income and showing little understanding for what consequences this will have for Norwegian businesses and industry. Both these accounts create a picture of a clear divergence between the neoclassical economists at MoF and Statistics Norway, who according to NHO and the Federation of Norwegian Industries, have a strongly theoretical approach and little experience with practical business realities and do not

[33] Assistant director and Assistant director – Environment and Climate in the Environment and Health & Safety Department, the Federation of Norwegian Industries

understand the grave consequences of unilaterally Norwegian restrictions and requirements for establishments in Norway. Both NHO and the Federation of Norwegian Industries urge a more pragmatic approach in order to create a viable emissions trading system that will not enforce unnecessarily harsh emission requirements in Norway resulting in reallocation, carbon leakage and increased global emissions (Foss and Fagernes pers.mess. 2011; Høibye pers.mess. 2011; Lier-Hansen 2008, March 6).

Peer Stiansen (pers.mess. 2011) also sees the need for a more pragmatic approach, and reflects a genuine concern with the possibility of carbon leakage. He confirms the MoE's consideration of this threat as real and that a viable emission trading system will have to take these concerns into consideration. This suggests that there is an internal antagonism between the MoE and MoF, and a conversely closer relationship between the MoE and business and industry.

Cicero's response to the amendment was in line with the response in 2004. They did see some improvements in the suggestion to increase the scope of the ETS and link it up to the EU ETS which would make the Norwegian system more consistent and less fragmented (Cicero 2007). They emphasized the importance of auctioning and/or selling allowances because of the negative effect of grandfathering in a long-term perspective. They moreover claimed that the system "most of the time not will generate a generally cost-effective regime where everyone is faced with the same price on their emissions", and that taxes and other differentiated measures may be necessary to compliment the ETS (ibid.).

Statistics Norway was positive towards the suggested amendment and concluded that it represented an improvement of the current system (Olsen[34] 2007). They moreover stressed the need to ensure cost-effective and exogenous allocation mechanisms, which they acknowledge may be challenging. According to Statistics Norway, grandfathering of allowances may be as cost-effective as auctioning, given that the firms cannot influence the allocation through their behavior. Grandfathering is however not seen as optimal by Statistics Norway because it will reduce state income and thus grandfathering is macro economically more costly than auctioning which can generate income to be used to replace other distortive taxes (Olsen 2007). Lastly, they remark that a replacement of the CO_2-tax with allowances means that "it can be questioned whether the new emissions trading system represents a tighter climate policy" (ibid.: 2).

[34] Director General of Statistics Norway (2005-2010).

Again, Bellona emphasized the need to include other measures. They introduced their response by stating that the organization

supports the main principles in the Government's suggestion to operation of the emissions trading system but conclude that the climate policy's criteria to succeed first and foremost is how it is combined with other measures and actions, including implementing new technology, energy renewal, public investments in infrastructure and legal measures (Holm 2007: 1).

This can be seen to represent a certain softening of their emissions trading skepticism, at the same time as they continue to emphasize the need and importance of additional measures.

Bellona moreover suggested that a *new entrants* reserve is established in order to avoid a stagnation of the production structure. As opposed to the other ENGOs Bellona had a more pragmatic approach to the debate about grandfathering and they perceived this as "distributional politics and not climate politics" and that the incentives to reduce emission will be the same independently of allocation method (Holm 2007). It is interesting that Bellona seemed to be indifferent to the equity aspect of emission allocation and the vast implications this has for who that will carry the costs of pollution.

Naturvernforbundet's comments were of a more general character and they seemed to continue their pragmatic approach to the ETS, although not enthusiastically. They "believe that emission allowances may work as an effective measure to reduce GHG emissions, both in Norway and the rest of the world (…) Emission allowances as a measure is probably here to stay, also in the next commitment period" (Haltbrekken[35] and Lahn[36] 2007). They accepted emissions trading as a means to reduce emissions cost-effectively, but at the same time stressed the need for an overall ambitious climate policy that would include additional measures. They believed this could be achieved through the implementation of measures such as regulations and a continued CO_2-tax.

In the first phase there was a broader representation of ENGOs, but in the second phase it is Bellona and Naturvernforbundet who dominate. These organizations represent two of the biggest ENGOs in Norway which can explain their ability to mobilize. The relatively modest ENGO activity can be attributed to the lack of resources and extensive economic expertise. Anders Haug Larsen (pers.mess. 2011) from Naturvernforbundet confirms the difficulty for smaller organizations in influencing the emissions trading process, and that his and Lars Haltebrekken's insights on emissions trading enabled Naturvernforbundet to follow

[35] Chairman of Naturvernforbundet (2005-d.d.)
[36] Chairman of Natur og Ungdom (2006-2008).

the process more actively, but that it is a complex issue and policy measure, which makes it more difficult for the ENGOs to influence policy making directly at the political level. Larsen has experienced that even at sessions at the Storting, there were several actors who not quite followed the process, while Stoltenberg knew the system and the arguments to his fingertips, making it difficult to challenge his position (Larsen pers.mess. 2011). Both Bellona and Naturvernforbundet also chose a pragmatic approach, thus allowing them to be more influential in the sense that since they did not voice radical criticism of the Government position, the could be referred to by the Government in order to illustrate ENGO support.

It is also interesting that it is Naturvernforbundet and Bellona who have been dominant, from a comparative perspective. They represent two quite distinctly different environmental profiles: Naturvernforbundet encourages reduced consumption and more structural changes in our lifestyle, while Bellona believes more strongly in the possibilities lying in new and cleaner technologies that will allow us to maintain the economic activity while emitting less GHGs. The premises behind emissions trading have tended to support the latter position and the former has been largely neglected.

Lastly, in the Proposition, the Government states that it will "work towards that the EU ETS shall be based on no grandfathering of allowances after 2012. Norwegian companies who are part of the ETS can therefore not depend on the grandfathering of allowances post 2012. This must however be considered in light of the EU's politics in the issue area" (MoE 2007).

There is again a vagueness regarding emission allocations signaling that what Norway will do is dependent on EU developments and domestic consideration. How this would eventually influence Norwegian policy would be evident from the result of Norway's process to establish a national allocation plan to be approved externally by the EFTA Surveillance Authority.

5.3 The national allocation plan and its revision[37], 2008-2009

When we compare the climate policy in the EU and Norway we discover a conspicuous ideological difference. In Norway the concepts of cost-effectiveness *(that is, the smallest possible amount of money out of the public purse), and* polluter pays *(that is the largest possible amount of money into the public purse) are used at all times.*

Basic economic welfare theory is given the place of honor in environmental policy. Deviations from the pure theory hardly gain ground. Similar attitudes toward use of theoretical economics are not found in any other country in the world.

This policy gives us a poorer and less steering-effective policy measure, and consequently a less dynamic environmental policy.

Stein Lier-Hansen (2008, February 15)

The process to incorporate the Norwegian ETS with the EU ETS began in earnest during the fall of 2007 when the Joint Committee of the European Economic Area (EEA) agreed to incorporate the Emissions Trading Directive 2003/87/EC and a number of implementing provisions into the Agreement of the European Economic Area.

The EU Directive requires each member state to submit a national allocation plan. In the case of Norway, as an EEA member, this must then be approved by the EFTA Surveillance Authority (ESA). Norway only became fully integrated into the EU ETS in 2009 after the revised Norwegian NAP was accepted by ESA, and the necessary amendment was made to the Greenhouse Gas Emission Trading Act.

The last and *third phase* thus concerns the final steps in the process of integrating the Norwegian and EU ETS through the formal approval of Norway's national allocation plan. It began with the articulation of the NAP based on existing provisions and legislation that were a result continuous negotiations and experiences from the first trading period. The initial NAP of March 2008 was a culmination of the preceding processes to establish an emissions trading system that would meet Norway's Kyoto commitments.

The original articulation of the Norwegian National allocation plan and the surrounding process will illustrate the diverging aspects between Norwegian and EU emissions trading policy. Eventually, the adjustments suggested to meeting the objections from ESA resulted in a revised Norwegian NAP, which represents where the Norwegian ETS stand as of today[38]. This was sent as a proposition to the Storting and passed as law in February 2009.

[37] The NAP documents are originally in English.

[38] It should be remarked that there are continuous amendments to include other gases and sectors, such as aviation. For the scope of my paper I am mainly interested I the more fundamental and general provisions and these were largely agreed upon in the articulation of the Norwegian NAP for 2008-2012. There are likely to be

5.3.1 The NAP of March 2008

The Norwegian and EU emission trading systems differ in their method of allocation. Article 10 of the EU Directive restricts sale in EU countries to a maximum of 10 % of the total quantity of allowances. Very few countries, however, have used the opportunity to sell allowances, and in the EU ETS close to 100% of the allowances have been grandfathered. Norway has gotten an exemption from this rule, and the petroleum industry has to pay for its emission allowances (MoE 2008b). Moreover, in the initial Norwegian NAP there was no provision of free allowances to new entrants, who were required to pay for their emission allowances. This is a stricter *new entrants* policy than the EU, and in the NAP of March (2008a: 13) it is stated that "there is no general reserve of free allowances for new entrants."

From the outset, Norway and the EU have had different views on the supplementary nature of emissions trading. Norway has argued for free use of flexible mechanisms and today emission trading is one of the key climate policy measures to secure Norwegian fulfillment of her Kyoto commitments. The EU, on the contrary, has favored a more restricted trading system that should be supplementary to domestic reductions and have restrictions on the use of flexible mechanisms under the Kyoto Protocol. In the Proposition to Amend the Greenhouse Gas Emission Trading Act (MoE 2007), written while Norway was still negotiating with the EU, it is stated that Norway works towards an agreement about an exemption from the restricted use of the flexible mechanisms JI and CDM. As articulated in the Norwegian NAP submitted in March 2008, "the government has set a limit on the use of credits from the project based Kyoto mechanisms (…), corresponding to 20% of the total quantity of allocated allowances" (MoE 2008a: 15).

The Norwegian NAP that was submitted to ESA for approval in March 2008, received relatively little attention through consultations as it was merely following the amendment to the Greenhouse Gas Emission Trading Act, which had been consulted during the spring of 2007. Thus, those who responded either had no remarks or referred to and emphasized their previous position and arguments. Both NHO and the Federation of Norwegian Industries emphasized their discontentment with the discriminatory nature of the Norwegian policy and stressed that this was in clear breach with EEA law.

ESA gave its decision in July 2008 requiring that Norway make certain changes before the NAP could be approved. In their response to the Norwegian NAP of March 2008 one of their main objections was that "the rules in the plan give no allocation to installations that

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fundamental changes as the Kyoto period ends in 2012, that is however a whole other chapter of emissions trading.

were established after 2001, but had a greenhouse gas emissions permit as of 28 March 2008" which according to ESA "represents undue discrimination compared to installations established earlier" (MoE 2008b).

5.3.2 The revised NAP of December 2008

The revisions made in order to meet ESA's requirements were drafted and sent on consultation in October 2008. The revised NAP (MoE 2008b) provided that;

> New existing" installations *will primarily be allocated allowances free of charge based on their average historic emissions in the years in which they were in operation during the 2002-2007 period. 6 installations fall in this category. The allocation of allowances for free to these 6 installations is estimated to total about 20 000 tons/year. These installations are Lyse gass, Hamar-regionen fjernvarme, Hønefoss fjernvarme, Østfold energy, BKK produksjon and Gasnor.*
>
> *Allocation to* installations ("new existing" or extensions) without a full calendar year of operation *during the 2002-2007 period (i.e. in place between 1 January 2007 and 28 March 2008), will be based on benchmarks (see below). 3 installations (Naturkraft Kårstø, NorFraKalk and Ormen Lange) in sum will get an allocation of about 540 000 t/year.*
>
> Installations with emissions during the 1998-2001 period which significantly increased their emissions after 2001 based on significant extensions, *will be allocated allowances based on their average historic emissions during the 2002-2007 period, calculated from the year in which the extensions came into operation. It is estimated that 5-6 installations may get about 450 000 t/year in addition compared to their allocation based on 1998-2001 figures. Installations that may qualify are Maxit Leca at Rælingen, Gassco's plants at Kårstø and Kollsnes as well as the petroleum refineries at Mongstad and Slagen. The SFT will define whether these and possibly others will meet the criteria set in the Emissions Trading Act.*

Both NHO and the Federation of Norwegian Industries are satisfied that the Government will meet the ESA requirements. Nonetheless, they argue that there are still provisions in the Norwegian Act that are detrimental for Norwegian businesses' and industries' competitiveness and will reduce the incentives to develop new environmental friendly technology and production in Norway, and may cause carbon leakage and thus increased CO_2 emissions in total. As a solution to this they both request a general allowance reserve for new entrants as is practiced in the EU (Brubakk 2008, Lier-Hansen 2008). Especially Stein Lier-Larsen shows a growing skepticism towards emissions trading in this phase. In several feature articles published in *Industrien* during the spring of 2008, he greatly criticizes the role of socio-economic concerns in shaping Norwegian climate policy (Lier-Hansen 2008, February 15; March 6).

Statistics Norway (Olsen 2008) remarked that the new provisions would weaken the cost-effectiveness of the system as

adjustments of the allocation basis founded on changing needs implies that the emission trading system works as an investment-subsidy for companies with CO_2 emissions. The larger the production capacity, the larger the need for emission allowances, and the larger the grandfathering of allowances can be expected at the next allocation round, if the system is upheld. The new rule therefore leads to socio-economic ineffectiveness. The cost of CO_2 will not be fully considered in investment decisions because one of the benefits of investing is that one can expect to receive more grandfathered emission allowances. A central role of the emission trading system is to influence investment decisions in a socio-economic favorable direction. The suggested arrangement will prevent this from happening.

Naturvernforbundet maintained their principled position that all of the allowances should be auctioned as this will ensure that the polluter pays. They moreover emphasize that the initial Norwegian NAP was discriminatory because some companies would receive grandfathered allowances and others would not. Hence they see it at as a solution to auction all allowances thus ensuring equal treatment and moreover setting a good example (Haltbrekken and Larsen 2008).

The total amount of Norwegian allowances covering the Kyoto commitment period 2008-2012, is 75.2 million allowances. Currently there are 113 installations covered by the Norwegian ETS. 79 of these installations received grandfathered allowances amounting to 7.5 million tons CO_2 equivalents in 2008 and will be receiving just below 8 million grandfathered allowances per year for the period 2009-2012. Off-shore petroleum installations have to buy all their allowances combined with paying a reduced CO_2 tax. This is done in order to ensure that the sector is faced with as similar costs as before the ETS was introduced, and it is politically possible because petroleum activities are still so profitable that the sector can cover the increased emission costs (Solheim pers.mess. 2011).

On-shore processing industries faced with international competition still receive a generous grandfathering of allowances: Installations existing prior to December 31 2001 receive grandfathered allowances corresponding to 100 percent of their average process emissions and 87 percent of their average energy-related emissions based on the years the installation has been operated in the period January 1 1998 and December 31 2001. Installations established after December 31 2001 and that have had emission at least one full calendar year in the period January 1 2002 to December 31 2007, will receive grandfathered allowances corresponding to 100 percent of their average process emissions and 87 percent of

their average energy-related emissions based on the years the installation has been operated in the abovementioned period. Otherwise, benchmarking will be used[39] (NAP 2008b). This leaves approximately 42 percent of the allowances to be auctioned by the MoF (Klif 2010a).

As the emission allowances have replaced the CO_2 tax, and the prices have been generally low, both petroleum and on-shore industry have experienced a slightly *lower* cost relating to their emissions.

Norway established a national emissions trading system that commenced in 2005 as a way of meeting Norway's commitments under the Kyoto Protocol. From the very beginning it was intended to link the national system with the European ETS. The first trading period from 2005-2007 was a trial period, later The Greenhouse Gas Emissions Trading Act of 2005 was revised and amended to incorporate the EU Emissions Trading Directive and to comply with the first Kyoto commitment period from 2008-20012. The Norwegian Greenhouse Gas Emissions Trading Act is, with the exception of paragraph 3, practically an implementation of the EU Emissions Directive (MoE 2007).

[39] See the Greenhouse Gas Emission Trading Act for the detailed benchmarking procedures.

6 A discussion of the main findings

The most important environmental struggle in Norway is not between environmentalists and industry, or between environmentalists, industry and political parties. The most important struggle is really between the Ministry of Finance and the 'rest'.

The use of the concept of cost-effectiveness has reached parodic heights. It's now high time we get a debate about the economists' and the Ministry of Finance's dominating position in Norwegian environmental policy.

Stein Lier-Hansen (2008, February 15)

From a realist perspective one could say that policy-making is about identifying a problem and the necessary measures to solve the problem, and then deciding on which policy instruments that are best suited to motivate the involved actors to carry out the measures in order to reach the formulated policy goals. This assumes that the measures and instruments can be derived more or less logically from the goal formulations and represent an instrumentalist approach to the study of policy measures. From this perspective choice of policy measure is context independent and is thus merely a technical issue.

This understanding of policy-making is based on several assumptions that are challenged by the constructivist perception that focuses of knowledge *production*, or the creation of *discourses.* This approach contests the realist assumption that policy can be decided upon and created based on a rational-choice model. Instead policy-makers base their decisions on dominating narratives and produced knowledge. Which policy approach we choose is thus inherently a *normative* question based on the reciprocal relationship between knowledge-production and policy-creation.

When looking back across the three phases some reflections about the institutional implications of the emissions trading process can be made. The process reveals who the central actors have been and how the dynamic of the economic discourse and the institutional structure have influenced the actors' preferences and values, and how they perceive the more general environmental values at stake. The interests and values implicit in the arguments that gained the most weight in influencing the articulation of the current emissions trading system, have been protected and reinforced through the emissions trading system's distribution of rights and transaction costs.

Through identifying the main actors and the arguments they have used I have been able to subtract the major issues of contention and how they have influenced the process. In my discussion I will use these findings to answer and discuss my research questions, and explore the relationship between actors, interests and values and how this has influenced the

emissions trading process. Especially two parallel antagonisms are revealed: one within Norway and one between Norway and the EU. It is when we contrast these two conflicts that some of the internal contradictions in the Norwegian position stand out.

6.1.1 A struggle over meaning

Neoclassical economic theory is not in compliance with the laws of nature.

Ronald Fagernes, the Federation of Norwegian Industries (pers.mess. 2011)

The economic discourse was consolidated at an early stage, even well before what I refer to as the first phase, and has been generally dominant in Norwegian climate policy. It has influenced whose arguments have been perceived as valid, and has had great implications for the articulation of the Norwegian emissions trading system. At a stage where the political process could have been opened up to include a variety of opinions and perspectives, the politicians deliberatively chose to limit the public debate in order to develop a strong consistent position protecting a neoclassical interest constellation and seeking to avoid questions of political controversy. With an established concern with efficiency, there has been less room for normative questions of a socio-environmental and eco-philosophical character.

This reflects a general trend, and is analogous to the developments in the EU process. As Hans Warmenhoven recollects about the EU process:

The interesting thing about the allocation process was that most of the countries entered into it as a technical exercise, even though they realized that creating an equitable system would be impossible. No one seemed willing to acknowledge that at the end of the day no technical solution would suffice and that a political solution would be necessary (Ellerman et. al. 2007: 345).

Through reducing an inherently distributional issue to a technical one, and establishing an institutional structure supporting this perspective, a strategic rationality has been fostered at the expense of a communicative and plural rationality. The early signals indicating strong consensus behind emissions trading, limited alternative voices and the involvement of a broader base of society. The key for the involved actors was access to the market, and access to allowances, that were believed to replace the CO_2-tax. Those actors who would be affected directly by an emissions trading system, namely businesses and industries, had been early initiators of an emissions trading system. The allowances represented a large market value,

and there was a lot at stake. The actors who mobilized were those who had vested economic interests in the emitting industries and who already were well organized in various special interest organizations. The environmental costs resulting from a lenient emissions trading system would fall on a diverse group with (ostensibly) less at stake and less mobilization force, namely society at large and future generations.

Despite certain differences, business and industry represented a rather homogeneous group in the face of an emissions trading system. The main interests of Norwegian businesses and industries can be summed up as follows: introduction of an emissions trading system that would replace the CO_2-tax, full harmonization with the EU emission trading system, grandfathering of allowances and a loose total cap: generally a system that would not impair their competitiveness (Bergesen 2004, Lier-Hansen 2004). Their bargaining position was strengthened by the fact that they constituted an influential group with clearly defined interests and a lot to lose from a restrictive Norwegian ETS. The potential losers on the other hand, had a relatively weak bargaining position compared to business and industry. Although the aggregate loss and/or gain are potentially very high, it would be spread across a large and heterogeneous group lacking a clearly defined common interest. Chasek et.al (2006) refer to this as a common feature of climate change issues which favor existing vested interests, and prevents the formation of ambitious climate policies. Implicitly the emissions trading system would protect the existing practices and avoid the question of who should have the right to shift cost upon whom, not only today but also regarding future generations.

These dynamics are also expressed in the literature on willingness to pay (WTP) and willingness to accept compensation (WTA), which states that WTA in order to give up a right or a good is generally higher, while WTP for the same object is respectively lower (Vatn 2005). This implies that the given rights structure is crucial in shaping which interests and preferences that have a strong bargaining position. This again suggests that when the industries traditionally have been given a right to pursue their activities without paying for emissions allowances their willingness to give up this right will be low. The institutional structure of emissions trading favors those who already have a right and who have more to lose and thus greater incentive to mobilize, whereas the losers are at a disadvantage regarding resources and technical expertise needed to influence the political process. Minister of the Environment and International Development, Erik Solheim (pers.mess. 2011) acknowledges these asymmetries and concludes that they represent a weakness in the emission trading system that may create unfair treatment of the smaller actors.

The Commission's interpretation of its mandate its following recommendations, and the Governments presentation of the main findings in White paper No. 54 (2000-2001) *Norwegian Climate Policy*, illustrate how the question of articulating a climate policy was defined as an *economic* question that should be solved with *economic* measures. Economic models and theories were thus used to justify and reinforce the legitimacy of the policy choice. Once this economic consensus had been reached it would be easier for the proponents of emissions trading to present their policy as a neutral tool that would ensure cost-effective emission reductions.

Furthermore, the manner in which this perception has been defined has largely determined who would be included in the debate and which arguments would be deemed valid. It early became a struggle between those who believed the emissions trading system should be restrictive and those who favored a more pragmatic approach. Explicitly normative questions of the distributional implications of emissions trading were largely dismissed. Thus discussions about plural values and deliberations of which environmental values we as a society want to foster have been largely absent. The main contention was between neoclassical economists and pragmatics, essentially between 'economists' and 'economists'. The process of articulating the Norwegian emission trading system was reduced to a question of distributing economic assets, and not about distributing environmental responsibilities in an equitable manner.

Within Norway the diverging perspectives have mainly been between those who support an emission trading system where reductions are undertaken at home, and those who support a flexible system where reductions are undertaken through joint efforts across countries. Parallel to this there is a perhaps even stronger contention between those who favor a strong polluter-pays principle and full auctioning or sales of allowances and those who are in favor of grandfathering.

The following table illustrates the main actors and the principles they support, thus contextualizing the positioning of the various actors' interests and main issues of contention.
I have identified two core issues that constitute the main dividing lines, namely between auctioning/sale or grandfathering of allowances, and between joint efforts (trade, JI and CDM) as supplementary or full flexibility. The contention over these issues relate to what the various actors perceive as equitable distributions of rights and duties. It moreover illustrates different understandings of the polluter-pays principle and to what degree the polluter should carry the internal abatement costs and/or the external environmental costs resulting from the existing pollution.

The different mechanisms will have implications for who will pay the environmental cost of pollution, and who will cover the abatement costs. This will again be decided based on society's perception of what constitutes a legitimate climate policy.

Table 1 Characteristics of the ETS design

	Grandfathering	Auctioning
Flexibility		**STATE**[40]
Supplementary	**EU/ INDUSTRY**	**ENGO**[41]

The Government was initially supporting a system that would be global in scope and allowed extensive use of the flexible mechanisms under the Kyoto Protocol. The argument has been that climate change is a global problem and reductions of GHGs will have the same aggregate effect no matter where they are undertaken (Alstadheim 2010; MoE 2001). Through extensive trade, emission can be reduced where it costs the least, which will mean the largest reductions possible at the lowest cost to society. Furthermore, the Government suggested that all of the emission allowances should be sold or auctioned according to the polluter-pays principle. This would ensure that the polluter pays the full costs of emission, and not society. Later both these position have been modified as a result of national consultation processes and the integration process with the EU ETS.

In a report from the Commission on Power and Democracy, *Knowledge-power and Environmental Policy*, Werner Christie Mathisen (2003) argues that some forms of knowledge are perceived as more solid and applicable than others, and that economics usually falls into this category. The economists work with models and laws that have an assumed high general validity. These are elements in favor of the economic discipline as a provider of prestigious, useful and solid expert knowledge. According to Mathisen, this is in the interest

[40] The Government supports auctioning on principle, but in reality they have chosen a more pragmatic approach.
[41] Interestingly Bellona is less concerned with whether the allowances are grandfathered or auctioned/sold as they believe either allocation method will create the same reduction incentives through introducing higher marginal emission costs (Holm 2007)

of economists as a profession, but not necessarily for the environment. Mathisen compared the White papers No. 46 (1988-89) *Environment and Development* and No. 58 (1996-97) *Environmental policy for sustainable development*. He concludes that the economic discourse is dominant in both papers, albeit slightly more so in the first one, and notes a correspondingly lacking concern for more eco-philosophical questions and concern about the relationship between nature and society (Mathisen 2003). This largely corresponds with my findings.

An actor's perceptions are used to legitimize his or her interests, as they are not perceived as special interests, but rather as a universal perspective. From my research, the two main contenders for the truth about emission allowances and thus how these should be allocated have been between economic experts and/or bureaucrats and industry and/or business representatives[42]. These two groups hold different views on how an economy should be organized and moreover what a fair distribution of costs should be. Despite these differences, they are nevertheless situated within a common ontological framework based on realist assumptions and individual rationality. In this struggle to influence the economic discourse, the voice of those challenging the discourse itself and the very assumptions and values it rests on, is largely absent.

There has been generally little concern about distributional differences between sectors *within* Norway (Foss and Fagernes pers.mess. 2011; Høibye pers.mess. 2011; Stiansen pers.mess. 2011). The main concern has been the position of Norwegian business and industry in face of international competition. There has been the creation of an 'us' and 'them' that has served to conceal any questions of which normative responsibilities we have, because Norwegian interests are perceived as inherently legitimate thus leaving any questions of normative character redundant.

The different actors prescribe certain qualities and characteristic to the different professions' position, and use this to explain their lacking understanding of a certain phenomenon. An example is how NHO and the Federation of Norwegian Industries describe the economists at MoF and Statistics Norway as ideologically bound by theory and thus lacking the ability to *understand* how businesses and industries are affected in reality. Through these types of explanations they reduce what may be professional disagreements to

[42] Partially because of the technical and rather complex nature of emissions trading, smaller actors seem to have lacked the resources to fully participate in the process and the larger ENGO's have chosen a more pragmatic approach, thus leaving them out of the most contentious debates.

ignorance and make the debate more polarized. While the economists make similarly small efforts in understanding the perspectives of their 'adversaries'.

There seem to be strong cultural differences among the different actors determined by 'where they belong'. Within these cultures they foster common interests and perceptions of the 'other' that become reinforced through contentious issues such as the emissions trading system. Holtsmark (pers.mess. 2011), as an economist at Statistics Norway, acknowledges that the different professions do not communicate extensively, and adds, albeit slightly ironically, that "economists don't care much for political processes".

The main divergence seems to exist between economists who are personified by the industry as academic theorists at the Ministry of Finance and Statistics Norway who lack a clear understanding of business and industry's interests which are 'real' and provide a fundamental social good. While the economists on the other hand, perceive these goods to be in the special interest of the business and industry, and may not necessarily be socio-economically beneficial. According to their view, if cost-effectiveness is to be achieved, exemptions are not to be made. This will distort the system, and moreover it is not guaranteed to create the wanted results.

During the first phase the strong, almost hegemonic, economic discourse seems to have been consolidated. I have identified two interpretative repertoires following the economic discourse concerning how the emissions trading system should be designed. I phrase these repertoires as following; 'emissions trading should first and foremost be an economic tool used consistently to meet an ambitious environmental target in a cost-effective way', which is used by actors with a neoclassical perspective, and 'emission trading should protect the environment and protect Norwegian industries and businesses', used by those with a more pragmatic approach. I believe these two repertoires capture the complex nature of the process and the opposing interests and values held by the dominant actors. In the White paper the Government remarked that in the consultation to the Commission's report, more than 40 institutions have responded and that "several of these institutions set specific conditions for them to support an emission trading system, and it is obvious that not all these conditions can be met simultaneously" (MoE 2001: 248).

This represents a development of two opposing understandings of the climate policy discourse. In the literature on discourse analysis such diverging understandings are explained by the development of distinct *interpretative repertoires*. I have referred to them as the pragmatic repertoire and the neoclassical repertoire. I present some of the main differences in the following table:

Table 2 Interpretative repertoires of emissions trading

	The pragmatic repertoire	The neoclassical repertoire
Main actors	Ministry of the Environment The Norwegian Commission on Low Emissions The Federation of Norwegian Industries NHO Bellona Naturvernforbundet	Ministry of Finance The Norwegian Commission on Emission Allowances Statistics Norway Cicero
Interests	Technological investments in Norway Belief in a pragmatic application of economic models that acknowledges market imperfections and protect Norwegian competitiveness Continued production and economic growth in Norway Weak polluter-pays principle: Companies who have invested in production facilities have an intrinsic right to receive allowances, especially when this is the custom in the EU	Cost-effective measures internationally Belief in a theoretically stringent application of economic models and market mechanisms Continued production and economic growth in the Norwegian sectors that are able to carry higher emission costs Strong polluter-pays principle, which will also ensure revenues to the state
Arguments	Economic: Investments must be made in order to create incentives that encourage clean technologies and renewables. Otherwise Norwegian industry will stagnate and fall behind internationally, and carbon leakage	Economic: Trade ensures the most reductions at the lowest cost to society. A pragmatic approach will create a fragmented and less cost-effective system that cannot be justified economically.

	will increase global emissions. Normative: As an industrialized country Norway has a historical responsibility and duty to set a good example, and we have the means to invest in new technologies that will benefit everyone Fair treatment of Norwegian industries	Normative: Allows us to reduce more for the same cost, and we have a moral duty to choose the most efficient policy Polluter should pay and not society It is fair that the state sells/auctions the allowances and then this income can replace other distortive taxes
Measures	Regulations and/or subsidies and voluntary agreements Grandfathering of emission allowances	Taxes and/or allowances combined with other measures Auctioning/sale of emission allowances

Several of the involved actors seem to have perceived the early strong and ongoing emphasis on emissions trading as a key measure to meet Norway's reduction commitments as a signal of this policy measure's impenetrableness. In the consultations related to emissions trading the ENGOs' have shown a general acceptance, but not support, of the ETS (Holm 2007; Haltbrekken and Lahn 2007). I believe this seemingly passiveness must be interpreted in light of the impression that emissions trading cannot be fundamentally challenged. Rather, a parallel process, as reflected in the Commission on Low Emissions' report[43], has emerged, thus providing an alternative approach to Norwegian climate politics where a more pragmatic discourse has been influential.

The industries and businesses were initially supportive of developing an emissions trading system, however, not as a separate national system. They wanted a harmonized system with the EU from the very beginning, securing equal treatment with EU industries and businesses (Bergesen Jr. 2004 and 2007; Lier-Hansen 2004 and 2007). The prolonged process to integrate the Norwegian ETS with the EU ETS, and the strong influence of strict neoclassical thinking in the Norwegian process, has caused much frustration among NHO and the Federation of Norwegian Industries on behalf of their members, and they have not been satisfied with the Norwegian political process.

[43] See their final report NOU 2006: 18 *A climate-friendly Norway,* for their recommendations on how Norway can reduce its emissions by two-thirds from current levels by the middle of this century

The table illustrates the dilemmatic position of the Government who, as the actor responsible for deciding on the final design of the emissions trading system, struggles to meet the opposing interests embedded in these repertoires. The respective actors follow quite distinct interpretative repertoires which they argue for consistently. Their repertoire is based on their interests and is used actively to legitimize and justify their position. In order to decide on a policy, the Government seeks to meet these interests to varying degrees, and usually through compromises thus involving at times contradictory interpretative repertoires. This may result in statements arguing for an "ambitious climate policy where the polluter pays" while including "grandfathering of allowances in order to secure the competitiveness of Norwegian industries".

The question of how the ETS should be designed was raised in the first phase by the Commission, and continued to be a main concern in the second and third phase. The main antagonism between supporters of an ideal economic cost-effective model and supporters of a pragmatic system that secures the competitiveness of Norwegian companies has concerned both the total size of the Norwegian cap, and the allocation method. According to the economists, 100% of the allowances should be either sold in the marked our auctioned. This is cost-effective, ensures that the polluter pays and will give the state revenues which can replace existing distortive taxes. The Government moreover, supports full auctioning on principle, based on a strong interpretation of the polluter-pays principle. Industries and businesses argue that in order to protect *Norwegian interests*, the allocation mechanisms must be dependent on practices elsewhere especially when Norway faces international competition. The incentives to reduce emissions will be the same. The Government acknowledges this argument, and in the face of competition and current practice in the EU, the Government has chosen to allow grandfathering. The economists and some of the ENGOs argue that competition should not influence the Norwegian system. Nevertheless as of today we have a system protecting Norwegian industry and protecting the status quo. A system it furthermore is in the interest of the most powerful actors to keep maintained.

According to economists emission allowances are cost-effective – if they are implemented 'correctly'. The 'correct' implementation rests on several conditions that must be met. During my interviews, one of the main contentions that is resonated throughout is against the MoF's ardent belief in economic theories and models. Foss and Fagernes (pers.mess. 2011) at the Federation of Norwegian Industries, emphasize that there is no other country in the world where the neoclassical economists enjoy such a strong and influential

position. They argue that the economic theories are presented as truths, with grave implications for industry.

In an ideal economic model it is easy to create an emissions trading system that is cost-effective. In the meeting with real life politics, conflicting interests and considerations of distribution, several of the models' main assumptions are severely challenged and not necessarily upheld. What happens to the cost-effectiveness and environmental ambitiousness in this context?

In reality we observe a more fragmented system: not all of the six GHGs covered by the Kyoto protocol are included, several key emitting sectors and industries are exempted and allowances are largely grandfathered, some based on historical emissions, others on estimates. NHO, the Federation of Norwegian Industries are satisfied with some of these concessions, although they believe the process has been unnecessarily elongated because of the strong position of the MoF and its continuous attempts to "sneak in purely neoclassical concerns and exemptions on behalf of Norway" (Foss and Fagernes pers.mess. 2011). Naturvernforbundet is not satisfied with the current Norwegian climate policy, although some of the most market-based initiatives have been stopped (Larsen pers.mess. 2011).

The fragmented nature of the emissions trading system raises a different concern with other actors, especially the economists. They signal a need for more clarity regarding the future developments of the ETS in order to send strong signals about the costs of emissions so that firms will consider these costs in their future investment decisions (Longva 2004; Prestrud 2004; Olsen 2007; Cicero 2007). An emissions trading system that is endogenous will not be cost-effective because the actors can influence the system through their behavior (Holtsmark pers.mess. 2011).

In the decision-making process, the politicians used economic arguments and economic advice in order to legitimize and gain support behind emissions trading. In the implementation phase they fail to adhere to their own policy principles because national interests weigh heavier. When this is the case, I believe it is fair to charge that the arguments behind emissions trading as a climate policy measure have been misleading. Emission trading has been 'sold' as a cost-effective solution, given that certain assumptions are met. To rephrase Vatn (2005: 225): If efficiency is defined as how emissions trading works in a market, then trading emission allowances in a market must create efficiency."

In reality these assumptions have been consistently breached by various exemptions in order to protect Norwegian economic interest to the point where many economists will claim that it is no longer cost-effective. I will not go into the discussion about the legitimacy of the

reasons behind these exemptions. In this context it is irrelevant whether they are valid or not, what matters is the consistency of the argument, which clearly fails.

When you introduce exemptions, special provisions and adjustments, the basic conditions of a *cost-effective* system are no longer met and thus the very backbone of the system is challenged. When Prime Minister Jens Stoltenberg argues for emissions trading he describes how;

The firms will use all their competence, all their engineers, all their financial advisors, all their creativity, not to lobby against the authorities to get exceptions and exemptions from environmental requirements, not to lobby against authorities to receive subsidies, grants and arrangements. They will use all their resources to reduce emissions in the cheapest possible way. It is incredible what firms can achieve when only they understand that this is how the system is and that it is profitable (Alstadheim 2010: 150)

However, as we see from the consultations from those representing industries and businesses, this is not the case. They report a lack of predictability and long-term visions that put Norwegian firms at a disadvantageous position compared to their EU counterparts (Bergesen Jr. 2007; Lier-Hansen 2007). Thus their energies have not been used the way Stoltenberg predicts, but rather in influencing the Government's decisions. Both NHO and the Federation of Norwegian Industries, who together represent the majority of Norwegian businesses and industries, acknowledge the seriousness of climate change and the responsibility they and their members hold in reducing GHG emissions (Foss and Fagernes pers.mess. 2011; Høibye pers.mess. 2011). This being said, they also want to secure the interests of their members, and ensure equal treatment with their competition. The Norwegian Government has wanted a stricter system than in Europe, and consequently the process has been a struggle between industries and business trying to secure their competitiveness and economic experts trying to protect their theories (ibid.). A picture in stark contrast to the ideal picture Stoltenberg is painting in *The Climate Paradox* (Alstadheim 2010).

By comparing the articulation of the proposition with the recommendations made by the Commission on Emission Allowances, we can identify which actors got the most leverage and who were able to influence the design in their interest. The explicit considerations of Norwegian businesses and industries' competitiveness may be justified from a more common perspective, but nevertheless also undoubtedly serves in the special interest of the affected industries. Moving from a report where the majority recommended *no* grandfathering of

allowances, to a system largely based on grandfathering[44] must be said to represent quite a substantial achievement on behalf of those who supported grandfathering. Generally, the changes that were made to the Commission's recommendations were toward a more pragmatic approach, largely serving the interests of especially NHO and the Federation of Norwegian Industries.

The allocation debate reflects a conflict between pragmatics and neoclassical economists regarding the distributional aspects of climate policy. The former believe in making investments *in* Norway in order to reduce emissions while continuing our economic growth, while the latter believe in continued production by industries that can carry the extra emission costs in Norway, off-set by emission reductions where they are cheaper through trade. They share a belief in market-based solutions, but differ over how the economic models should be applied, and who should carry the costs.

In the emission trading process the main opposing views seem to have been, and continue to be, between pragmatics and neoclassical economists, who represent different professional cultures adhering to opposing paradigms. The former group promotes environmental regulations that will not compromise the interests of Norwegian businesses and industries; the latter supports a more stringent use of economic theories and models to achieve cost-effective and market-based environmental policies. In their struggle over meaning, both these camps lack a primary concern with the socio-environmental developments and the more fundamental underlying social structures that cause detrimental climate change. On the contrary, they systematically omit questions and issues that discuss which environmental values we as a society want to foster and protect.

The vagueness of the Government's position and lack of a clear decision on allocation method are moreover likely to have sent signals to the industries that they could expect receiving grandfathered allowances. Bromley (1989: 39) argues that "regularized behavior, whether or not it is officially sanctioned by legal process, over time takes on the aura of a right". Moreover, once a right is given, previous experiences have shown that it is much more difficult to restrict access to a good that an actor is perceived to have an entitlement to (Raymond 2003).

[44] Norway does sell a greater amount of its allowances than the EU, some 42 percent, however, most of this is covered by the petroleum sector off-shore which gets no grandfathered allowances. Thus, mainland industries still receive more or less the same treatment as their European competitors.

6.1.2 The ETS from an equity perspective

It is good that the emissions trading system is in place. Now, Norwegian companies can make money from reducing their GHG emissions.

Erik Solheim (MoE 2009, February 27)

Creating environmental policy is a complex process. Closely related to solving an environmental issue such as climate change, are questions of distributing rights and duties, thus creating winners and losers. Related to the cost-effectiveness of emissions trading are questions such as cost-effective for *whom* and at which costs? Are there measures we *should* or *want* to undertake even if they are refuted by cost-effectiveness analyses?

Embedded in emission trading there are thus some decisions about who are granted rights and respectively duties, depending on what type of system is being upheld, even if it's normative character is not explicitly discussed. Rather, as an economic measure, emission trading is largely perceived as a neutral tool securing fair and effective allocations if the 'invisible hand' is only left to work undisturbed. The processes I have analyzed clearly demonstrate the inherently normative aspect of this perspective.

The Greenhouse Gas Emissions Trading Act represents the Government's main measure to meeting our Kyoto commitments. The choice to establish an emissions trading system has been influenced by the dominating discourses and the values they uphold. Relating back to the definition I use of institutions, once established as an institution the emissions trading system will "provide expectations, (…) support values and produce and protect interests" (Vatn 2005: 60). Thus, changing the institutional structure, which has been done with the implementation of an emissions trading system, has vast distributional implications as it defines what is effective based on the right structures created. In this context, discussions about equity should be paramount. And yet, what I observe is that they are largely absent.

Raymond (2003: 34) draws attention to two main reasons why public policy analysts avoid questions of equity. They are either normative or pragmatic:

The normative argument defends an efficient policy outcome as the most ethically justified goal for public policymakers, thereby rendering consideration of other equity-based outcomes largely irrelevant. The pragmatic argument, by contrast, notes the importance of equity concepts (other than efficiency) in policymaking but declines to consider them further because they are too difficult, murky or inconclusive to discuss and research productively.

This largely corresponds to my observations. Firstly, when I have spoken to economists and read presentations of the official Norwegian climate position, emission trading is justified because it is cost-effective, however without taking into consideration its implicit protection of the status quo or implications for the distribution of rights. Efficiency theory is based on a consequentialist framework. Nonetheless, an interesting feature of the emission trading process is that the process of deciding on a policy goal and then the means to reach this goal, literary has been reversed. Traditionally, the politicians proclaim a goal and then the economists' may be given the task ensuring that this is achieved in the most cost-effective manner. With emission trading it seems it was *a priori* accepted that cost-effectiveness per se is the goal, and then the policy was chosen. This furthermore implies an deontological approach as it seems emissions trading "can be justified when it adhered to some a priori governing rule [i.e. efficiency], and this alone determines whether or not an action is morally justifiable" (Ikeme 2003: 196).

Secondly, equity-concepts *are* difficult to assess. I find this to be the case not necessarily because there is a lack of empirical material, but rather because of the strong normative position the cost-effectiveness argument holds. To discuss 'winners' and 'losers' is controversial as it seems even the winners are not happy to be identified as such because it reveals their special interest in a process where this has been presented as a common interest, often under the auspices of being cost-effective. Lastly, equity issues are frequently being defined as *political*, and left at that (e.g. NOU 2000a).

There is a general contention then, between what the different actors perceive as an equitable and legitimate climate policy, although this debate receives little explicit attention in the literature. There is moreover a lacking clarity concerning the polluter-pays principle and more precisely *who* should carry the environmental costs of pollution. In the international negotiations, a key concern has been about the allocation of reduction responsibilities and commitments. The developing countries, in particular, argue that the developed countries share a historic responsibility and therefore a duty to undertake reductions first (Chasek et.al 2006; Raymond 2003). It is therefore noteworthy that in the Norwegian process, this aspect has been largely absent. Rather, the Government speaks of an ideal and strong polluter-pays principle, and then articulates a system where allowances are grandfathered, clearly breaching with an equity interpretation of the principle (Woerdman et.al. 2008: 135-137). This leads me to believe that the polluter-pays principle as an argument is used strategically by the Government in order to gain legitimacy behind a policy that is first and foremost protecting Norwegian interests.

The distribution of rights and duties will be dependent on the existing institutional structure, both because it defines the right structures and transaction costs and because it influences the actors' preferences and rationalities.

Implicit in the Norwegian support of emission trading is the fact that reducing emissions in Norway is expensive and will require vast economic as well as social adjustments. Through extensive international trade and use of the Kyoto flexible mechanisms, the existing production and consumption patterns in Norway can be continued while we meet our reduction commitments. Thus our fossil fuel dependency is likely to be increasing while our abatement costs will also be rising, further increasing our dependency on trade. This creates a mutually reinforcing relationship, which supports the trade argument, but also makes it circular. From an equity perspective it is also dubious: Does the fact that abatement costs are high in Norway (because we are a high-cost society) justify a continuation of our growth, which currently only can be sustained because someone else are undertaking the reductions where they are cheaper (because it is done in low-cost societies)? Unless we are willing to discuss the real equity implications of any climate policy, and emissions trading in particular, the existing structure is likely to be upheld at the expense of alternative approaches.

From my research process it seems that there have been very few fundamental questions raised about the system itself, and which structures it upholds. The early consolidation of cost-effectiveness seems to have been rather successful in obsoleting alternative approaches and debates. The rather resigned comment in Naturvernforbundet's consultation accepting that "emission trading is here to stay" (Haltbrekken and Lahn 2007: 1), reflects the power of this argument and the perceived impossibility to challenge it. A leading premise behind the Norwegian climate policy has been cost-effectiveness, and this seems to have trumped questions of equity and fairness in shaping the process of policy formation. This influences both how the actors perceive the current climate policy and what are perceived as viable alternatives.

Firstly, the process has taken place in closed environments mostly influenced by expert opinions. Climate policy, and emission trading specifically, has become a technical and economic exercise that most people feel excluded from. According to a survey done by TNS Gallup and Klif in 2010, between 60 and 70 percent of the Norwegian population have little or no trust in achieving emission reductions at home or abroad through emissions trading (Klif 2010b). The Director of Klif, Ellen Hambro, expresses concern with the lacking trust in emissions trading among the population and relates this to the fact that the system is "complex and difficult to understand" (ibid.).

There has been little room for deliberation and community engagement. Rather people are alienated from the climate question. It has become 'high politics' and consequently the citizen has been marginalized. In an international survey undertaken in 1992, 72% of the Norwegian respondents said they would "choose protecting the environment before economic growth" (Andresen and Butenschøn 2001: 342) There are several reasons to be cautious of the results from surveys like this. What people answer in such polls cannot always be taken to mean that they really would follow these claims in reality. However, the response does convey a certain notion of how people feel and what values they hold. Not least, they were notions that could have been acted upon and debated. Instead, the climate debate was hijacked by economists.

Ex post my observation can easily become speculative and there is no use in arguing in retrospect what could have happened if the process had been more deliberative. However, it is tempting to ask whether through deliberation a more collective rationality would have surfaced and perhaps cost-effectiveness would not have been given the prominence it has.

As with any policy that seeks to protect a common resource, and restrict its use, there will be winners and losers. Questions of a fair distribution will arise (Raymond 2003). A common feature in contributions to the Norwegian emissions trading policy process is the lack of clear references to these questions. Both *cost-effectiveness* and the *polluter-pays principle* are referred to frequently, despite the absence of clear definitions. What is true of both these terms is that they are value laden and carry with them powerful connotations that make them appealing in political arguments. Together they provide a strong case for any policy that is defined as abiding by both terms, which emission trading is. In this section of my analysis I will thus scrutinize how the terms are applied and how the relationship between our understanding of the terms and the context in which they are applied have influenced our understanding of their actual meaning and role in influencing climate policy.

In a simplified list of the advantages of emissions trading, Prime Minister Stoltenberg emphasizes three factors; "1) secures emission reductions, 2) fair – the polluter pays, and 3) promotes new technology" (Alstadheim 2010: 152) . According to his argument it is fair that the polluters pay and not the community. "Instead of us using money from the Treasury, we get money into the Treasury" (ibid: 154). This is dependent on the allocation method however and it requires that allowances as either sold or auctioned by the government. In the trial phase in 2005-2007 all the allowances were grandfathered, and under the current system some 58 percent of the allowances are still grandfathered. Moreover, it depends on the stringency of the total cap: the looser the cap the more of the burden is shifted to the sectors not covered by

the scheme, and/or the governments need to buy emission allowances from abroad (Longva 2004). If the latter materializes, the community will pay while the polluters may actually profit from an allowance system.

In a contribution to this debate, Woerdmann et.al (2008: 137) argue explicitly that "grandfathering is inconsistent with an equity interpretation of the polluter-pays principle". According to the authors;

Under grandfathering there is a wealth transfer from the public to the polluter. This improves the financial position of the shareholders: the value of a share increases because the polluter has received an asset with a market value free of charge. Even if the polluter pays under grandfathering because of the opportunity costs faced, the polluters receive a capital gift equal to the revenues that the government would have obtained at an auction. Such a capital gift, while not distortive in efficiency terms[45]*, does have a redistributive impact that is beneficial for the polluter. Grandfathering may thus be perceived as unfair from the polluter-pays perspective* (Woerdmann et.al. 2008: 136).

Some of the initial reservations against emissions trading were of a normative character, and analysts have attributed this skepticism to concern that it would allow rich countries to buy themselves free from a historic responsibility (Chasek et.al. 2006; Raymond 2003). Internationally the normative debate has been more strongly voiced. Moreover, those countries who opposed emissions trading usually did so on moral grounds. The EU's skepticism against emission trading for example is usually explained by the strong position of the green movement and a general concern that trade would not result in actual reductions, and moreover that the whole notion of buying oneself free form a responsibility was received as dubious.

Initially, therefore, the EU requested a flat reduction target across all the participating countries. It is outside the scope of my paper to go into detail on the change in the EU position, other than remarking that there was a complete change in position, partially explained by the American decision not to ratify the Protocol (Raymond 2003; Chasek et.al. 2006; Ellerman et.al. 2007).

Against this background it is interesting that Stoltenberg refers to the current position of emissions trading as a climate policy tool in the EU as evidence of its superiority (Alstadheim 2010) I believe this blurs the debate and avoids the important normative issues

[45] The authors fail to take into consideration the distributive implications are essential in *any* efficiency calculation. Thus they diverge from my understanding of all efficiency consideration to be normative, and that the polluter-pays principle therefore inherently not merely about efficiency, but about distributing rights and duties, and there is about *equity*.

that made the EU a trading skeptic for so long. The fact that emission trading is implemented is not evidence enough that the normative issues have disappeared or necessarily have been solved.

The ENGOs have challenged the influential fossil fuel industrial complex's presentation of Norway's special position. The ENGOs have persistently argued that Norway's economic wealth, based largely on exploitation of fossil fuels, gives her a special responsibility to be an environmental forerunner also on her own turf.

The prevalence of economic actors reflects some of the implications of introducing market mechanisms and in the case of the ETS, creating a market between the state and industry; who becomes defined as actors is inherent in the policy choice and suddenly the opinions and values of the citizens, as part of society and the ones who currently pays the cost of pollution, become redundant. Moreover, the consequences of introducing market mechanisms have implications for how the actors behave and what is perceived as sound behavior.

According to institutional theory it is likely that the introduction of market mechanism will encourage the actors to seek maximal individual gains. The rational actor model is thus upheld, supporting the models and predictions made by neoclassical economists and realist policy-analysts. However, they refuse to ask *why* this is so, a central question to a more constructivist approach, where the importance of social context in shaping our behavior is emphasized. In a more deliberative environment actors are believed to maximize the common welfare and not necessarily purely individual gains. An emission trading system however, rather than fostering a social rationality that encourages actors to seek collective gains, reduces the issue to a struggle over securing ones competitive advantage and protecting ones individual economic interests.

The main controversy in the emissions trading debate has surrounded the competing interests of creating an ambitious climate policy and securing the competitive position of Norwegian business and industry. The industries have favored a lax system based on grandfathering of allowances, while the more theoretically conservative neoclassical economists have favored a restrictive system where there should be no grandfathering of allowances and no exemptions for any sectors of the industry.

One of the reasons why emission reductions is such a contentious issue is the current conflict between the conception that CO_2 emission reductions can only be achieved at the expense of reduced industrial production, and thus reduced economic growth. This paints a picture of economic policy and fiscal policy being in opposition. There is extreme

incongruity. Throughout my research in the official documents there are no references to alternative ways of growth. The existing institutional structures seem to be so heavily embedded in any political thinking, environmental thinking included, that the two issues are deemed to be perceived as incompatible. Meeting one need by necessity excludes the other. My main question for further research and analysis is thus how can we overcome this inherent structural barrier? Is it possible to think of economic growth and environmental protection in a fundamentally new way that allows us to continue to improve the livelihood for those who need that without compromising the prospects for future generations?

7 Conclusion

My research questions are not easily distinguished. They are influenced by relationships of a reciprocal character and will both influence and be influenced by each other. I have highlighted what I perceive as the most central concept(s) in each question in order to make it clear what my emphasis will be when answering them. To recap, my research questions are the following:

1. Which **actors** were dominant in conceptualizing the **discourse** influencing the emissions trading system?
2. Which **dynamics** reinforced and upheld the dominant discourse once established?
3. Which arguments **won** - whose interests and values became **protected** in the Norwegian national allocation plan?
4. Has the Norwegian emission trading system been perceived as legitimate because it **represents equity principles**, or because it **protects powerful interests**?

I have used an institutional approach to answering my research questions. Through my analysis and discussion I have endeavored to clarify the interrelated relationships between institutions as social phenomena and the actors involved. The institutional structure defines what is considered efficient, and also influences our preferences and values. The purpose of my thesis has been to gain a comprehensive understanding of this relationship and how it has influenced the Norwegian emissions trading process.

I have analyzed the arguments used to influence the political process and how some perceptions, or discourses, become dominant at the expense of (unvoiced) alternative perceptions. I have endeavored to identify who the dominant actors have been in the Norwegian emission trading policy process, which arguments they have presented and lastly who were able to get political approval or their position. I have used a discursive approach and have as such focused on how power and position influences what is perceived as valid and 'true'. Moreover, from a constructivist perspective, I believe the social phenomenon I study to be constructed and influenced by the involved actors at the same time as the actors' themselves are influenced by the social context.

Who the actors have been can be answered rather separately, and I will begin by doing so. The two nest questions are much more interdependent, and will also be influenced by who the dominant actors were, and I shall answer them jointly. Lastly I will present my answer to

the last question. It should however again be stressed that the answers are closely interlinked and that the demarcations I make are not absolute.

7.1 The central actors and discourse

The Norwegian climate debate related to emissions trading has been a rather closed process, both to reduce the tension surrounding a political controversial topic and secure a strong consensus. This has limited the range of active participants. The strong position of the economic discourse in Norwegian environmental politics had strong bearings on who were perceived as legitimate actors voicing valid arguments.

As Norway was defining its position on climate change during the late 1980's and early 1990's, a clear move towards a market-based approach was made. Andresen and Butenschøn (2001: 344) remark that, "domestically the making of the new policy was a rather closed and seemingly technical process, and since the main elements of stabilization and taxation were maintained, neither Parliament, green NGOs nor the general public paid much attention to what may have seemed a rather subtle policy change of the Norwegian climate policy". However, this apparently *subtle* change would lay the foundations for the subsequent process and thus had far-reaching consequences for who would dominate the Norwegian climate debate and moreover whose interests would be served.

The economic discourse limited actor participation to those who had vested economic interests, and discussion topics to those related to economic theory. In broad terms, the main contention has been between the Ministry of Finance and business and industry represented by NHO and the Federation of Norwegian Industries. Within this group moreover, the main contention has been between those who believe in a restrictive emissions trading system, where the allowances are sold, and those who believe in a more pragmatic system where the allowances are grandfathered. Despite their different perspectives on emissions trading, they both supported the most fundamental ideas behind emissions trading. Thus none of them challenged the underlying discourse; rather they developed two distinct interpretative repertoires that represent their understanding of emissions trading.

These two groups represent powerful interests and traditionally strong positions in society. In the emissions trading process, their struggle over influence has made the discussion more polarized and narrow, leaving considerably less room for other actors and alternative voices. The ENGOs, Bellona and Naturvernforbundet, who chose a pragmatic approach, were involved but their arguments were largely marginalized.

The economic discourse's main premises were resting on the articulation of a cost-effective environmental policy, and emissions trading furthermore, was believed to be well-suited to reach this goal. Thus the economic discourse justified both the goal and the measure to reach this goal. Throughout the process however, the hold of this strictly neoclassical approach has been challenged as the antagonisms between the pragmatics and the neoclassic became stronger. Throughout the process the Government has thus found itself in a dilemmatic position trying to articulate an ambitious climate policy, while at the same time not impairing Norwegian economic interests. This illustrates that although the economic discourse was consolidated early in the process, it is dynamic and only as absolute as it is perceived to be.

7.2 Efficiency or equity?

The economic discourse has been traditionally strong, and through the emission trading process its hegemonic position has been reinforced through the institutional design. This dynamic has fostered a preference towards economically technocrat solutions requiring as little deliberation and dialogue as possible, instead of creating room for a collective decision-making process which could have opened up for a discussion of alternative values.

Economic arguments are powerful and may be perceived as difficult to challenge. Once it became embedded in the institutional structure it is further strengthened and becomes a part of the order of thing, something which is not questioned. Therefore, the contention we see between the pragmatics and neoclassical economists is still confined by the economic discourse and does not represent a questioning of the fundamental premises. The institutional robustness will also make it more difficult to change once it has been established. Considering the implications the institutional structure has for which interests are recognized and protected, and which are denied, I believe this tendency is problematic.

The dominant position of the economic discourse comes at the expense of alternative perceptions and approaches to climate policy. The emission trading process has been reduced to a struggle between the ones with vested interests at stake, blurring the more subtle changes that are made as a consequence, and the implications of this for the future prospects of alternative interests and values. Emission trading involves vast economic resources and the more strongly vested the institutions supporting the system become, the more difficult it will be to revise it critically. It becomes, and has perhaps already become the 'order of things',

something which we do not question and believe to be outside the scope of things we can change.

Undertaking emission reductions where they are cheaper allows us to reduce more for the same amount spent, the proponents of trade have argued – an argument difficult to argue against. Behind this economic rationale lies strongly vested economic interests: the Norwegian economy is highly dependent on fossil fuel exports and CO_2 emissions were on an increase in the 1990's making it unlikely that Norway would be able to meet the Kyoto requirements without incurring high cost and economic and social adjustments, unless emission trade would be accepted.

Among the proponents of emission trading it is believed that Norway is in a unique position as a European energy supplier. Increased emissions in Norway will be offset by decreased emission in countries like the UK and Germany as they substitute coal with for example Norwegian gas. This gives Norway an obligation, a moral duty if you will, to continue increasing emissions. This position is referred to as the 'fossil fuel industrial complex' (Andresen and Butenschøn 2001: Nilsen 2001). Thus from all perspectives, the world would be better off if Norway continued its domestic emissions and achieved its Kyoto target through joint implementation internationally. Trade was perceived as, and has been portrayed as the panacea to meeting Norway's Kyoto commitments. It is both economically sound and morally right following the argument.

My conclusion however, is that emissions trading supports the existing structure of inequalities that makes emission reductions so much more expensive in Norway than in for example India, in the first place, and will moreover encourage the continuation of such inequalities. Thus emission trading may very well be cost-effective, but it is cost-effective within the "current structure of institutional arrangements that determine what is a cost – and for whom" (Bromley 1989: 4). However, the proponents of the cost-effectiveness argument seldom ask these questions, but take the distribution as given, thus implicitly protecting the existing right structure and status quo.

Interestingly, in their introduction, the Commission on Emission Allowances acknowledges the inherent problem of this thinking when they conclude that "it is difficult to see how, in the long run, there can exist an ambitious climate policy without any consequences for the industrial composition in Norway and other countries" (NOU 2000: 5). This seems to be the core issue and cause of political controversy. But rather than discussing this issue is it is pushed ahead to be dealt with later. Meanwhile Norway's unique position as a provider of modern, energy-effective and (relatively) cleaner energy sources justifies

increased emissions here, which are off-set by international emissions trading in a cost-effective manner. According to this position it seems we all can be winners.

However, I will argue that in a global perspective it is the Norwegian Treasury, Norwegian industry and business and Norwegian consumers who are the winners, while people in marginalized societies and future generations are the losers.

7.3 Some last remarks

From a constructivist and pluralist perspective, the competitive environment created by an emissions trading system is a social construct, and although the constraints it creates are real, they are not static or inevitable but as social construct they are subject to influence and change. In order to enable this change, the dominant perspectives, or discourses, must be identified as such, and not as 'truths'. However, established hegemonic discourses that go unchallenged will greatly influence what are perceived as appropriate policy measures, and consequently also how we behave.

Through contrasting the principle of *cost-effectiveness* with the principle of *equity* I have demonstrated how they essentially are equally normative in character and the implications of this on how we should analyze the political process. The initial choice of which policy approach *should* be applied is thus implicitly normative in character. The involved actor will chose an argument based on her interests and standing. The argument used thus represents not only her interest, but moreover a conviction that this is the *better* argument, and will be utilized in an endeavor to turn her special interest into a common interest that is more likely to gain broad support.

According to my perspective, the Norwegian emissions trading process has fostered individual rationalism and has been conceived as an interest struggle by the actors. This has limited the more fundamental debate about values. Not because values are not important or that there are no reconcilable environmental values, but because the existing discourse has reduced their relevance. The dynamics of the process and the development of a strong economic discourse have made questions of equity redundant. But as I have demonstrated in my thesis, the existing dynamics are not absolute truths or limits; rather they are social constructs receptive to change.

The very reason why we discuss emissions trading in the first place is based on some common belief that we share a responsibility to protect the environment. Environmental policies moreover, are inherently about distribution, that is, about issues of equity. My

analysis of the Norwegian emissions trading process reveals a general lack of acknowledging this. Consequently there is a current lack of equity discussions related to emissions trading. However, as Raymond (2003: 2) argues; "As resource scarcity increases, it will be even more difficult to approach any environmental policy without addressing such equity implications directly; no longer can they be ignored or obscured". This will be a reality in Norway as well, and through my thesis I hope that I have illustrated the importance of including these questions and thus building an alternative environmental discourse where plural values are fostered, and where we develop a comprehensive understanding of the complexity of environmental equity issues that will establish a common ground for a more fruitful environmental equity debate.

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Appendix

Interview guide

Introduction

- My background
- The thesis

Background

- How long have you worked for the organization?
- What has your role been?
- What is your academic background?

1 The perspective of the organization

a) What is the organization's perspective on emissions trading as a climate policy measure? Hva er org.s syn på klimakvoter som virkemiddel i klimapolitikken?

- How do you perceive emissions trading the way the system is operationalized as of today?

b) How has the organization voiced its perspective on emissions trading as a climate policy measure?

- Do you have an official policy
- Have you participated actively in the public policy debate?

2 Comparing emissions trading with alternative measures

a) Why do you think emission trading has gained such a strong position in Norwegian climate policy?

b) What do you think the implications of this are for the use of alternative policy measure?

- Do you believe emissions trading to be sound climate policy?
- Is Norway fulfilling its climate commitments through the surrent policy?

3 Actors and breakthroughs in the decision-making process

What is your perception of the organization's achievements in influencing the articulation of Norwegian climate policy?

- What do you believe are the reasons why you have achieved to little/so much?

- Who, if any, have you perceived as winners or losers?

What do you recognize as the main contention in Norwegian climate policy in general, and in the emissions trading process more specifically?