Choosing Efficient Combinations of Policy Instruments for Low-carbon development and Innovation to Achieve Europe's 2050 climate targets

Political feasibility of climate policy instruments in the EU


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Political Feasibility of Climate Policy Instruments for Achieving the European Union Long Term Emissions Reduction Targets

An analysis of interest groups’ preferences

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Abstract

Climate change is increasingly considered as one of the biggest challenges of modern times. The European Union has addressed this challenge with a specific climate policy package (20/20/20 package) and by setting long term emission reduction targets. However, numerous scholars and practitioners believe that the current European climate policy is not sufficient to achieve the long term emission reduction targets and that new policy instruments along with a revision of the existing ones are needed. This study aimed to investigate the political feasibility of the adoption of climate policy instruments for achieving the EU long term emission reduction targets by understanding the preferences of interest groups for different policy instruments. Specifically, this study explores the preferences of industry, environmentalists and academics at EU level.

The analytical framework consisted of the factors that Hahn (1989) identified as influencing interest group preferences for policy instruments, namely the nature of the instrument (e.g. market, regulatory, voluntary, informational); the perception of distribution of costs and benefits; what is known about the performance of the instrument (uncertainty as deterrent of use, level of flexibility); and the level of implementation of the policy instruments (European, national, regional/local). The methodology consisted of focus groups with industry, environmental NGOs and academic/think-tanks representatives, document analysis and individual interviews. The analysis revealed that that industry tends to prefer less ambitious targets with regard to 2030 and 2050 than NGOs. This is in accordance to Hahn’s argumentation. It was also found that on Hahn’s factor of performance of the instrument, there needs to be achieved a certain balance between uncertainty and flexibility. On the nature of the policy instrument, the study found accordance between findings and literature. As Hahn (1989) suggests industry prefers market-based instruments while NGOs prefer a regulatory approach. It was also found that different interest groups will prefer different levels of implementation of different climate policy instruments.

Concluding, the analysis of political feasibility of the adoption of climate policy instruments for achieving the EU long term emission reduction targets is complex. By examining one element of political feasibility namely interest groups’ preferences for different climate policy instruments, it is possible to gain an insight in how these preferences are influencing the political feasibility of policy instruments. However, further research is needed for achieving an in-depth analysis of political feasibility. In order to reach an in-depth study of political feasibility, it is recommended to examine all the elements of political feasibility, power constellations, interest group’s preferences and the institutional setting.
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1) Introduction

Climate change is increasingly considered as one of the biggest challenges of modern times as it has a significant impact on the global economy, population safety and environmental resources. The complexity of the problem lays in the fact that its main cause is intertwined with societal growth and evolution (Boersema, 2009).

In particular, greenhouse gas (GHG) emissions, the root cause of climate change, have been rising due to the use of fossil fuels and increasing energy demand. Increased concentration of GHG in the atmosphere leads to increased temperature whose impacts are already being observed in terms of rising sea levels and melting glaciers. According to the latest report of the Intergovernmental Panel on Climate Change (IPCC, 2014), if GHG emissions are not significantly reduced this will have negative impacts on population health, natural ecosystems and the economy (IPCC, 2014). Furthermore, the report observes (with high confidence) that total GHG emissions deriving from anthropogenic emissions have not ceased to increase from 1970 to 2010 and that some of the higher increases are concentrated at the last section of this period (IPCC, 2014)\(^1\).

In order to cut GHG emissions there is need for collective climate action. The European Union (EU) in its 2020 strategy has set a 20% GHG emissions reduction target by 2020 compared to the 1990 levels (European Commission, 2010). This is further divided into 21% emission reduction prerequisite for the Emission Trading Scheme (ETS) sector and a 10% emission reduction prerequisite for the non-ETS sector comparing with 2005 levels (Böhringer C., 2009). The main pillar of EU’s climate GHG emission reduction policy is the ETS. Apart from the 2020 targets, the EU has also been discussing a policy framework for climate for 2030. The framework proposes an emission target of 40% reduction below the 1990 level by 2030 (European Commission, 2014). This target is supposed to be agreed upon in October 2014 the latest. Besides these policy frameworks the EU also is planning ahead towards 2050. In its climate change roadmap the EU has committed to cut 80-95% of its GHG emissions compared to 1990 levels by 2050 (European Commission, 2011). However, even though the EU is on its way towards achieving a reduction of 20% compared with 1990 levels by 2020, the current climate policy instrument mix is not optimal since it has some drawbacks which will obstruct achieving the 2030 and 2050 targets.

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\(^1\) According to IPCC (2014):“Total anthropogenic GHG emissions were the highest in human history from 2000 to 2010 and reached 49 (±4.5) GtCO2eq / year in 2010.”
Thus, it is imperative to revise and further improve the current policy instruments in order to achieve the 2030 and 2050 EU GHG emissions reduction targets.

Much theoretical discussion exists about policy instrument design and adoption (see e.g. Howlett, 2011; Hahn, 1989). Typically, environmental policy instruments are categorized into four main typologies: market-based instruments such as emission trading, carbon tax, subsidies; regulatory instruments such as electricity performance standards; informational instruments such as eco-labelling; and voluntary instruments such as negotiated agreements between government and industry (see e.g. Howlett, 2011).

According to economic theory, a policy instrument should be selected with regard to its capacity to achieve objectives in a cost-effective manner. However, in practice there are many other factors influencing policy instruments design and adoption. Scholars have increasingly acknowledged the role of institutions, power and interest groups preferences in the process of policy making (Bressers et al, 1999; Hahn 1989). These factors affect the political feasibility of a proposed policy, meaning that they influence the likelihood that a policy proposal will be adopted by relevant political fora. In this context, Hahn (1989) argues that interest groups preferences can be taken as an indicator of political feasibility. For example, highly organized interest groups such as industry and environmentalists have the power and capacity to pressure policy-makers for the adoption or change of an instrument design. Hahn (1989) also identifies a number of factors influencing interest group preferences. These include: 1) the nature of the instrument (e.g. market, regulatory, voluntary, informational); 2) the perception of distribution of costs and benefits; 3) what is known about the performance of the instrument (uncertainty as deterrent of use, level of flexibility); and 4) the level of implementation of the policy instruments (European, national, regional/local).

This research is embedded in the EU funded CECILIA2050 project that analyzes the performance of existing climate policy instruments and their interaction, and describes ways to improve the economic efficiency and environmental effectiveness of the EU climate policy instrument mix. In this context, this study aims to investigate the political feasibility of climate policy instruments for achieving the EU 2030 and 2050 GHG emission reduction targets by understanding the preferences of interest groups for different policy instruments. Specifically, this study explores the preferences of industry, environmentalists and academics at EU level. The study of preferences of EU policy-makers were also initially included in the study. However, they could not be investigated because it was not possible to reach the target group (see methodology for more details).
Consequently, the main research question of this study is: How are interest groups’ preferences for different climate policy instruments shaped? Sub-questions are:

a) What relevant discourses interest groups put forward about EU climate policy instrument design and adoption?

b) What do interest group discourses tell about their perceptions of problems, solutions, distribution of costs and benefits and performance of the instruments?

c) What interest group discourses tell about the political feasibility of different instruments?

This study has a qualitative research design and will adopt a deductive approach to the investigation. In order to answer the before-mentioned question, this study is divided in the following sections. In chapter 2, the analytical framework is outlined and in chapter 3 the methodological section is described. In chapter 4, the climate policy instruments are illustrated while in chapter 5, 6 and 7 the results, the discussion and the conclusion are described respectively.
2) Analytical framework

In the following section the terms of political feasibility and interest groups are defined and interest group preferences characterized.

a) Defining political feasibility

When trying to define what political feasibility is we come across a plethora of definitions in the political science literature. According to Meltsner (1972), political feasibility can illustrate the particular distance between the “desirable and the possible” in the policy making process. According to Weber D. (1986) political feasibility “suggests that a policy proposal is acceptable to, or at least not opposed by a sufficient number of the relevant policy-makers so that the proposal is likely to be adopted”. This means that if an instrument is being opposed by a powerful interest group, for example industry, this might put pressure on the policy-makers for opting not to adopt that instrument. Then there is the view of Majone (1975) who points to the limitation of available political resources, distributional constraints and institutional constraints as potential factors influencing political feasibility. When talking about policy instrument choice, Hahn (1989) suggests that the reaction of interest groups to various policy proposals can reveal a lot of information about the political feasibility of the instrument. In this vein, Skodvin (2010) argues that in case of target groups exerting political pressure to impede the adoption of certain environmental policy plans, these plans will probably not solve the problem entirely and will become infeasible.

This study adopts the definition of political feasibility developed in the CECILIA2050 project that is: “the likelihood that a policy proposal will be adopted by relevant political fora, taking into account the power constellation between various relevant interest groups, their preferences for policy instruments, and the institutional setting in which proposals for instruments (and their concrete design) are discussed” (CECILIA2050 internal research design, 2014). Out of these three important elements this research focuses on interest groups’ preferences.

b) Defining interest groups

Trying to define interest groups one stumbles upon the vast number of neologisms (Beyers, 2008). The terms used in literature vary from interest groups, target groups, pressure groups etc.² In general terms,

² Other terms used include: interest groups, political interest groups, interest associations, interest organizations, organized interests, pressure groups, specific interests, special interest groups, citizen groups, public interest groups, non-governmental organizations, social movement organizations, and civil society organizations.
interest groups can be defined as “any association of individuals or organizations, usually formally organized, that, on the basis of one or more shared concerns, attempts to influence public policy in its favor” (Encyclopedia Britannica). Interest groups try to affect government policy to benefit themselves or their causes. They do that by lobbying, i.e. pressuring policy-makers. Skodvin (2010) divides interest groups into “agenda setters and veto players” according to the conditions under which these groups may have an influence on the policy making process. The agenda setters are political actors that have the benefit of considering the interest of all the veto-players and being selective of the beneficial elements that they prefer to promote in the political agenda; the veto players are actors that are needed in order to change the status quo (Tsebelis, 2002). Hahn (1989) does not define interest groups as a whole but lists only of which groups they consist of, namely legislators, bureaucrats, industries, environmentalists and academic groups. Finally, Beyers (2008) describes three defining elements of the term interest groups, namely organization, political interests and informality). The first element represents the defining nature of the group. The fact that interest groups are organizations implies ruling out public opinion movements which could possibly have an impact on policy output. The next element concerns the actions of exerting pressure towards a path in support of the political ideologies of the electorate, which is also referred to as “political advocacy”. The last element characterizing interest groups is associated with the fact that interest groups are not running for elections but prefer lobbying activities with politicians in order to attain their goals.

This research has identified three key interest groups influencing climate policy decisions:

- Industries (and their associations and networks) – that have to comply with regulations.
- Environmental non-governmental organizations (NGOs) (and networks) – that are concerned about environmental protection.
- Academics and think tanks officials (and networks) – which are generating knowledge for policy-making.

In addition to these groups, the study initially included also the group of EU bureaucrats who are charged with developing and implementing regulations (such as European Commission and EU agencies policy officers, legislative stuff, executives, policy advisers). Although these are not interest groups, they do have their own agenda and preferences for policy instruments.
c) Analytical framework

The analytical framework of this study is constituted by Hahn’s (1989) factors influencing interest groups preferences, namely:

- what is known about the performance of the instrument (uncertainty as deterrent of use, level of flexibility);
- the perception of distribution of costs and benefits;
- the nature of the instrument (e.g. market, regulatory, voluntary);
- the level of implementation of policy instruments (European, national, regional/local).

A number of criteria have been developed for these factors (see table 1). Regarding these factors, the nature of the instrument relates to the categories of climate policy instruments described in the introduction i.e. market-based, regulatory, informational or voluntary. The second factor refers to the distributional effects of the implementation of climate policy instruments. Buchanan and Tullock (1975) argue that interest groups may often be successful in blocking environmental policies despite the beneficial effect of these policies to the larger part of the society. This might be explained by the distributional effects of regulation in the environmental sector which entails the fact that costs accumulate while benefits are broadly disseminated (Buchanan and Tullock, 1975). Here, the focus will be on the costs such as economic costs of climate policy instruments, political costs referring to political support or lack of political support and to social costs which relates to the distribution of costs among actors in the society. The third factor on the performance of the instrument will be measured by the level of uncertainty of contextual conditions but also effectiveness of the instruments and the level of flexibility of regulative acts to respond to the changing circumstances. The last factor to be examined is the level of governmental implementation of the instrument. This includes the European, national and regional/local level.
<table>
<thead>
<tr>
<th>Factors affecting interest group preferences</th>
<th>Criteria</th>
</tr>
</thead>
</table>
| Performance of the instrument               | ▪ Level of uncertainty  
|                                             | ▪ Level of flexibility |
| Perception of distribution of costs and benefits | ▪ Economic cost  
|                                             | ▪ Political cost  
|                                             | ▪ Social costs |
| Nature of the instrument                    | ▪ Market  
|                                             | ▪ Regulatory  
|                                             | ▪ Voluntary  
|                                             | ▪ Informational |
| Governmental level of instrument implementation | ▪ European  
|                                             | ▪ National  
|                                             | ▪ Regional/local |

Table 1: Factors and criteria affecting interest group preferences

3) Methodology of focus groups and interviews

This study has a qualitative research design and adopts a deductive approach to the investigation. In this qualitative study, the dependent variable is interest groups’ preferences for climate policy instruments and the independent variables are Hahn’s factors. Hahn’s hypothesis that the preferences of interest groups for policy instruments are influenced by a number of factors is a non-directional hypothesis. This means that Hahn makes a prediction about an outcome (interest groups preferences) but the exact form of difference and interrelation of the indicated factors is not specified. This study will try to assess the interrelation of factors and understand the relative importance of them for the different interest groups.

In order to do this, the preferences of interest groups for different climate policy instruments were assessed by means of literature review and focus group interviews with key stakeholders knowledgeable about EU climate policy. Three focus groups were organized: one focus group with industry representatives; one focus group with environmental NGOs representatives; and one focus group with academics and think-tank officers. The attempt to organize a focus group with EC officials failed (see below). Literature and focus groups data were further complemented with three individual interviews,
one with an environmental NGO officer, one with a think-tank officer and one with an industry representative.

Focus groups methodology is a unique way of gathering data while having at the same time group interaction. In general, focus groups have a duration of 1 to 2 hours (Morgan, 1997). The participants discuss in a round table format and in an atmosphere where all opinions are welcomed. With regard to the number of participants to a focus group, this should be between 5 and 12 experts (Krueger 1988, 1994, 2000, Morgan 1997). This takes into account the fact that there needs to be enough participants to keep the discussion lively while at the same time gathering a wide variety of information. At the same time this number of participants also ensures that the environment remains comfortable for participants to express themselves in an open manner as well as it ensures that the time allotted is sufficient for each participant to provide his/her input. It is argued that the ideal number of participants of a focus group is 6-8 experts (Krueger, 2002). In order to achieve a diversity of views that is adequate, the number of focus groups should be between 3 and 5 (Bloor et al 2001).

A questionnaire of 10 questions was prepared. The questionnaire operationalized Hahn’s factors influencing interest group preferences in order to guide the focus groups discussion. For example, one question asked about participants’ views on success and failures of EU climate policy instruments. Another aspect that was examined was which attributes of a climate policy instruments are of importance to the participants. Another question focused on which governmental level should climate policy instruments be implemented. The same questionnaire was used to conduct the 3 complementary interviews. For the complete questionnaire see the appendix of this study.

Each focus group discussion was taped and transcribed. In addition, the content of the individual interviews was summarized. The transcripts and summaries were coded according to the criteria of the analytical framework. Data were analyzed so that to identify prevailing discourses as well as major differing views.

d) Logistics of each focus group organization

In order to identify potential participants for the focus groups this study relied on an already existing stakeholder’s database of the CECILIA2050 project. The database was integrated with other possible potential participants identified through internet research. The participants were selected based on their expertise on EU climate policy, their degree of involvement in the EU climate policy debate and their geographical location. About the latter, participants based in Brussels area were chosen. This is because the research focuses on the European level of climate policy.
For the focus group with European Commission (EC) officials a total of 50 people were invited at the level of Head of Unit or Deputy Head of Unit from the EC Directorate Generals (DGs) of Energy, Environment, Climate, Transport and Enterprise. These high level experts were contacted by email and the response rate was less than 10% and the absolute majority was negative. This hindered the organization of a focus group with this stakeholder group.

For the focus group with carbon-intensive industry representatives a total of 25 people were invited at the level of Senior Manager/Advisor, Vice-Director and Director from a variety of carbon-intensive industries and companies. The response rate was more than 50% and 8 people participated to the event. The participant were interested and happy to contribute with their views to this study.

Regarding the focus group with environmental NGOs representatives we relied on the personal network of a CECILIA2050 project partner. A total of 6 people were invited by email and due to their personal connection with this colleague the response rate was 100%. These experts came from various environmental NGOs that are active on an EU or international level. The actual participants comprised of 4 experts as there were two last minute cancellations.

The focus group with academics and think tank representatives included academic researchers, research managers, policy analysts and scientific officers. These experts were employed at various universities, institutes and think-tanks and had experts in climate, energy and environment issues. A total of 23 experts were invited by email and the response rate was more than 50%. The confirmed participants were 8 and there were no cancellations for this focus group.

The focus groups took place over two days, 14th and 15th May 2014, in Brussels. A senior researcher acted as moderator while I acted as assistant by taking care of the logistic of the day, taping and writing notes. The duration of each focus group was about 2 hours including a short presentation of the CECILIA2050 project. Some of the participants who were unable to attend the focus groups were given the possibility to provide their input with a phone interview. Three phone interviews were conducted based on the questionnaire of the focus groups.

Focus group interviews and individual interviews were recorded. As Morgan (1998) observes recording is advantageous since it gives the opportunity to the researcher to go back to the raw data i.e. the answers of the participants all focus group tape recordings were transcribed reaching a total of 75 pages. As Morgan (1998) observes: “this analysis strategy (transcript based approach) produces the most depth and detail; it is also the most time-consuming”.

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4) Background information about EU climate policy instruments

Policy instruments are generally the “myriad techniques at the disposal of governments to implement their policy objectives” (Howlett, 1991). There is a wide variety of climate policy instruments that are being used by national governments and the EU in order to reduce GHG emissions. The environmental policy instruments toolkit is extensive and includes various instruments that can be categorized into: economic (market-based) instruments such as environmental taxes, tradable permit systems or targeted subsidies, regulatory, such as emission and technology standards, informational instruments such as eco-labelling, and voluntary instruments such as voluntary agreements between governments and industry.

Market-based instruments

To begin with market-based instruments, a general definition is that these instruments have an impact on the “estimates of costs of alternative actions open to economic agents” (OECD, 1994). These market-based instruments include regulations that provide market incentives which encourage firms to become active in abating pollution fulfilling interests of their own and at the same time achieving the collective goals of pollution control (Stravins R.N., 2003). According to most environmental economists, market-based instruments provide environmental protection in a cost-effective way by granting economic incentives to companies which will choose environment-friendly production and products at the lowest costs (see Stravins, 1997, Bressers H.T.A. et al., 1999, European Commission, 2007, OECD, 2000). This is considered an advantage of market-based instruments where companies have the flexibility on how to respond to the economic incentives (OECD, 2002, Keohane, 1997).

Environmental taxes and charges can answer in a direct way any market failures by integrating the environmental impacts i.e. externalities of industrial activities (OECD, 2002). Similarly, with the tradable emission permits system (cap-and-trade) all sources face a limit of a single price on emissions (Goulder L.H. et al., 2008). The number of allowances that is needed for production -at a desired emission level- is being submitted by all firms, while the allowances can be distributed either by auctioning or by free allocation (Tietenberg T. et al., 2010). The EU’ Greenhouse Gas Emissions Trading System (EU ETS) was established in 2005 and covers approximately 45% of all emissions of the EU (European Commission, 2013). It is considered to be the cornerstone policy instrument of the EU’s climate policy and is currently in its third phase. This phase started in 2013 with a structural reform of EU ETS and will end in 2020

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3 This is a theoretical advantage according to OECD, 2002 and Keohane, 1998
(European Commission, 2013). Major changes have introduced a cap on emissions EU-wide and a shift towards allowance auctioning instead of cost-free allocation (European Commission, 2013). Both taxes and cap-and-trade system, tend to lead to an increase of consumer product prices (Goulder L.H. et al., 2008).

Targeted subsidies for abating pollution is a governmental action where firms receive a benefit for each emission’s unit that they lower below a specific baseline level (Goulder L.H. et al., 2008). On the other hand subsidies lead to less cost-effectiveness comparing to emission taxes or tradable allowances because by reducing firms’ costs they give incorrect incentives on the output level and consequently this results in “excess entry” (Goulder L.H. et al., 2008). Furthermore, the regulating authorities have to increase the subsidy price of emissions to be higher than that of the other policies resulting in too much abatement from input replacement or “end-of-pipe treatment” while on the other hand, resulting into too little output (Goulder L.H. et al., 2008).

**Regulatory instruments**

With regard to regulatory instruments, these have been considered as a traditional approach to reducing pollutants. According to Goulder L.H. et al 2008, this regulatory approach is not able to apply a certain emissions price to all the economic sectors. He also argues that regulatory instruments such as technology mandates and performance standards have disadvantages with regard to achieving the goal of cost reduction (Goulder L.H. et al., 2008). This cost reduction refers to problems that legislators encounter in the design of these instruments as well as in the limitation of these instruments to optimally include various approaches to emission reductions (Goulder L.H. et al., 2008).

Standards are considered as the most common regulatory instrument and are divided into two general categories: the standards defining the overall level of environmental quality to be achieved in a region and those that pose limits on emissions covering sources that emit pollutants e.g. installations (Hahn, 1989). Emission standards are of importance as they determine the emission limits and caps on specific sources that are emitting pollutants. According to Hahn (1989), emission standards constitute the “dominant instrument in environmental regulation throughout the world” (Hahn, 1989). Two significant categories include technology-based and performance standards⁴ (Bernstein J., 1991). The former

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promote a specific technology that is to be used in order to be in compliance with the regulation, while the latter indicate a performance measure and allows firms to choose the most appropriate way to meet this standard (Hahn, 1989). Performance standards are considered more flexible than technology-based standards due to the fact that they allow actors to find the optimal way in achieving a performance measure (Hahn, 1989).

**Informational instruments**

Informational instruments rely on public disclosure of information that is environmentally related. This information is disseminated by public authorities and industry to consumers (IPCC, 2007). The main base that these instrument rely on is “moral suasion” by informing consumers in a standardized manner on the environmental impact of certain products and services (Jordan A. et al, 2010, Jordan et al., 2003). Eco-labelling is an example of informational instruments. Eco-labels are a source of information for consumers that help to compare products and then based on that information choose to buy the most environmental friendly product. This instrument is not considered as very intrusive compared to regulatory instruments (Jordan A. et al, 2010). However, in case the eco-labels are widely recognized they may have a strong impact on producers that can be similar to regulatory standards (Jordan A., 2010, OECD, 1999). Despite this advantage eco-labels cannot be effective in altering consumer behavior besides raising public awareness on environmental friendly issues (Jordan A., 2010).

**Voluntary instruments**

Voluntary instruments are agreements between a governmental authority and a private party such as industry that are made in order to reach environmental goals such as ameliorating the environmental performance of the private entity beyond complying with the regulatory provisions set (IPCC, 2007). The definition of voluntary agreements of the European Commission is in accordance with the before-mentioned definition of the IPCC⁵ (European Commission, 1996), while the European Environmental Agency focuses more on the element of these agreements being a product of negotiation with public authorities⁶. It is not the case that these agreements are truly voluntary; since some agreements can give rewards or impose penalties to the private entities when succeeding or not on the environmental target (IPCC, 2007).

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⁵ The EU Commission adopts a much more inclusive definition: ‘agreements between industry and public authorities on the achievement of environmental objectives’ (CEC, 1996).
⁶ The European Environmental Agency refers to voluntary instruments as “covering only those commitments undertaken by firms and sector associations, which are the result of negotiations with public authorities and/or explicitly recognized by the authorities” (EEA, 1997).
The EU climate policy instrument mix comprises a number of instruments included in all the categories described above. The current instrument mix has been relatively successful in achieving the GHG emission reduction goal. However, according to the European Environmental Agency many “optimal” changes to the design of the current instrument mix will be needed in order to meet the 2050 target of 80% GHG reduction comparing to 1990 levels (EEA, 2012).
5) Results chapter

In this chapter, the results of the analysis of the focus groups data are presented. First some general observations are outlined on the success and failure of EU climate policy and then Hahn’s factors i.e. performance of the instrument, perception of distribution of costs and benefits, nature of instrument, governmental level of instrument implementation, affecting the preferences of interest groups are described.

e) Successes and achievements of EU climate policy

When the participants of the focus groups where confronted with the issue of EU’s climate policy biggest achievement the answers were different. Across focus groups, participants reported that the greatest successes of EU climate policy were the EU ETS, the renewable energy directive and the whole 2020 climate policy package. The EU ETS is considered to be one of the biggest achievements of EU’s climate policy because it is claimed to have reduced emissions and to have become a model of emission reductions that could be replicable elsewhere in the world. This has increased the EU’s position as a global player on the international setting. As noted by one respondent who participated in the focus group with industry representatives:

“I think the biggest achievement until now has been ETS, because emissions have been reduced from ETS which is something that a lot of people don’t really admit or don’t give the ETS the credit for it.”

Similarly, a respondent who participated in the group organized for NGO representatives commented:

“EU ETS has been a blueprint scheme for many countries outside Europe in order for them to also develop climate policies. Look to the China climate scheme, look to Mexico, South Korea as well as in many other environmental legislation acts worldwide, the EU example has created followers on a global level.”

Another recurring idea that emerged in all of the three focus groups was that the EU 2020 strategy as a whole is very successful because it provides a ten-year growth strategy for the EU. The EU 2020 strategy paved the way for a smart, sustainable and inclusive growth for EU until 2020 (European Commission, 2010). It includes five targets that cover employment, research, education, poverty and the 20/20/20 target. The latter refers to a climate-energy target that aims for GHG emission reduction by at least 20% comparing to 1990 levels (or by 30%, if the conditions are right) and aims for an increase of the
renewable energy share in the energy mix of 20% as well as a 20% increase in energy efficiency (European Commission, 2010). Participants discussed the benefits of this strategy for improving the investment environment for businesses, and many reported the renewable target of 20% as very beneficial. Addressing these issues, one respondent who participated in the group of industry representatives reported:

“Looking broadly to all the sectors, the biggest achievement in my view is that the overall 2020 strategy really gave a general direction to business and triggered/changed the investment readiness of the European Economy.”

In particular, on the EU renewable energy target set to 20%, one member of the NGO group noted: “The single biggest achievement is the EU renewable energy target that we have placed for 2020 which resulted in the good investment climate for renewable energy technologies in the EU. As a result of this success we’ve seen major reductions in technology costs for investing in solar energy”.

f) Problems of EU climate policy

With regard to the problems of the EU climate policy, respondents across all focus groups mentioned EU ETS’s weaknesses and the challenge of the economic crisis. Many respondents reported similar views on the recession and its impact on the EU ETS since it lowered the emissions resulting in a surplus of allowances and consequently negatively affecting the operation of the carbon market. It is interesting that the NGO participants chose the word “failure” several times when describing problems of the EU climate change policy, illustrating their negative perspective on this specific topic. Discussing the first main constraint of EU climate policy, one respondent of the group of NGO representatives noted:

“The problem of EU ETS is the very large inflow of offset credits; these offsets were of doubtful quality in terms of really delivering emissions cards; and yet this has also been identified not only by us but also by the European Commission; and many argue that this is the main cause for collapse in carbon price. It has been surfacing these years and we’ll continue to be facing that problem. I think the biggest failure in the system of EU ETS is that it allowed those (allowance) systems with low quality to come in the ETS sectors in the first place.”

Another respondent of the group of academic and think tank representatives argued that ETS problems are also influenced by the lack of ambitious political actions in the design and implementation of policy instruments. This also relates to the interaction between political factors and stakeholder interests
when implementing policy instruments in practice (Bressers et.al, 1999). As this respondent notes on this theme:

“I guess also time has shifted a lot politically, in a way that what could have been -in my view- a good climate policy instrument is now, in the current political climate, a rather weak instrument because there are so many complex design questions, that should be answered and today they are not being answered sufficiently and ambitiously; and so that’s the reason why I think it’s also a weakness. “

Besides the above mentioned recurrent ideas, an important idea that emerged from the discussion in one of the groups is worth mentioning. Some respondents participating in the think tank/academic focus group discussed the lack of a comprehensive and holistic approach when it comes to the EU climate policy and that there seems to be a lack of “real engagement of the European External Action Service”. The ideas discussed included the importance for the EU to show the successes that have already been achieved in climate policy and the need for the EU to raise awareness with information campaigns on the benefits of its climate policies for EU citizens, industries and the whole society. As one of the respondents of the think tank academic focus group reported:

“I think the biggest problem with EU’s climate policy is that first of all it has not really focused on trying to involve the other EU operators like the European External Action Service. The same thing can be seen in all other EU policies. We don’t have a comprehensive picture of what kind of policy mix will really help us in order to drive better environmental targets for climate policy; and so this is one of the biggest challenges, we haven’t really managed to create a positive narrative of our successes”.

g) Performance of the instrument

The characteristics that an optimal policy instrument should have were discussed and the arguments that were put forward are diverging. Across all focus groups a prominent theme that emerged was the importance of flexibility and predictability/stability for investments. Furthermore, many respondents of all the groups indicated that setting targets is of equal importance to accomplishing targets and therefore it should be given more consideration. Discussing these themes, one respondent, participating in the academic/think tank group stated:

“For me the most important thing is to agree on what the target is, that we are aiming at; and then give enough flexibility whatever instruments we are using, that in the end it’s free for people to decide how we get there as long as we are all aiming at the same target. So our starting point should be to know
what our target is, and where we are aiming at. And when we then plan the instruments, the problem that arises is how to create the balance between stability and flexibility."

Another theme identified was that many respondents participating in the academic/think tank focus group reported the importance to conduct policy experiments at the EU or MS level. These participants noted that it is important to assess and analyze the data obtained by all the scientific studies and experiments that have been carried out by the EU. This provides a factor helping reduce the future uncertainty on the effectiveness of the instruments. As a respondent of the think tank/academic focus group reported:

“Europe has experimented in the last decade with a list of policy tools and we now have quite a lot of data and information to assess;...we intuitively know which ones have been successful with regard to been deployed and achieving certain goals...cars efficiency standards have been quite effective [...]”.

h) Perception of distribution of costs and benefits

Any climate policy instrument that is chosen will require additional investments and these changes in economic activity will translate into costs for industry and society. From an economic point of view cost is being evaluated through efficiency and cost effectiveness (Goulder et al., 2008). According to the Pigouvian principle, pollution should be given a price at the marginal external cost (Goulder et al., 2008). The political cost is related to policy maker’s view of broader objectives that go beyond the strict economic efficiency and cost effectiveness (International Energy Agency, (2011). Interest groups such as politicians engage in “rent seeking” which is lobbying towards a favorable policy instrument (Tietenberg, 2010). If this rent seeking is successful, the net benefits that go to the interest group, i.e. the politicians will decrease the “net benefits to the society as a whole” (Tietenberg, 2010). This leads to the social cost of climate policy instruments. An additional element to the political cost refers to the fact that politicians’ terms in office are usually short term which might lead to decisions not made according to increasing environmental quality in the long term but pursuing social policies for electorate and therefore causing environmental inefficiencies (Tietenberg, 2010). The distribution of costs, according to Skodvin (2010) are concentrated on few interest groups while at the same time benefits are distributed on a broad basis.

Across focus groups, the discussion also evolved around the economic, political and social costs of implementation. Participants of the industry group, focused on the economic costs of the implementation of the policies and did omit the benefits of implementing climate policy instruments. Addressing this issue, one respondent participating in the industry group reported:
“The main problem has been, also because of the economic crisis, that we have arrived at the limits of the EU climate policy; these policies have been promoted as an opportunity for industry and an opportunity for growth; in reality these policies have turned very much into a burden – in most cases for many reasons; e.g. one of the most important bottlenecks with these policies are administrative costs for companies; I mean I’m mentioning a very small problem but this is the reality, so right now this is an extremely complicated framework because it has added extra costs due to lack of clarity; due to multiple targets and so it has become a kind of something like a monster instead of a good policy – it really needs to be revised.”

Other respondents argued that the political backing and support of policies is important. Politicians should inform the voters of the benefits of the proposed climate policy instruments in order to reduce the political cost politicians are faced with. As one respondent of the group of academic/think tank representatives, noted:

“There is a very interesting case study in Denmark where they have been discussing a carbon tax but they didn’t really succeed. Then the discussion switched to an air pollution tax and suddenly people started to get informed on what this tax can do for improving cities. This is a politically easier debate because the impact on every day’s life is much more visible. So maybe that is the solution and air pollution is now one example maybe there are some other things that show benefits to citizens”.

Another important point which emerged across focus groups refers to the social costs. Policy makers design policies that have social costs and then blame industry for these costs. If policy makers supported their policies and industry would implement these policies, then the social actors would also support the policy. As one of the respondents of the industry focus group reported:

“Just the fact that the cost in Germany is a lot more onto the consumers; nevertheless the consumers are not complaining as much as they are in the UK, and that’s because the German political authorities (Merkel etc.) basically are standing behind/supporting the Energiewende, at least at a political consensus; whereas in the UK they put forward a policy and then blame us (utility industry) for it. Whereas actually if the UK politicians were standing behind carbon policy and defending it then actually the public would also support it as well. But instead they blame everyone else for additional costs they go network companies or costs are going up, its EU climate policy is going up. Whereas actually these are cost effective policies that will benefit the consumers in the UK but no one is making that cares.”
i) Nature of instrument

There are diverging preferences among all interest groups about the typology of instruments to adopt. Industry strongly preferred market-based instruments such as EU ETS. Throughout the discussion, respondents of the industry group also identified that direct regulatory instruments such as standards and technology support policies could be beneficial for driving innovation. On the other hand, NGO participants opted more for regulatory instruments as well as some academic respondents. About market-based versus other policy instruments, one respondent of the industry group stated:

“I think that setting standards is working e.g. I followed regulations such as the F-gas regulation, in setting standards and setting realistic framework; it really works. As long as industry can really be involved in telling you, look by 2020 I can’t get there but I can by 2025. That’s a good way of designing policies.”

Other respondents from the NGO and the academic group reported their preference for regulatory instruments. For instance one NGO respondent discussing these themes noted:

“Regulatory approach is more efficient as it takes the problem of information asymmetries and the inability to act on the market that you have to have a cap facility to be in a trading system [...]”.

In sum the NGO community preferred regulatory instruments. One reason for this preference is that regulatory approaches create a symbolic value to reaching ambitious environmental targets in the long term and this logically appeals to environmental NGOs (Hahn, 1989). From the individual interview the views were similar supporting regulatory approach, technology support as well as informational instruments. As one participant of the individual interview stated:

“I’m going to give you a general statement, we seem to have gone through a period where we are sort of consistent with this economist driven policy and therefore economic instruments have, there seems to have been, a lack of recognition of the traditional regulatory instruments. And I think that is a mistake.”

Respondents from all focus groups recognized the positive role of informational instruments and voluntary agreements. However, during the discussion the participants identified that awareness campaigns to inform the public are efficient only in combination with either market-based instruments or regulatory instruments.

On the point that the EU law is restrictive, the NGO participants underlined the role of the unanimity practice in the Council of ministers. The Council of the EU is voting unanimously on a number of issues
which the Member States (MS) consider to be sensitive, such as common foreign and security policy and EU finances, while on other issues, “by simple majority (15 member states vote in favor) or qualified majority (260 votes from at least 15 member states are in favor)” (Council, 2014).

j) Governmental level of instrument implementation

On the appropriate governmental level of instrument implementation, there was a clear division between industries that preferred the European level and the NGOs who preferred national level for climate policy implementation. The analysis suggests that respondents of industry group were in favor of centralization at the EU level with climate policy instruments such as the EU ETS. For instance one respondent of the industry group reported:

“European cap is better than national cap, European emission standards are better than national standards, EU tax which was tried in the past to make it, is better than the national one”.

On this theme, other respondents focused on the decrease of the perception of the responsibility political actors have when policies are implemented at the EU level. Discussing these issues one respondent of the NGO group noted:

“As soon as everything becomes European and I don’t know if this is where we’re driving at, that we have a European feed in tariff design or something, then you lose the national feel for what you’re responsibility is, potentially; or just assuming that Europe is taking care of it and then doesn’t act at national level, whereas things like spatial planning you don’t have the type of work like this in Europe at national level, because it’s national competence and it’s very little that European policy is relevant.”
6) Discussion chapter

In this chapter, the implications and limitations of this study are discussed. This study investigated Hahn’s factors affecting interest group’s preferences. However, these factors might not be the only ones affecting interest group’s activity in the policy design process. In this section the bottlenecks and limitations of these factors are examined as well as the consistency between Hahn’s factors and focus groups’ findings. The findings discussed in this report highlight the complexity of interest group preferences.

One of the sub-question of this study was “What relevant discourses interest groups put forward about EU climate policy instrument design and adoption?”. In order to answer this question one needs to look at the overall pattern of interest group’s discourses when being confronted with the EU climate policy instrument design. In general relating to the successes and weaknesses of the EU climate policy instrument design the weaknesses are viewed through a more critical lens than successes. Among the discourses that emerged, the greatest successes of EU climate policy mentioned were the EU ETS, the renewable energy directive and the whole 2020 climate policy package. This perceived success is in line with the views expressed by the European Commission (2014). The EU ETS is considered to be one of the biggest achievements of EU’s climate policy due to the fact that it has reduced emissions and has become a model of emission reductions that could be replicable elsewhere in the world. EU ETS is widely considered “a cornerstone” of EU’s policy in the fight against climate change (European Commission, 2014). Another recurring idea that emerged from the data is that the EU 2020 strategy as a whole is very successful because it provides a ten-year growth strategy for the EU. The EU 2020 strategy paved the way for a smart, sustainable and inclusive growth for EU until 2020 (European Commission, 2010). One element of this strategy in particular is the renewable target of 20% has been perceived as very beneficial.

With regard to the problems of the EU climate policy the main problem is EU ETS’s weaknesses. The phase 3 of EU ETS is expected according to Van Asselt (2010) to be an important instrument in reaching EU’s 2020 strategy targets. In addition the impact of the economic crisis has played a major role in aggravating the weaknesses of the ETS since it lowered the emissions resulting in a surplus of allowances and consequently negatively affecting the operation of the carbon market.

With regard to the second sub-question of the research questions namely: What do interest group discourses tell about their perceptions of problems, solutions, distribution of costs and benefits and
performance of the instruments? In order to answer this question the following sections have been divided into the four factors that influence interest groups’ preferences that were examined in this study.

a) Performance of the instrument

The study suggests that the performance of the instrument has a high impact for instrument choice. This is in accordance with Hahn’s analysis who argues that the effect of information of policy mix performances can affect the actions of key interest groups. On the performance of climate policy instruments, this study found that there is need for more balance between uncertainty and flexibility of the instruments.

With regard to the level of uncertainty, uncertainties cannot be avoided. It is very difficult to envision the effectiveness and impacts of environmental policies (Goulder et al., 2008). The impacts of uncertainty to the efficiency gains that are to be anticipated for necessitates that the marginal benefits from emission decline will equalize with society’s marginal costs of emission decline (Goulder et al., 2008). Because regulatory authorities have an information deficit about these marginal emission costs the level of uncertainty is bound to be high (Goulder et al., 2008). Industry needs low uncertainty in order to have make costly investments. This study found that it is important to conduct policy experiments at the EU or MS level and to assess and analyze the data obtained from the scientific studies and experiments that have been carried out by the EU so far. This would help reduce the uncertainty on the effectiveness of the instruments.

Regarding the level of flexibility, the findings of this study suggested that policy instruments should be flexible in order to adjust to fluctuations and changing circumstances. This is in line with much discussion in the literature. For example, Goulder et al. (2008) voices the importance of adjusting to new information. As market-based instruments are considered to provide industry flexibility to respond to the economic incentives (OECD, 2002, Keohane, 1997), the issue of flexibility should also be taken into more consideration in also the other categories of climate policy instruments.

b) Perception of distribution of costs and benefits

On distribution of costs and benefits, Hahn (1989) states that industry is more likely to support regulations that will achieve cuts in direct costs. Furthermore, the perception of distributional impacts of costs and benefits to interest groups influences interest groups that will react, disregarding the actual costs and benefits (Keohane et al., 1998). If the distributional impact seems unbalanced, the interest
groups concerned are likely to obstruct the proposed policies. In this report the perception of economic and social costs was illustrated while the political cost was mentioned very briefly and the benefits were mentioned. Goulder et al. (2008), argue that the distributional impacts among carbon-intensive industries and other societal actors e.g. consumers can affect the political feasibility of policy instruments. In the case of a cap-and-trade system as in the EU ETS, the free allocation of allowances can increase the political feasibility of a policy instrument due to the fact that it does not put cost on large emitters of pollutants (Goulder et al., 2008). From the categories of climate policy instruments, technology and performance standards as well as cap-and-trade permit systems with free allocation are very popular instruments implying that interest groups, might have pressured and succeeded for their preferred instruments (Goulder et al., 2008). The perceived distribution of costs according to Van Asselt (2010) is an important factor in climate policy design. For instance in the EU ETS the industry emitting large amounts of pollutants aimed for avoiding costs of the EU ETS by putting pressure with lobbyists for the maximum amount of allowances that they could get (Van Asselt, 2010). In this case it might have been successful lobbying since at the beginning a great amount of allocations was distributed (Anger et al., 2008).

c) Nature of instrument

According to the literature, environmental NGO groups “are likely to prefer command and control instruments for philosophical, strategic, and technical reasons” (Keohane et al., 1998). Indeed, the environmental NGOs expressed preference for regulatory instruments. Contributing to this, regulatory approaches also create a symbolic value to reaching targets of environmental progress in the long term and this logically appeals to the NGO focus group participants. According to Hahn (1989), NGOs prefer symbolic policies due to long-term commitment and their instrument of choice is standards. This was well illustrated by a range of ideas presented at the focus groups. In addition, NGOs might want to convey an environmental ethic in order to influence citizens of a society (Hahn, 1989). In contrast to that, industry is portrayed as not preferring symbols since they refer to long term objectives and these are related to higher costs (Hahn, 1989). From the results of this study it was found that industry prefers market-based instruments due to the flexibility that they provide towards the economic actors. With regard to the informational instruments results suggest that they should be implemented in combination with other market-based or regulatory instruments. This is in line with the argumentation of Jordan A. (2010) that these instruments cannot be effective in altering consumer behavior besides raising public awareness on environmental friendly issues.
When choosing climate policy instruments, the level of governance needs to be taken into account (Hahn, 1989). Accordingly, Hahn argues that the policy instrument should be implemented depending on which level the environmental problem exists. However, he suggests some exceptions to this, for instance in case there is a local/regional issue that needs technical expertise from the national level. The results of this study suggest that different interest groups prefer different levels of climate policy implementation. Industry preferred the European level while NGOs leaned towards the national level due to perceived differences of effectiveness. I argue that it is important to implement a climate policy instrument on the European and national level. This dilemma of taking action at the European/supranational or the national level was illustrated in the ETS implementation (Van Asselt, 2010). The 2003 ETS Directive addressed the EU supranational level aspects while at the same time the Member States remained responsible of making decision regarding important aspects (Van Asselt, 2010). These important aspects included the total number of allowances to be allocated and distributed which resulted in having a strong impact in terms of cost distribution (Van Asselt, 2010). The ETS example shows that the choice of the level of implementation is a very complex one, often a result of the trade-offs between multiple criteria such as efficiency, environmental effectiveness, free market and also national interests (Van Asselt, 2010).

Finally, regarding the third sub-question, namely, “what interest group discourses tell us about the political feasibility of different instruments”, the main issue that arises is that political feasibility is a very complex notion. In addition, the complexity of policy making should be considered before analyzing the instrument choice made by the various stakeholders. Policies are formed through the synergy of different actors over a long time span, in various loci such as institutions of political and economic nature, and all of them performing in a climate of uncertainty “caused both by context and time-specific knowledge and information limitations” (Bressers and O’Toole, 1998). As Howlett (2011) observes “instrument choice...in a sense, is public policy-making, and understanding and analyzing potential instrument choices involved in implementation activity is policy design”. This study has adopted the definition of political feasibility developed in the CECILIA2050 project which is the following: “the likelihood that a policy proposal will be adopted by relevant political fora, taking into account the power constellation between various relevant interest groups, their preferences for policy instruments, and the institutional setting in which proposals for instruments (and their concrete design) are discussed” (CECILIA2050 internal research design, 2014). Out of these three important elements the focus on
interest groups’ preferences and the discourses that emerge are not enough in order to explain the political feasibility of certain climate policy instruments.

e) Limitations of study

With regard to the findings of this study the following limitations occur. This study does not provide a comprehensive overview of all relevant interest group’s preferences for the optimal climate policy mix for 2030 and 2050. Although this study researched on the relevance of Hahn factors in influencing interest groups preferences it did not reveal all the insights that were expected. For instance, the overall level of environmental quality that can be achieved by an instrument has not emerged in the focus groups as it would be expected. According to Hahn (1989), industry has a preference to lower environmental standards. However, industry’s choice is less ambitious targets with regard to 2030 and 2050. The analysis of focus groups revealed this point of interest but only very broadly. This report has limited findings due to the fact that the focus group discussion did in some instances not reveal the information expected. However, this is related to the specificity of the methodology. Focus groups are meant to understand, through guided discussion, what is important to the participants. The questionnaire aims to direct the discussion towards topics that are of interest to the researcher. This does not necessarily mean that all issues that the researcher expects to emerge will actually be raised in the discussion. If some expected issues do not emerge, this may indicated that they are not as relevant to the participants as those that they raise.

With regard to the methodology, the following limitations occur. First, it was not possible to organize a focus group with EC officials due to contingency reasons. Secondly, the focus group of NGO representatives comprised of only 4 participants when the ideal number of focus group participants is at 6-8 participants. This occurred due to contingency reasons that I tried to overcome with document analysis, as well as an additional individual interview. Thirdly, the composition of focus groups could be improved. In particular, one participant of the focus groups of industry and on one of the academic/think-tank group could have been placed into more than one group due to their professional profile. For instance, one think tank representative could also have been placed into the NGO focus group since he used to be active in that domain as well. In general, a number of 6 participants per focus group is recommended.
7) Conclusions & Recommendations

The aim of this research was to examine the political feasibility of EU climate policy instruments by studying interest groups’ preferences.

This study tested Hahn’s hypothesis that interest group preferences are affected by what is known about the performance of the instrument (uncertainty as deterrent of use, level of flexibility), the perception of distribution of costs and benefits; the nature of the instrument (e.g. market, regulatory, voluntary) and the level of implementation of policy instruments (European, national, regional/local). The study tested the hypothesis by exploring the preferences of industry, environmentalists and academics) for different typologies of EU climate policy instruments.

In general, the analysis of focus groups revealed that industry tends to prefer less ambitious 2030 and 2050 GHG emission targets than NGOs. This is in accordance to Hahn’s arguments (1989). In addition, this study suggested that the performance of the instrument has a high impact in interest group’s preferences for climate policy instruments. Specifically, findings suggested that a certain balance between uncertainty and flexibility needs to be found in the design of climate policy instruments. Accordingly, further investigation of these aspects is recommended. Regarding the perception of distribution of costs and benefits, findings suggested that industry seems more focused on economic costs while environmental NGOs and academics are more focused on social costs, while political costs did not emerge as a major issue. Surprisingly, benefits, and in particular improvement of environmental quality, were not addressed by the interest groups as expected. On the nature of the instrument, the study found accordance between findings and literature. As Hahn (1989) suggests industry prefers market-based instruments while NGOs prefer a regulatory approach. On the governmental level of implementation of climate policy instruments this report found a different outcome from what Hahn’s suggested, namely that the policy instrument should be implemented depending on which level the environmental problem exists. In particular, this study found that different interest groups will prefer different levels of implementation of different climate policy instruments. Industry preferred the European level while NGOs leaned towards the national level due to perceived differences of effectiveness.

The methodology that was used in order to conduct this study consisted of focus groups, document analysis and individual interviews. In particular, three focus groups were conducted, with representatives of industry, NGOs and think tank/ academic representatives. In order to complement the data obtained three individual interviews were conducted and were included in the analysis.
However, due to some limitations (impossibility to organize a focus group with European Commission officials) further research is recommended on this matter to gain better understanding Hahn’s factors influencing interest group preferences. Furthermore, due to time constraint reasons this study investigated only a restricted number of key factors affecting interest group preferences. However, more factors could be derived from the literature (see e.g. Hahn, 1989). Therefore, a study with more resources covering a larger number of interest groups should be conducted. Finally, it is advised that stakeholders at the European level cooperate more with the coordinators and partners of this EU funded project in order to attain a better overview of interest groups preferences for climate policy instruments.

Concluding, the analysis of political feasibility of the adoption of climate policy instruments for achieving the EU long term emission reduction targets is complex. As this study adopts the definition of political feasibility developed in the CECILIA2050 project that is: “the likelihood that a policy proposal will be adopted by relevant political fora, taking into account the power constellation between various relevant interest groups, their preferences for policy instruments, and the institutional setting in which proposals for instruments (and their concrete design) are discussed” (CECILIA2050 internal research design, 2014). By examining one element of political feasibility namely interest groups’ preferences for different climate policy instruments, it is possible to gain an insight in how these preferences are influencing the political feasibility of policy instruments. However, further research is needed for achieving an in-depth analysis of political feasibility. In order to reach an in-depth study of political feasibility, it is recommended to examine all the elements of political feasibility, power constellations, interest group’s preferences and the institutional setting. Nonetheless, this report adds to the existing knowledge and might be of value for other researches on the preferences of different interest groups for different climate policy instruments.
A. Questionnaire used in focus groups and in individual interviews

Opening question

1. We've placed name cards on the table in front of you to help us remember each other's names. I would like to start by going around the table. Please, tell us your name and organization.

Introductory questions

2. When you think of the EU climate policy, what do you think has been its biggest achievement and its biggest problem? 4 min

3. When you think of climate policy instruments, what are the most important instruments that come to mind? 4 min

4. Among all instruments that you have named, which ones do you consider to have been overall most successful in achieving the EU climate targets and what do you think was the reason of success? 4 min

Key questions

5. What are the 3 characteristics of a climate policy instrument that you regard as most important and therefore shape your preference for the instrument? 9 min. Only for moderator: e.g. distribution of costs and benefits; visibility of the costs and benefits; flexibility vs. uncertainty; costs of enforcement and monitoring; generation of revenues to be earmarked for environmental quality; symbolic value of the policy.

6. Consider these typology of instruments: market instruments such as emission trading, carbon tax, subsidies; regulatory instruments such as electricity performance standards; voluntary agreements between government and industry; informational instruments such as eco-labelling; and technology support instruments such as R&D policy and removal of barriers to acquisition of green technology. Which of these typologies of instruments in your opinion perform better with regard to the attributes that you just described as most important and what are the reasons for that? 9 min
Transition: So far we have talked about the attributes of the instruments. But instruments are shaped within an institutional context where a set of rules guides the decision-making process and restrain the capacity of actors to influence that process. The next few questions are about institutions and actors influence.

7. How does EU law support or restrict a more ambitious and more coherent instrument mix in European climate policy? Are there instances where European law would need to be changed to increase coherence and effectiveness of the mix? If yes, can you think of a way to overcome these legal barriers? 9 min

8. Member States differ in their capacity to implement policies, and also their level of ambition when it comes to climate action. To ensure that frontrunners continue to have sufficient scope for action, which climate policy instruments or elements of an instrument should remain decentralized at national or even regional scale? 9 min

9. Where and from who do you think the most innovative ideas for new/better climate policy instruments are likely to come from? How do you think these ideas may successfully spread and become adopted policy? 9 min

Ending question

1. Think about all that we have talked about today. What do you think is most important when designing climate policy instruments?

B. Summary of focus groups with industry

At the beginning of this focus group the moderator presented the CECILIA2050 project in order to inform the participants of the aim and the scope of the project. The discussion that followed was structured along main themes and the main argumentation of the participants was on the following:

• Biggest achievement and biggest problem of EU climate policy

As the biggest achievement of EU climate policy the EU ETS was reported, which despite its problems has been able to reduce emissions. In addition the entire 2020 strategy was also seen as a positive
development in climate policy of the EU. In addition, the EU renewable energy target of the 2020 strategy was mentioned since it has resulted in technology cost reductions of renewable energies.

On the other hand, criticism was expressed on the EU ETS and the negative impact of the economic crisis to the EU ETS which also aggregated the ineffectiveness of the EU ETS. Another weak point was attributed to the fact that there has not been a clear policy objective regarding the renewables target that it should reduce fossil-fuel dependence and drive a transition.

- 3 most important characteristics of a climate policy instrument

The three characteristics raised by the participants were various, with cost-effectiveness, market-based instrument and predictability as the most mentioned ones. In addition, flexibility of the climate policy instrument was mentioned to be important as well as political backing of climate policy instruments proposed.

- Best performing typology of instruments: market instruments, regulatory instruments, voluntary agreements, informational instruments and technology support instruments.

The main argument mentioned on this subject was the importance of market based instruments together with technology support policies. In addition one participant mentioned eco-design and another focused on triggering innovation.

- How does EU law support or restrict a more ambitious and more coherent instrument mix in European climate policy? Are there instances where European law would need to be changed to increase coherence and effectiveness of the mix? If yes, can you think of a way to overcome these legal barriers?

EU law restricts a more coherent instrument mix in the EU climate policy such as for instance harmonization of energy taxation in all MS since the energy mix is a national competence of MS.

- Member States differ in their capacity to implement policies, and also their level of ambition when it comes to climate action. To ensure that frontrunners continue to have sufficient scope for action, which climate policy instruments or elements of an instrument should remain decentralized at national or even regional scale?
Regarding the level of implementation of a climate policy instrument, the views expressed were in favor of the European level and as example the EU ETS was mentioned. Another view was more focused on flexibility than on centralization or decentralization of the level to implement climate policy instruments.

C. Summary of focus group with NGOs

At the beginning of this focus group the moderator held a small presentation on the CECILIA2050 project in order to inform the participants of the aim and the scope of the project. The discussion that followed was structured along main themes and the main argumentation of the participants was on the following:

• Biggest achievement and biggest problem of EU climate policy

As the biggest achievement of EU climate policy, the EU renewable energy target of the 2020 strategy was mentioned since it has resulted in technology cost reductions of renewable energies. In addition the entire 2020 strategy was also seen as a positive development in climate policy of the EU. Another success of EU climate policy which was reported, was the EU ETS, which despite its problems has been able to serve as a blueprint for other countries outside of the EU to follow EU’s example.

On the other hand there was a lot of criticism expressed, and the term failure was used by the majority of the participants even though an opinion was raised on the difficult tradeoffs during the political process. A problem of the EU climate policy that was noted was the EU ETS and its mechanism that allowed offset credits with low quality to enter the EU ETS market. Adding to that the negative impact of the economic crisis to the EU ETS also aggregated the ineffectiveness of the EU ETS. Another failure mentioned was the inability for the EU climate policy to identify the circumstances that were changing in a fast-paced manner.

• 3 most important characteristics of a climate policy instrument

The three characteristics raised by the participants were various, with flexibility (resilience) and stability the most mentioned ones. In addition, strong compliance of the climate policy instrument in order to provide certainty to investors and also resilience were reported by the respondents. Another opinion expressed was about the importance of achieving an impact on the international level and not only on the European.
Best performing typology of instruments: market instruments, regulatory instruments, voluntary agreements, informational instruments and technology support instruments.

The main argument mentioned on this subject was the importance of having a mix of different tailor made policy instruments in order to be able to respond to various types of challenges. On market based instruments the problems of informational asymmetries were mentioned and the regulatory instruments were therefore preferred by some respondents.

How does EU law support or restrict a more ambitious and more coherent instrument mix in European climate policy? Are there instances where European law would need to be changed to increase coherence and effectiveness of the mix? If yes, can you think of a way to overcome these legal barriers?

EU law restricts a more coherent instrument mix in the EU climate policy such as for instance harmonization of energy taxation in all MS since some issues such as taxation are decided in the Council by unanimity. Through this practice MS can block decisions from being discussed further, thus restricting a more ambitious EU climate policy before it even is being implemented and this reduces the decision’s overall effectiveness. This issue would be solved if the Council would decide on qualified majority and not based on unanimity. The issue of transparency of the European Commission (EC) was also raised as well as the fragmentation of the EC’s DGs on environment and climate issues.

Member States differ in their capacity to implement policies, and also their level of ambition when it comes to climate action. To ensure that frontrunners continue to have sufficient scope for action, which climate policy instruments or elements of an instrument should remain decentralized at national or even regional scale?

Regarding the level of implementation of a climate policy instrument, the views expressed reported on the national level to be the preferred level. As examples it was mentioned that the investment framework (eg. subsidies) is very effective on the national level as well as some issues as the spatial planning exist only on the national level. MS should not take unilateral action on energy mix (as Germany did) without having a dialogue with other MS since the action of one MS will have consequences on the other MS as well.

Another argument noted was that the implementation on the European level might lead to the potential loss of responsibility or inactivity of national officials.
D. Summary of focus group with academic/think tank representatives

At the beginning of this focus group the moderator presented the CECILIA2050 project in order to inform the participants of the aim and the scope of the project. The discussion that followed was structured along main themes and the main argumentation of the participants was on the following:

- **Biggest achievement and biggest problem of EU climate policy**

As the biggest achievement of EU climate policy the EU ETS was reported, which despite its problems has been able to serve as a blueprint for other countries outside of the EU to follow EU’s example. In addition, the EU renewable energy target of the 2020 strategy was mentioned since it has resulted in technology cost reductions of renewable energies. A positive point was also that the EU has experimented with a various amount of policy tools and that there has been a lot of data and information on this subject.

On the other hand, lot of criticism expressed, on the EU ETS where the difficult tradeoffs during the political process have severely weakened it. Adding to that, the negative impact of the economic crisis to the EU ETS also aggregated the ineffectiveness of the EU ETS. Another weak point was attributed to the fragmentation of the European Commission DGs and of the External Action Service to be actively engaged on the international setting representing with EU with one voice.

- **3 most important characteristics of a climate policy instrument**

The three characteristics raised by the participants were various, with stability, flexibility and political backing the most mentioned ones. In addition, transparency of the climate policy instrument was mentioned as well as that the instrument should be disruptive meaning that it should ensure an accelerated deployment of mitigation technologies.

- **Best performing typology of instruments: market instruments, regulatory instruments, voluntary agreements, informational instruments and technology support instruments.**

The main argument mentioned on this subject was the importance of having a mix of different tailor made policy instruments in order to be able to respond to various types of challenges. The advantages of market based instruments such as flexibility were mentioned while at the same time the regulatory instruments were also viewed as important.
• How does EU law support or restrict a more ambitious and more coherent instrument mix in European climate policy? Are there instances where European law would need to be changed to increase coherence and effectiveness of the mix? If yes, can you think of a way to overcome these legal barriers?

EU law restricts a more coherent instrument mix in the EU climate policy such as for instance harmonization of energy taxation in all MS since some issues such as taxation are decided in the Council by unanimity. Through this practice MS can block decisions from being discussed further, thus restricting a more ambitious EU climate policy before it even is being implemented and this reduces the decision’s overall effectiveness. This issue would be solved if the Council would decide on qualified majority and not based on unanimity.

• Member States differ in their capacity to implement policies, and also their level of ambition when it comes to climate action. To ensure that frontrunners continue to have sufficient scope for action, which climate policy instruments or elements of an instrument should remain decentralized at national or even regional scale?

Regarding the level of implementation of a climate policy instrument, the views expressed reported that the Kyoto Protocol tried to implement it on both the international and national level. The opinions were various with some arguing on the sectoral differentiation of targets on the national level while others preferred overall targets at the European level.

Another argument noted was that the implementation on the European level might lead to the potential loss of responsibility or inactivity of national officials.

E. Summary of individual interview: Industry

The individual interview with an industry representative was conducted in order to have the input of this participant but only on half of the questions since this participant had given his input on the other questions during his short stay at our focus group discussion.

The main argumentation of the participant was on the following:

• How does EU law support or restrict a more ambitious and more coherent instrument mix in European climate policy? Are there instances where European law would need to be changed to
increase coherence and effectiveness of the mix? If yes, can you think of a way to overcome these legal barriers?

EU law restricts harmonization of energy taxation in all MS since the energy mix is a national competence of MS.

EU law supports a more coherent instrument mix in the EU climate policy such as for instance with the EU Common market principle which is helpful in terms of allowing cost efficient decarbonization efforts. However, the fragmented and uncoordinated nature of EU climate policy with the overlapping EU climate policy instruments and with the renewables target has restricted a more coherent instrument mix. In order to overcome these legal barriers, state’s aid guidelines will be helpful towards moving to a common market. In addition, it is important to identify and change market distortions where they exist. Another issue that emerged is that the EU ETS has no flexibility and its surpluses should be dealt with.

- Member States differ in their capacity to implement policies, and also their level of ambition when it comes to climate action. To ensure that frontrunners continue to have sufficient scope for action, which climate policy instruments or elements of an instrument should remain decentralized at national or even regional scale?

Regarding the level of implementation of a climate policy instrument, the view expressed was outside EU ETS it should be at MS level. A key issue in the housing sector is energy efficiency; addressing poor housing with a top down approach does not address the problems of energy efficiency. There needs to be a greater focus on the national level of implementation.

F. Summary of individual interview: NGO

The individual interview with a representative of the NGO community was structured along main themes and the main argumentation of the participant was on the following:

- Biggest achievement and biggest problem of EU climate policy

As the biggest achievement of EU climate policy, F-gas regulation was mentioned because it is setting a precedent for a global phase out of F-gases and it was described a good combination of having both
phase down of F-gases and also in specific sub-sectors. In addition, the ETS was also mentioned as a success although major criticism was conducted.

A major problem of the EU climate policy that was noted was the EU ETS because it is not working as a driver for emission reductions and very little prospects of having it improved in the short term.

• 3 most important characteristics of a climate policy instrument

The three characteristics raised by were that the climate policy instruments should be binding national targets, which work well such as the renewable target of 2020. In addition, besides having this overall target it is also important to have specific resource policies such as CO2 for cars. Another characteristic mentioned is that regulatory instruments are preferred.

• Best performing typology of instruments: market instruments, regulatory instruments, voluntary agreements, informational instruments and technology support instruments.

The main argument mentioned on this subject was the importance of having a mix of different tailor made policy instruments in order to be able to respond to various types of challenges. On market based instruments the problems of informational asymmetries were mentioned and the regulatory instruments were therefore preferred by some respondents.

The main typology preferred are regulatory instruments and technology support, because according to this respondent they work best. Voluntary instruments could be an additional instrument and informational instruments are also important but only in combination with a regulatory framework, for instance eco-design in combination with eco-labelling.

• How does EU law support or restrict a more ambitious and more coherent instrument mix in European climate policy? Are there instances where European law would need to be changed to increase coherence and effectiveness of the mix? If yes, can you think of a way to overcome these legal barriers?

EU law restricts a more coherent instrument mix in the EU climate policy because the energy mix is still a MS competence and taxation are decided in the Council by unanimity. Through this practice MS can block decisions from being discussed further, thus restricting a more ambitious EU climate policy before it even is being implemented and this reduces the decision’s overall effectiveness. In order to solve this, there needs to be a Treaty change and achieving an energy Union. In addition, another issue of importance would be for the EU to speak in one voice on energy bilateral agreements with external actors.
• Member States differ in their capacity to implement policies, and also their level of ambition when it comes to climate action. To ensure that frontrunners continue to have sufficient scope for action, which climate policy instruments or elements of an instrument should remain decentralized at national or even regional scale?

Regarding the level of implementation of a climate policy instrument, the view expressed was a preference of the national level. It was mentioned that it depends on the instrument typology, as for instance with the voluntary agreements between industry and MS/local governments the national level is considered to be more effective. In addition, cities and regions should be able to go beyond target set at the national or European level.

G. Summary of individual interview: Academia

The individual interview with a representative of the academic community was structured along main themes and the main argumentation of the participant was on the following:

• Biggest achievement and biggest problem of EU climate policy
As the biggest achievement of EU climate policy, the CO2 in cars and in particular the CO2 stabilization target decided in 2000. In addition, the EU renewable energy target of the 2020 strategy was mentioned since it has resulted in technology cost reductions of renewable energies.

A major problem of the EU climate policy that was noted was the EU ETS because it is not working as a driver for emission reductions and very little prospects of having it improved in the short term. An additional theme that emerged was that the general overarching policies such as EU 2020 strategy have not been that successful according to this respondent. It is important that concrete policies should be focused on since they have been more successful.

• 3 most important characteristics of a climate policy instrument
The main characteristic raised was that the climate policy instruments should push for renewable energy policies (CO2 free energy). In addition the regulatory approach was also mentioned.

• Best performing typology of instruments: market instruments, regulatory instruments, voluntary agreements, informational instruments and technology support instruments.
According to this respondent, regulatory instruments have been neglected by the European Commission and that should not be the case. Regulatory instruments are effective such the regulatory framework to
limit SO2 emissions from power plants was successfully regulated. With regard to the CO2 emissions due to their complexity, they are more suitable for market-based instruments. In addition, market instruments as in the case of EU ETS should be able to adjust in changing circumstances. On informational instruments they are effective only in combination with other instruments.

- How does EU law support or restrict a more ambitious and more coherent instrument mix in European climate policy? Are there instances where European law would need to be changed to increase coherence and effectiveness of the mix? If yes, can you think of a way to overcome these legal barriers?

On this issue there was no concrete answer mentioned by the respondent. However, the respondent commented that in order to have an impact of policies on energy efficiency the weakest link in the production should be targeted. As an example if inefficiency-heating buildings are taxed then consumers will change their behavior. In addition, it was noted that there exist legal administrative barriers associated with the implementation of the climate policy instruments.

- Member States differ in their capacity to implement policies, and also their level of ambition when it comes to climate action. To ensure that frontrunners continue to have sufficient scope for action, which climate policy instruments or elements of an instrument should remain decentralized at national or even regional scale?

Regarding the level of implementation of a climate policy instrument, this issue did not receive a concrete answer.

H. List of participants

- **Focus group with industry representatives at European Climate Foundation (ECF), 14.05.2014, 9.00-11.00**

<table>
<thead>
<tr>
<th>Mr</th>
<th>Jos Cozijnsen</th>
<th>Emissions trading consultancy (emissierechten.nl)</th>
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<tr>
<td>Mr</td>
<td>Folker Franz</td>
<td>ABB power</td>
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<tr>
<td>Ms</td>
<td>Susanne Kuschel</td>
<td>BASF - The Chemical Company</td>
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<tr>
<td>Ms</td>
<td>Katarina Maaskant</td>
<td>IKEA EU Affairs, IKEA Service Centre</td>
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<tr>
<td>Ms</td>
<td>Barbara Mariani</td>
<td>Confindustria</td>
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<tr>
<td>Mr</td>
<td>Alistair McGirr</td>
<td>SSE utilities</td>
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</tbody>
</table>

- **Focus group with NGO representatives at Mundo-b, 14.05.2014, 11.30-14.00**

| Mr        | Jason Anderson | WWF European Policy Office |
| Mr        | Joris Den Blanken | Greenpeace |
| Ms        | Manon Dufour | E3G - an independent organization acting to accelerate the global transition to sustainable development. |
| Mr        | Daniel Fraile Montoro | Climate Action Network Europe (CAN Europe) |

- **Focus group with NGO representatives at IES VUB, 15.05, 11.30-14.00**

<p>| Ms        | Annika Ahtonen | European Policy Centre (EPC) | Policy Analyst -EU political economy, energy and environmental issues, and health policy |
| Mr        | Kris Bachus | University KU Leuven | Research Manager |
| Ms        | Noriko Fujiwara | Centre for European Policy Studies (CEPS) | Associate Research Fellow and Head of Climate Change |
| Mr        | Mark Johnston | European Policy Centre (EPC) | Senior adviser on energy, environment and climate change |
| Ms        | Johanna Kentala-Lehtonen | Vrije Universiteit Brussel (visiting from the University of Tampere) | Visiting Researcher |
| Mr        | Thomas Legge | European Climate Foundation (ECF) | Senior Associate EU Climate Policies |</p>
<table>
<thead>
<tr>
<th>Mr Thomas Stehken</th>
<th>Acatech - German National Academy of Science and Engineering</th>
<th>Scientific Officer</th>
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<tr>
<td>Mr Tomas Wyns</td>
<td>Institute for European Studies (IES) at the Vrije University Brussels (VUB)</td>
<td>Doctoral Researcher</td>
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</table>

- **Individual interview Participants**

**Industry:** Mr. Alistair Mcgirr, SSE

**NGO:** Ms. Femke De Jong, Policy Officer at Carbon Market Watch

**Academic:** Jorgen Henningsen, Senior Adviser to European Policy Centre (EPC) on energy and the environment
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