Political feasibility of climate policy instruments in the EU
AUTHOR(S)

Dr. Stefania Munaretto, Institute for Environmental Studies, VU University Amsterdam
Dr. Henriette Walz, Institute for Environmental Studies, VU University Amsterdam

With thanks to:
The authors wish to thank the interviewees, the participants to the policy simulation, the participants to the focus groups and the respondents to the on-line survey for their contribution to this project research. Many thanks also to dr. Dave Huitema for comments and suggestions on earlier versions of this report.

Project coordination and editing provided by Ecologic Institute.

Manuscript completed in [September, 2015]

<table>
<thead>
<tr>
<th>Document title</th>
<th>Political feasibility of climate policy instruments in the EU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Package</td>
<td>WP 4.9</td>
</tr>
<tr>
<td>Document Type</td>
<td>Contribution to deliverable</td>
</tr>
<tr>
<td>Date</td>
<td>9 September 2015</td>
</tr>
<tr>
<td>Document Status</td>
<td>Final</td>
</tr>
</tbody>
</table>

ACKNOWLEDGEMENT& DISCLAIMER

The research leading to these results has received funding from the European Union FP7 ENV.2012.6.1-4: Exploiting the full potential of economic instruments to achieve the EU’s key greenhouse gas emissions reductions targets for 2030 and 2050 under the grant agreement n° 308680.

Neither the European Commission nor any person acting on behalf of the Commission is responsible for the use which might be made of the following information. The views expressed in this publication are the sole responsibility of the author and do not necessarily reflect the views of the European Commission.

Reproduction and translation for non-commercial purposes are authorized, provided the source is acknowledged and the publisher is given prior notice and sent a copy.
Table of Contents

1 Executive summary 3
2 Introduction 6
3 Instruments for environmental policy 7
4 The politics of instrument choice: what is political feasibility? 9
   4.1 Actors involved in policy-making 10
   4.2 Key factors affecting political feasibility: analytical framework 11
5 Results 13
   5.1 Interviews 13
   5.2 Survey 16
   5.3 Policy simulation 20
   5.4 Focus groups 23
6 Key findings and conclusion 25
   6.1 Stakeholder preferences for climate policy instruments 25
   6.2 Power dynamics among interest groups 26
   6.3 Institutional arrangements 27
   6.4 Contextual factors influencing political feasibility 27
   6.5 Concluding reflections 28
7 References 30
1 Executive summary

This report presents the results of the CECILIA2050 research concerning the political feasibility of climate policy instruments in the EU. Political feasibility was defined as the likelihood that a policy proposal will be adopted by relevant political fora, given 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. Consequently, the leading research question of this study was: How do interest groups’ preferences, power constellations, and institutions affect climate policy instruments design and which lessons could potentially be drawn for future instrument design choices? The analysis is based on a multi-method approach that includes semi-structured in-depth interviews, focus groups, an on-line survey and a policy simulation with relevant stakeholders in the EU climate policy domain. Data were qualitatively analysed using a mixed bottom-up and top-down coding approach for the three domains investigated. In the following the key results are summarized.

Stakeholder preferences for climate policy instruments. Overall, stakeholders across interest groups and countries expressed preference for a tailored mix of climate policy instruments with a reformed EU ETS as its cornerstone. Taxation and regulation were clearly preferred over voluntary and informational instruments. Strategic interest and perceptions about design characteristics, performance and impacts of policy were found to play a major role in stakeholder preferences. Interestingly, results suggest that it is easier to agree on policies whose distributional effects are hidden because they are likely to be less contested rather than on policies whose impacts to specific societal groups are more evident are exposed to strong opposition.

Power dynamics among interest groups. Overall, the European Commission was perceived to have major influence on the discussion about climate policy while EU politicians were not considered to play a key role in this debate. In contrast, national politicians, and particularly Eastern European ones, are deemed powerful actors as they can block climate policies in the EU Council. National bureaucrats are also among those who exert major influence as they frame the national discussion on climate policy. Industry, and particularly the energy intensive industry (EII), has, in general, the reputation of a quite powerful actor with lobbying capacity at national and (to a lesser degree) EU level. Environmental NGOs, the research community and the business intermediary community were in general not deemed powerful actors in the climate policy debate. In general, networking capacity at national and EU level, and economic importance of the actors was considered to increase one’s capacity to influence decisions.
Institutional arrangements. Respondents did not see institutions as impediment to the feasibility of individual policy proposal—such as the EU ETS reform. However, concerns were raised about the limits posed by institutions to attain a coherent climate policy instrument mix. Two main institutional barriers were identified: 1) lack of competences of the EU in specific climate-related sectors such as the energy sector; 2) unanimity voting rule which gives MSs power to block decisions in the Council. However, some noted that a policy proposal that is rather ambitious might not pass qualified majority vote while a compromise proposal might have chances to pass unanimity vote.

Contextual factors influencing political feasibility. One important contextual factor is the degree of action taken in the international climate policy arena. On this point, the general observation across interest groups was that there is no reason for the EU to adopt an ambitious climate policy outside the framework of a major international climate agreement given the relatively low share of the total emission generated in the EU compared to other countries and the high risk of losing economic competitiveness with an ambitious climate policy. Also, the political climate tremendously influences the political feasibility of a policy proposal and in particular the global economic crisis and the Ukrainian crisis.

In light of the findings, this report formulated a number of considerations:

- **About policy goals.** Results suggest that it is easier to agree on ambitious policy goals as long as the distributional impacts are not clearly evident. However, the implementation of generic policy goals is often problematic. Therefore, achieving agreement on ambitious, generic goals has more symbolic than substantive value. Yet, symbolism is important to set the limit and build intention of action for the long-term. This is particularly relevant in the context of climate policy for which clear, long-term targets are needed to ensure policy effectiveness.

- **About policy instruments.** Although most of the climate policy debate revolves around which instrument would perform best, actors indicated that the political climate is more important for feasibility than the actual instrument. The results were inconclusive with respect to the favoured instrument of relevant stakeholders. While some ambitious actors might prefer taxes or regulations over the EU ETS, they acknowledge the fact that those instruments would also have to go through the political struggle of instrument design and adoption. Accordingly, many actors focus on improving the effectiveness of the EU ETS itself.

- **About perceptions shaping policy preferences.** Results suggest that individual perceptions, such as those regarding distributional impacts of policy options, play a major role in shaping stakeholder preferences. This is relevant when discussing the impact assessment of policy options. If, based on an impact assessment study, interest groups perceive the impacts of a policy proposal as unfair they are likely to oppose it. Hence, particular attention needs to be paid to policy impact assessment
studies in order to ensure their credibility and legitimacy so as to avoid misconception among affected parties.

- **About influential actors.** Results indicate that the Commission has a major influence in shaping the EU climate policy. Consequently, stakeholders who aim to insert their policy ideas into the political debate should engage in discussion with the Commission at early stages of the policy development process. At the same time, being influential puts the Commission in the position to exploit the momentum and use its power to ensure environmental effectiveness of the EU climate policy.

- **About institutions.** Results indicate that the unanimity voting rule within the EU Council is a barrier to a coherent EU climate policy. On this point, working in informal fora on a compromise policy proposal to take to the Council might be a better strategic move than focusing on a highly ambitious proposal. This holds particularly true when designing a new policy for which uncertainty about impacts is high and interest groups are more inclined to adopt a cautious approach.

- **About member state differences.** Our results indicate that national contexts shape the position of actors in different MS. While in Poland the distributional effects of policies among MSs dominated the discussion, the role of EII was prominent in the climate policy debate in Germany. One opportunity for policy proponents to gain political leverage might lie in identifying the distinct progressive forces in different countries and work on building a coalition for progressive action.

- **About differences among stakeholder groups.** Results show that preferences of actors strongly vary across stakeholder groups. However, at the same time groups are also heterogeneous, either in their ambition or in their beliefs. For example, environmentalists and academics vary greatly in their beliefs and perceptions of different policy instruments such as the EU ETS. Furthermore, industrialists differ with respect to their ambition depending on which sector they belong to. While some EII take on a generally opposing role, the power sector is a strong proponent of strong carbon pricing. Policy proponents need to be aware of this internal heterogeneity if they are to build support for policy proposals.

- **About multi-level governance.** Political dynamics at different levels of policy making – national, EU-wide and international – influence each other. For example, the analysis clearly revealed that the international climate policy debate plays a major role on the EU and national climate policy development. Similarly, what countries decide to do to tackle climate change highly influences decisions at the EU level and in turn the position of the EU in the international negotiations. The interplay of these multi-scale dynamics influences the chance of policy proposals to be taken into consideration in different policy arenas. Consequently, policy proponents need to be aware of these dynamics in order to identify the appropriate scale and momentum to lobby for new policy ideas to be taken into consideration.
2 Introduction

In the climate policy domain the European Union (EU) has adopted a mix of regulatory, voluntary and market instruments to achieve its carbon emission reduction targets. However, market and governance failures have led to major inefficiencies of these instruments – most notably the collapse of carbon price and the consequent malfunctioning of the EU ETS scheme.

In this context, one goal of the EU funded CECILIA2050 project is to investigate how the European climate policy instrument mix should evolve to guide the transformation to a low-carbon economy. Specifically, the project investigates ways to improve the economic efficiency and environmental effectiveness of the EU climate policy instrument mix, and to address constraints that limit its performance and feasibility. Constraints include public acceptance, political feasibility, availability of finance and the physical infrastructure, but also the administrative and legal framework.

This report presents the results of the part of the project concerning the political feasibility of climate policy instruments in the EU. The likelihood that a theoretically efficient and cost-effective instrument be really adopted by policy-makers critically depends on a number of political factors (see e.g. Majone, 1975, Hahn, 1989, Dror, 1969, Keohane et al., 1998). Among these factors, on the basis of extensive literature review, we hypothesized that interest groups’ preferences, power dynamics and institutional settings play a critical role. Consequently, the goal of this study was to investigate the interplay of these three dimensions to shed light on potential opportunities and constraints for the adoption of climate policy instruments in the EU. Taking this into account, the leading research question of this study was: How do interest groups’ preferences, power constellations, and institutions affect climate policy instrument design and which lessons could potentially be drawn for future instrument design choices?

The EU climate policy was the policy space of our investigation. Within this space the policy issue area we investigated was typologies of policy instruments – market, regulatory, voluntary, and informational – for achieving the EU long term decarbonisation targets with a focus on the EU flagship climate policy instrument, i.e. the EU emission trading system (EU ETS). Interest groups were selected as unit of analysis.

To address the research questions a mix of different qualitative research methodologies was used, including semi-structured in-depth interviews, focus groups, an on-line survey and a policy simulation with relevant stakeholders in the EU climate policy domain. Three focus groups were held in Brussels in May 2014 with representatives of environmental NGOs, industry and academics respectively. Over the same period of time, 21 interviews were
conducted with key stakeholders from the European Commission, national ministries and agencies, environmental NGOs, academia and businesses from Germany, the UK and Poland. Furthermore, an on-line survey was conducted in 8 EU countries (Check Republic, Denmark, France, Germany, Italy, Poland, Spain, and UK) between May and September 2014. The 338 recipients included stakeholders from environmental NGOs, policy-making communities, industry, academia and think-tanks. The response rate to the survey was 20%. The majority of respondents includes members of the research community, NGOs and industry representatives (76% all together) while the remaining respondents were essentially national and European policy makers. Finally, the policy simulation, a one and a half day workshop held in October 2014, involved 22 experts on EU emission trading from six EU countries (Poland, Check Republic, Italy, Germany, UK, Denmark, and France) across different interest groups (European Commission, environmental NGOs, academia, think-tanks, governmental ministries and agencies). The focus groups and the on-line survey questions targeted stakeholders’ preferences for broad typologies of climate policy instruments, while the interviews and the policy simulation focused on the EU ETS.

The following chapters present the results of the study. Specifically, chapter 2 and 3 provide the context and the analytical framework of the study. Then chapter 4 illustrates the results of the analysis per each of the methodological approaches used. Drawing from the findings, chapter 5 distils a number of salient observations about the political feasibility of climate policy instruments in the EU. Finally, chapter 5 wraps up the study and draws the conclusions.

3 Instruments for environmental policy

In the most general sense, policy instruments are the tools at the disposal of governments to attain policy goals (Jordan et al. 2013). The literature abounds with categorizations of policy instruments based on criteria such as governing resource and level of coercion. For a comprehensive review, beyond the scope of this study, we refer the reader to the comprehensive work of, for example, Howlett (2011) and Jordan et al. (2013).

Looking into the environmental policy domain, one of the most commonly used taxonomy distinguishes incentive-based, direct regulatory, voluntary, and informational instruments. Table 1.1 illustrates different typologies of instruments within these categories. We found useful to refer to this taxonomy as stakeholders tend to be familiar with it. For example, experts and stakeholders in the climate policy domain, immediately associate energy taxes, carbon emission trading or renewable energy subsidies to the idea of incentive-based (or market-based) instruments. Similarly, energy efficiency standards and emission standards for cars come immediately to mind as typical regulatory instruments, and CO2 labelling for cars and energy labelling are known as informational instruments.
Table 1.1 Taxonomy of instruments commonly used in environmental policy

<table>
<thead>
<tr>
<th>Typologies of instruments used in environmental policy</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Incentive-based instruments</strong></td>
<td></td>
</tr>
<tr>
<td>Emission taxes</td>
<td>Imposes a common emission price. Firms pay per every unit of emission generated. It generates revenues that can be used for environmental protection activities.</td>
</tr>
<tr>
<td>Tradable allowance systems or “cap-and-trade”</td>
<td>Imposes a common emission price (through market mechanisms). Firms pay per every unit of emission generated. Auction or free allocation of initial allowances. In case of auctioned allowances this instrument generates revenues.</td>
</tr>
<tr>
<td>Subsidies for pollution abatement</td>
<td>Firms are rewarded for every unit of emissions that they reduce below a baseline level.</td>
</tr>
<tr>
<td>Taxes on inputs or goods associated with emissions</td>
<td>Used when it is difficult to monitor emissions. Little cost-effectiveness because they do not engage all pollution reduction channels. It generates revenues.</td>
</tr>
<tr>
<td>Incentives for R&amp;D and technology deployment</td>
<td>Incentives for clean technology R&amp;D such as subsidies to private R&amp;D, strengthened patent rules, technology prizes, basic governmental research, and demonstration projects. Also, incentives to push the adoption of newly developed technology such as short-term assistance (subsidies, tax exemptions, etc.) for early adopters.</td>
</tr>
<tr>
<td><strong>Direct regulatory instruments (command and control)</strong></td>
<td></td>
</tr>
<tr>
<td>Technology mandates</td>
<td>Impose requirements on the production process (e.g. end-of-pipe treatment, mandates on specific input mix).</td>
</tr>
<tr>
<td>Performance standards</td>
<td>Require that a firm’s output meets certain conditions (e.g. energy efficiency standards, fuel efficiency for cars, renewable portfolio standards). Standards give firms flexibility to choose how to meet the standard. Regulators generally lack information to tailor standards to individual firms.</td>
</tr>
<tr>
<td>Permits</td>
<td>Permits are documents required for sources of pollution (e.g. power plants, chemical factories and, smaller polluters). The permits include information on which pollutants are released, how much the source is allowed to release, and the program that will be used to meet pollutant release requirements.</td>
</tr>
<tr>
<td><strong>Voluntary regulation</strong></td>
<td></td>
</tr>
<tr>
<td>Government-industry negotiated agreements</td>
<td></td>
</tr>
<tr>
<td>Certification</td>
<td></td>
</tr>
<tr>
<td>Standards auditing and accountings, etc.</td>
<td></td>
</tr>
<tr>
<td><strong>Informational instruments</strong></td>
<td></td>
</tr>
<tr>
<td>Information campaigns</td>
<td></td>
</tr>
<tr>
<td>Labelling and produce information</td>
<td></td>
</tr>
<tr>
<td>Exhortation and moral suasion, etc.</td>
<td></td>
</tr>
</tbody>
</table>

Source: adapted from Goulder and Parry (2008) and integrated with elements of Howlett (2011)
4 The politics of instrument choice: what is political feasibility?

The choice of policy instruments is determined by many different factors. Economic factors, most notably expected high efficiency and cost-effectiveness, may speak in favour of adopting economic instruments. However, the likelihood that such instruments be really adopted depends on a number of political factors. For example, some well-organized interest groups (e.g. industry and environmentalists) who perceive the instrument as a sell-out or unfair, and have capacity to mobilize strong opposition – for example through the media or by forming coalitions – can put pressure on policy-makers for not adopting or changing the instrument design. Policy-makers themselves may perceive that there is no momentum for such a proposal to enter the policy discussion or they may fear strong opposition. They can also think that the proposal is unfeasible because the institutional and administrative effort required to implement it is too high.

Interestingly, in the political science literature it is hard to find a conceptual definition of political feasibility and a convenient methodology to estimate it. Webber (1986, p. 549) comes close to a definition when he states that “the term 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”. Majone (1975) does not define feasibility but rather points to the political, distributional and institutional constraints relevant to the problem and the context examined (without actually providing an empirical approach). Other scholars have identified factors affecting political feasibility in general (Meltsner, 1972; Dror, 1969) or per stage of the policy cycle (Webber, 1986). These include actors’ motivations, beliefs, resources, sites and exchanges. Although these scholars do not provide a methodological approach, they do draw the boundaries of the investigation.

Looking into economic approaches, the standard economic framework to compare different policy proposals focuses on their economic efficiency and is normative by nature. Instead, political economy evaluations are positive, i.e. they describe reality in a neutral way and sometimes make testable predictions about which policy proposals will be adopted taking into account the political realities. Such predictions flow from an analysis of the institutional setting in which the instrument is being discussed, and the preferences of all those playing the game. In this context, the work of Hahn (1989) stands out as unique attempt to develop a general model to assess which instrument will be chosen by relevant actors in a certain institutional setting. In retrospect, despite its limitations, e.g. it overlooks the multi-governance dimension of policy design, the model proved able to predict and explain general patterns of policy instrument use. In synthesis, Hahn suggests that to understand the politics of instrument choice it is important to consider how specific (powerful) interest groups are likely to react to different kind of policy proposals in a specific institutional context. Also, he suggests that relevant interest groups, their power and their attitudes can be expected to vary across countries.

In this study we adopted an approach that is not dissimilar to the way Hahn studied the political feasibility of policy instrument. This mean we took a political economy angle, in
which predictions about the feasibility of certain instrument choices flow from an analysis of the institutional setting in which the instrument is being discussed, the preferences and the power relations of those playing the game. Consequently, we defined political feasibility as the likelihood that a policy proposal will be adopted by relevant political fora, given 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.

In the following we provide a detailed overview of these dimensions that constitute our analytical framework.

4.1 Actors involved in policy-making

In general, actors involved in policy-making are divided into public and private (Pappi and Henning, 1998), or, according to the control they have over policy related decisions, between a policy’s demand and supply side (Keohane et al., 1998). In line with Hahn (1989) we here include environmentalists and industrialists as relevant interest groups on the demand side. On the supply side of policy, actors are subdivided into legislators and bureaucrats (Bressers and Huitema, 1999), as well as according to whether they are subject to (re-)election or not (Dür, 2008) and whether they are agenda-setters or veto-players (Skodvin et al., 2010). In addition to these groups, well established in the literature, the number of other influential actors has increased in recent years (Pappi and Henning, 1998). Especially in the design of market-based instruments, academics and “bureaucratic entrepreneurs” play an important role (Hahn, 1989). The evolution of emissions trading has also led to the formation of another stakeholder group, the constituencies (Voß, 2007). An example is the carbon market business intermediaries.

Drawing from the above, this study focused on the following six stakeholder groups:

- **Bureaucrats**: policy-makers not subject to (re-)election and/or who have more power over agenda-setting than over policy adoption

- **Politicians**: subject to re-election and/or having veto power

- **Environmentalists**

- **Industry**

- **Research community**: academics and other research/think-tank experts

- **Emissions trading constituencies**
4.2 Key factors affecting political feasibility: analytical framework

The utility function of an actor materializes in his preference for a certain policy proposal. The preference is shaped by different factors, which can be broken down into criteria (highlighted here in bold letters) and sub-criteria (presented in italics). An important factor influencing preferences is the motivation of an actor (Meltsner, 1972). Motivation is made up of three sub-criteria. The first, self-interest, is exhibited, for example, when representatives of industry aim to minimize costs, or when environmental organizations strive for their well-being, or legislators follow their constituents' preferences (Keohane et al., 1998). Strategic interests serve self-interests but then rather indirectly, for example, when industrialists support strict regulatory policies in order to manage collective risks or when environmentalists favor symbolic policies because they increase the likelihood of stricter action in the future (Hahn, 1989). However, especially environmentalists and legislator, may also be motivated to strive for a high environmental status due to ideological interests (Hahn, 1989; Keohane et al., 1998).

Table 1.2 Analytical framework: key factors determining the political feasibility of a policy proposal

<table>
<thead>
<tr>
<th>Category</th>
<th>Criteria</th>
<th>Sub-criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preferences</td>
<td>Motivations</td>
<td>Self-interest, strategic interest, ideological interest</td>
</tr>
<tr>
<td>Beliefs</td>
<td>Ideology</td>
<td>experience, modes of governance</td>
</tr>
<tr>
<td>Perceptions</td>
<td>About distributional effects, policy saliency, policy flexibility</td>
<td></td>
</tr>
<tr>
<td>Power</td>
<td>Resources</td>
<td>Financial, knowledge, legitimacy</td>
</tr>
<tr>
<td></td>
<td>Relations</td>
<td>Resource exchange, coalitions, networks</td>
</tr>
<tr>
<td></td>
<td>Influence</td>
<td>Attributed influence to actors</td>
</tr>
<tr>
<td>Institution</td>
<td>Institutional requirements</td>
<td>Required rule changes, required authority changes</td>
</tr>
<tr>
<td>setting</td>
<td>Existing set of rules</td>
<td>Decision-making fora, voting rules, formal and informal procedures</td>
</tr>
</tbody>
</table>

Which policy an actor prefers to support in order to serve his motivation is influenced by his beliefs about policy instruments (Meltsner, 1972). These are shaped by experiences (Howlett, 2011) and historical attitudes (Dror, 1969), but also by ideology concerning both intended goals and the type of instrument employed (Keohane et al., 1998) and the prevailing state-society interactions and governance aims, i.e. the mode of governance (Howlett, 2011). With regard to the latter, for example, the overall aim of a legal governance system is to achieve social order through laws and regulations. In contrast, the management of major organized social actors through subsidies, information campaigns, state owned enterprises, and independent regulatory commissions is distinctive of corporatist governance systems. Market governance systems have a focus on resource/cost efficiency and control through the promotion of privatization and competition. Preferred policy instruments in these contexts
are public-private partnerships, voluntary regulation, auctioned allowances, and tax incentives and penalties (see e.g. Howlett, 2011; Kjaer, 2004; Pierre and Peters 2000).

In addition to motivations and beliefs, perceptions about the effect of a policy influence the preference of an actor (Bressers and Huitema, 1999; Keohane et al., 1998). Possibly the most important perception is that of distributional effects, i.e. the perception of who is going to win and lose on account of the policy (Majone, 1975, Hahn, 1989, Keohane et al., 1998). The perception of the urgency or saliency of the policy also plays an important role (Keohane et al., 1998). Another factor, particularly important for policy-makers, is the flexibility of an instrument, i.e. how well it can be adapted to changing circumstances and uncertainties in the future (Bressers and Huitema, 1999).

To which extent an actor can influence the decision-making process in his favour depends on his power. Power is central to the bargaining process of political decision-making (van Dyke, 1968). It is one of the most contested concepts in political science and a thorough review of its conceptualization is beyond the scope of this study. We here adopted the definition of Arts and van Tatenhove (2004) who describe power as “the ability of different actors to mobilize resources in order to achieve a certain outcome in social relations”. When giving this definition, the authors also acknowledge that different definitions of power describe it either as a dispositional or as a relational phenomenon. In the former case the focus lies on the capacity of actors to make use of resources to support their own position. In the latter case, power is defined over the actual act of influence of one actor on another one. There are two underlying differences in these definitions. First, the emphasis is either on resources or on the relation between actors. Second, the focus is either on the capacity to act or the actual outcome. This is connected to the difference between power and influence: an actor can possess power without exercising it, while his influence is a causal concept and necessitates the exercise of power (Dür, 2008).

Following from the above, the concept of power can be captured by three main criteria, namely resources, relations and influence. Resources can be of different type depending on the stakeholder group (Dür, 2008). For example, industrialists and legislators have substantial financial resources at their disposal. Also, many target groups possess expertise and knowledge. Environmentalists, in contrast, often fall back on legitimacy. An important resource is also the degree of organization that a certain interest group exhibits (Dür, 2008; Svendsen, 2002). Similar to resources, relations can be of different kind (Pappi and Henning, 1998). They can be characterized by a resource exchange common in the relation between private and public actors where public actors trade the control over the legislative agenda and decision-making in exchange for expert knowledge and public support from private actors (Skodvin et al., 2010; Pappi and Henning, 1998). Whether or not the possibility of resource exchange also crystallizes into influence of an actor on another depends on the interdependence of the two, i.e., for example, on how much the public actor needs the resource of the private actor (Skodvin et al., 2010). Influence can be assessed by letting all stakeholders estimate their own influence and that of others involved (Dür, 2008).
Whether or not actors can use their power to push their positions is constrained by the institutional setting. Institutions can be defined as the existing rules of the game (Majone, 1975) which include the forum in which a proposal is discussed (Bressers and Huitema, 1999) and the voting rules with which it is adopted (Jordan et al., 2013). The forum determines the actors that decide over the proposal and thereby the aspects that gain importance. For example, the Ministry of Finance has different priorities over policy targets than the Ministry of the Environment (Bressers and Huitema, 1999). If a policy is classified as a fiscal policy and handled by the Ministry of Finance, it might be designed and evaluated with respect to different goals than if it was classified as an environmental one and developed by the Ministry of the Environment. The stricter the voting rule, on the other hand, the easier it is for interest groups to block proposals, because it is sufficient to convince one decision-maker (Skodvin et al., 2010). The voting rules and fora for an upcoming decision need to be considered as given for an actor (Majone, 1975). However, interest groups can decide where to lobby (Dür, 2008) and take the institutional constraints into account in their strategy.

A policy might also demand an institutional change, i.e. a change of the authority or the rules with which a problem is handled. Different policy proposals thus differ in the institutional requirements they demand and the constraints they face. Actors might anticipate these constraints and include them in their preference for a certain proposal.

Given the above, in this study we hypothesize that the interplay of interest groups preferences, power dynamics and institutions (independent variables) influence political feasibility (dependent variable). Consequently, understanding the interplay of these three dimensions in their related criteria and sub-criteria can help identify potential bottlenecks and constraints for the adoption of instruments. In the following, the results of the study are illustrated in light of this analytical framework.

## 5 Results

In the following sections the results of the investigation are synthesized. For more details, we refer the reader to the annexes of the report.

### 5.1 Interviews

The interviews were structured by a questionnaire that was developed in line with the criteria of the analytical framework. For each of the criteria there was a question that assessed the respondent's view on it either directly or indirectly. Interviews were conducted mainly face to face in Brussels and Berlin and via phone with Polish and English representatives. Most interviewees agreed that the EU ETS should remain a cornerstone of EU climate policies. They stressed that the instrument is cost-efficient and that carbon pricing is an appropriate way of internalizing the cost of GHG emissions. In contrast, a minority of interviewees phrased fundamental criticism, suggesting that the EU ETS works effectively only in theoretical terms. Taxes and regulations did not appear as favoured by the majority, with taxes being seen as
politically unfeasible and regulations as complicated to adopt and implement. There was a consensus among interviewees that the EU ETS is not working properly at the moment and needs a reform. The main obstacle to a reform of the EU ETS was found to be political will of the national governments and some climate sceptics in the European Parliament. Preferences (perceptions, motivations and beliefs) were found to play a role for the actors to form their position, along with power dynamics among interest groups. In contrast, institutional requirements for passing an EU ETS reform proposal did not significantly influence actors' position.

In general, many interviewees seemed driven by strategic interests as, for example, they supported the strengthening of the EU ETS essentially because the instrument is already in place. Also, many expressed concerns about distributional impacts of the EU ETS costs across member states (MSs) and highlighted that distributional impacts within MSs (across societal groups or sectors) have so far been low because of the low European Union Allowance (EUA) price. Another important issue emerged was distributional impacts at international level. On this point respondents expressed concern about the fact that the EU ETS might, now or in the future, discriminate European firms by unilaterally putting a cost burden on them.

With respect to power dynamics, the Eastern European MSs were perceived as blocking climate policies in the EU. The “old” MSs were blamed co-responsible of this stalemate because they did not sufficiently take into consideration the concerns of the Eastern European countries about climate policy in the beginning of the policy design process. Also, several interviewees highlighted that big MSs, especially Germany, have a higher responsibility in the climate policy negotiations and are not always as progressive as they claim to be. Many respondents perceived energy-intensive industries (EIs) as having the strongest voice in the climate policy debate and considered them a great obstacle to an ambitious EU ETS, as these industries generally oppose ambitious climate polices. The influence of EIs was perceived to be greater at national level, because a particular national company represents a bigger clout at national than European level and because politicians are elected locally. Also, interviewees stressed the importance of MSs' specific circumstances: some countries as Germany and Poland are shaped more strongly by EIs than others as for example the UK. This further weakens the influence of EIs on European level. According to the interviewees, the level of influence that stakeholders have is determined by the share of employment they represent, their political network and the access they have to governments (MS, and European Commission and Parliament), by the clarity of their message, their ability to build coalitions and to make their message heard by the media. Knowledge also plays an important role. Often, it seems to be used strategically.

Institutional barriers (e.g. change of rules required to pass policy proposal, voting rules, etc.) were not perceived as crucial when determining the feasibility of an EU ETS reform proposal. Several participants while recognizing that policy proposals can be easily adopted by qualified majority vote, also noted that an ambitious proposal might not pass qualified majority vote but a compromise may pass unanimity. Furthermore, it appeared that stakeholder groups
decide which institution to lobby depending on the circumstances of the policy process, i.e. which institution is responsible at a specific moment in time.

Another strong determinant of the feasibility of an EU ETS reform proposal regards the framing of the associated debate, particularly how it is influenced and politicized. The degree of action in the international arena stuck out as the most important contextual factor. Also, according to the interviewees, the political climate tremendously influences the political feasibility of a policy proposal. On this point they mentioned two major influencing factors: the economic crisis, and the Ukrainian crisis that fuelled new discussions about energy security. Because the economic crisis and the austerity policies have made it difficult for European countries to spend money, the political climate is perceived as inopportune for climate policies in general.

Turning to interest group preferences, environmentalists did not express much enthusiasm about the EU ETS itself. To a higher degree than other stakeholders the instrument was perceived as not working. However, environmentalists also highlighted that the advantage of the EU ETS is to put a limit on emissions. Representatives from politics and bureaucracy evaluated the EU ETS almost exclusively positively. Given its quite unique position, the power sector took a very progressive stand with regard to the EU ETS reform. Because investments are necessary in the sector, the sector is particularly struck by the contradiction between long-term incentives versus short-term prices. Therefore, the positions were strongly influenced by strategic interests such as predictability, credibility and transparency. The claim for higher prices was also very prominent, because this would realign short- and long-term incentives. The steel sector position was quite different from that of other sectors. In general the representatives of the sector expressed a fundamental opposition to the overall climate targets that they regarded as unfeasible. Also, the steel sector would prefer policies such as R&D for innovation technologies. However, this position is in contradiction with the belief that green production technologies do not have much potential in the steel sector.

Finally, looking at responses across countries, none of the European representatives mentioned the influence of EIIs as being too high. On the other hand, the influence of the media on the EU ETS was almost exclusively mentioned here. In contrast, German respondents paid particularly strong attention to the treatment of EIIs that were seen as an obstacle. Accordingly, the influence of the EIIs was a factor that dominated the perception of German representatives about the EU ETS. Interviewees explained the high influence of EIIs in Germany with the relevance that they have for employment. Also, German representatives stressed more than representatives from other countries that the EU ETS is not working properly and that it necessitates an urgent reform. The instrument was perceived as non-transparent and complex. One factor that played a big role in the arguments of the German representatives was the national target of 40% emissions reductions by 2020. As for Polish interviewees, interestingly, they were mainly driven by national self-interest rather than strategic or ideological motivations. On the one hand, they pointed to lack of political will of MSs as obstacle to a reform of the EU ETS. On the other hand, they focused on the
distributional impacts across MSs and particularly mentioned the need to transfer financial resources from richer to poorer countries if MSs had different treatment in the policy.

5.2 Survey

The on-line survey asked respondents to score performance criteria of 5 policy instruments on a scale from 0 (=very bad) to 5 (=very good). The instrument categories were: environmental taxation, emission trading, subsidies, direct regulatory instruments, voluntary agreements and informational instruments. The survey also asked respondents to score the importance of each of the indicated criteria as well as to score the capacity of these instruments to contribute to achieve the long term EU emission reduction targets. Questions about perceived influence of actors and barriers to the achievement of long-term emission reduction targets were also asked. In the following we present both the aggregated results and the results per stakeholder group. An overview of the results in figures is reported in Appendix D.

Starting with preferences for instruments, according to respondents the most important criteria that an instrument has to satisfy were cost-effectiveness and capacity to stimulate investment in low carbon technology (average score above 4), followed by capacity to stimulate behavioural change, distributive justice and capacity to address uncertainty (average score around 3.5).

Looking at the instrument categories, taxation was the instrument performing best in all criteria (scores were between 3 and 4 in all criteria with the exception of distributive justice), and particularly in those criteria that respondents considered most important, namely cost-effectiveness and capacity to stimulate low carbon investment. Similar considerations holds for regulation that was believed to be able to stimulate low carbon investment (score of 3.7) but not to be as good as taxation in addressing uncertainties and maintaining public cost at low levels. Interestingly, respondents seemed not to trust the performance of emission trading that much. All criteria scored below 3 with the exception of cost-effectiveness and capacity to stimulate low carbon investment, which anyway scored lower than in the case of taxation and regulation. In particular, according to respondents the instrument cannot address uncertainties (score of this criterion is only 2). As for subsidies, they were believed to be able to stimulate low carbon investment (score of 3.5) but at the expense of distributive justice (score of 2).

Another observation regards the capacity of the instruments to contribute to achieve long-term EU emission targets. Respondents indicated regulatory instruments followed by taxation as the instruments that can contribute the most to achieve long-term targets. Also, despite the lack of confidence in the performance of the EU ETS, respondents believed that the instrument has also a role to play in the achievement of long-term targets (ranking third after regulation and taxation). In contrast, voluntary regulation did not receive much credit in terms of its capacity to contribute to emission reductions (score of 1.7). In fact, the instrument scored low in all criteria (below 2) with the exception of public costs that were perceived to be quite low. Similarly, informational instruments were not believed to have much influence
in achieving long-term emission targets (score of 2.2), although they were more popular than voluntary agreements.

In synthesis, respondents tended to prefer regulation over market instruments for its perceived capacity to stimulate low carbon investment in a cost-effective manner. Among market instruments taxation is by far the most preferred, while the confidence in the EU ETS appears comparatively low.

Turning to interest group preferences, the analysis suggests that EU public officers and environmental NGOs valued the capacity of an instrument to stimulate low carbon investment as the most important criterion that an instrument has to fulfil (score of 5). Public officers in MS regarded this criterion as important as cost-effectiveness. Not surprisingly, the latter was also by far the most important characteristic that a climate policy instrument has to possess according to respondents from the industry sector (score 5). The research community valued cost-effectiveness, stimuli to low carbon investment and behavioural change almost equally important (score around 4.5). To EU public officers cost-effectiveness, distributive justice and behavioural change were also very important performance criteria (score around 4). In contrast, MS policy makers regarded the capacity to address uncertainty as an important criterion (score around 3.5) along with behavioural change. Industry regarded capacity to stimulate low carbon investment, and distributive justice almost equally important criteria, followed by capacity to address uncertainties. Environmental NGOs were more concerned with cost-effectiveness and distributive justice and capacity to address uncertainties (score around 3.5) than behavioural change (score around 2).

Representative of the industry sector scored voluntary agreement relatively high in all criteria (above 3) in comparison to all other instruments whose score remained below 3 - with the exception of the EU ETS criteria of cost-effectiveness and capacity to stimulate low carbon investment. However, when asked to what extent different instruments can contribute to the achievement of long-term emission targets, the industry sector indicates the EU ETS as the one with higher capacity to achieve the targets (score above 4), while all other instruments have a similar score around 2.5. The latter suggests that industry representatives did not seem to attribute a diverse role to other instruments such as regulation and taxation in contributing to the achievement of targets. Also, it is interesting to note that industry representatives evaluated subsidies slightly less positively than regulatory instruments.

Not surprisingly, EU public officers expressed a preference for the EU ETS and direct regulation as instruments to achieve long-term targets (score of 4). Subsidies and environmental taxation were slightly less appealing to them (score of about 3.5), while informational instruments were significantly less appealing (score of 2.3). Voluntary regulation received very little credit (score less than 1) as instrument that can help achieve long-term emission targets. Also, taxation, subsidies and regulation were believed to be able to stimulate low carbon investment, while the EU ETS was believed to be able to distribute costs and benefits equitably in the society.
Environmental NGOs tended to prefer taxation and direct regulatory instruments as means to achieve long-term emission targets. Subsidies were also appealing to them (score 3.3), far more than the EU ETS (score 2.1). In contrast, voluntary agreements and, to a lesser extent, informational instruments were considered to have little capacity to contribute to the long-term emission targets. Also, this stakeholder group placed high value on regulation and taxation’s capacity to stimulate low carbon investment cost-effectively and equitably and on their ability to address uncertainties. In contrast, the EU ETS was evaluated rather negatively on these criteria. Similar concerns were expressed for voluntary agreements and informational instruments that, however, were recognized to have the advantage of low administrative costs for the public sector.

MS public officers considered the EU ETS the most appropriate instrument to achieve long-term emission target, followed by regulation and taxation to a lesser extent. The EU ETS scored above 3 in all criteria with a pick of 4 on cost-effectiveness. Subsidies were appreciated to a much lesser extent. They were believed to be able to stimulate low carbon investment (score of 3.4) but not so much to be cost-effective (score of 2) and capable of addressing uncertainties (score of 1.6). Voluntary agreements and informational instruments were not much appealing to MS public officers (score of all criteria around or below 2).

Finally, the research community regarded taxation and to a lesser extent the EU ETS, regulation and subsidies as instruments that will lead the way to long-term emission reduction. These instruments were believed to be able to stimulate low carbon investment cost-effectively. Taxation was also considered to be able to address uncertainties (score of 3.5). However, as general observation, the score that the research community gave to these criteria was on average lower than that given by other stakeholder groups for the same instruments. In other words, the research community was much more cautious, or sceptical if you will, on the capacity of a single instrument to fulfil these criteria entirely.

Turning to the issue of power dynamics, one way to assess power is by asking stakeholders how they perceive the influence of actors involved in the decision-making process, including themselves (Dür, 2008). Accordingly, in the survey respondents were asked to score the influence of stakeholders in climate policy decision processes on a scale from 0 (=no influence) to 5 (=high influence). They were also asked to score on the same scale a number of proposed determinants of such influence.

Overall, respondents perceived the European Commission as the most influential actor (score of 4.3). This is in line with the policy simulation findings, where participants reported to have learned the importance of the Commission’s power of initiative in shaping the climate policy discussion (see also section 4.3). National politicians and industry were also perceived as quite powerful in the survey (score of 3.8 and 3.6 respectively). Interestingly, EU politicians were not among the actors that were considered to play a key role in climate policy making (score of 3.1). They were considered a bit more influential than environmental NGOs (score of 2.8) and the research community (score of 2.5) but definitely not as powerful as the Commission.
The analysis of the data per stakeholder groups reveals that the EU public officers believed national bureaucrats to be the most influential actors (score of 5), while the national bureaucrats believed the Commission to be the most influential (score of 5). For both groups, another key influential actor was industry. This is somewhat not surprising given that the Commission and national bureaucrats work in close interaction, and that many industry sectors have invested considerable amount of resources in lobbying capacity in Brussels and in their home country. This latter observation finds support in the survey question regarding how much money and time respondents invest in lobbying policy ideas, to which representative of the industry responded with a score of 3.8 on a scale from 0 (=none) to 5 (=substantial amount). Only the Commission officials reported to invest more (score 4.5). It is also interesting to note that the Commission officers perceived national politicians to play a much more substantial role in climate decision-making (score of 5) than what the national bureaucrats perceived with regard to politicians (score of 3).

Contrary to what EU and MS public officers reported, industry representatives did not perceive themselves as much influential in the climate policy debate (score of 2.6). They do recognize the Commission (score of 4.4) national (score of 3.4) and EU (score of 3.3) politicians as influential actors. They also see environmental NGOs as playing an important role in the climate policy debate (score 3), more than the research community.

Environmental NGOs representatives attributed equal influence capacity to national politicians and the Commission (score of 4.2) and to a much lesser extent to industry, national bureaucrats and EU politician (score of 3.4, 3.3, 3.1 respectively). Also, they placed themselves among the relatively influential actors (score of 2.9). They seemed not to believe much on the influence of research on the policy debate, though (score of 2.1).

The research community places much influence capacity on the Commission (score of 4.3), industry (score of 4), and national politicians (score of 3.8), and to a lesser extent on EU politicians, national bureaucrats and environmental NGOs.

Another observation is that the research community, environmental NGOs and business intermediaries are in general not deemed particularly powerful by any stakeholder group (score always below 3).

Finally, when it comes to assess their own influence, EU public officers, national bureaucrats and environmental NGOs are the groups that perceive themselves as stakeholders with a certain amount of influence capacity. This “self-confidence” attitude holds particularly true for the Commission (score of 4.5).

Looking into the determinants of stakeholder’s influence, in general access to EU bureaucrats (score of 4) and connection with national politicians (score of 3.9) are believed to play a key role in increasing one’s capacity to influence decisions. The economic importance of the stakeholder is also deemed important (3.8). In accordance to the level of influence attributed to the stakeholder groups, EU public officials consider access to national politicians and bureaucrats and economic importance to be key determinants of stakeholders influence. Similarly, for national bureaucrats access to EU politicians and EC officers, and economic
importance are key determinants of influence. Environmental NGOs placed similar level of importance to all proposed determinants of influence (score between 3 and 4). All stakeholder groups scored the relationship with the media the lowest (score around 3 or less).

The last question of the survey asked respondents to assess on a scale from 0 (=not important) to 5 (=very important) to what extent a number of options represented a barriers to an ambitious 2030 and 2050 climate policy. Competing interests and agendas among MS (but also at the EU level) and insufficient prioritization of climate policy in national (but also the EU) agendas stood out as major barriers to an ambitious climate policy (score of 3.9 and 3.7 respectively). Another important barrier was the uncertainty surrounding the international climate regime (score of 3.6). Interestingly, respondents did not deemed particularly limiting either the lack or the cost of low carbon technology. National bureaucrats were the ones most concerned with the developments of the international climate regime (score of 4.8) along with lack of financial resources (score of 3.8). In contrast, EU bureaucrats expressed concern for the lack of physical infrastructure (score of 4). Remarkably, for industry representatives the lack of clear long term targets was not as much of a limiting factor as the uncertainty about the international climate regime, the lack of financial resources and the competing interests and agendas among MS. Environmental NGOs placed significant importance to the political dynamics at national and EU level, and secondarily to the lack of physical infrastructure and the uncertainty surrounding the global climate regime. Similarly, the research community pointed the finger towards the national and EU political dynamics but also highlighted the uncertainty problem stemming from the lack of a clear international climate regime, lack of clear long-term targets and lack of evidence about the effectiveness of policy instruments.

Institutional barriers, such as for example the need to change existing EU laws, was not perceived as a strong limitation by any of the stakeholder groups. In line with the interview findings (see section 4.1), neither MS officials nor EU officials perceived the need to modify EU laws to be a significant barrier to an ambitious climate policy (score of 1.5 and 2 respectively). Environmental NGOs, industry representatives and the research community were more concerned (score between 2.5 and 3), but among all the potential barriers still this was one of those that was perceived as not so important.

5.3 Policy simulation

The policy exercise simulated simplified EU Council negotiations taking place in the year 2025 on re-design features of the EU ETS 5th trading period that would start in 2031. Participants were split into eight teams and asked to play the role of senior policy makers from the European Commission and seven European countries (Germany, Poland, Czech Republic, Spain, Italy, Denmark, UK). Teams were asked to play according to a role description and a scenario with information about the socio-economic context in 2025 and particularly of the country they were simulating. The preferences that participants expressed during the workshop can thus not serve as a foundation for assessing stakeholders' preferences.
However, participants easily embraced the scenario which depicted a non-functioning EU ETS. The fact that all participants could easily accept a scenario wherein 2025 the EU ETS still does not work effectively indicates that this is a likely possibility in the mind of the policy exercise participants. At the same time, the lively discussion that took place during the exercise, show understanding of problems and interest to identify solutions to improve the functioning of the instrument.

Parties showed high interest to use EU ETS revenues for climate mitigation and adaptation purposes in all member states. As negotiations moved in the direction of a stricter EU ETS policy, countries seized the opportunity to call for a focused use of the EU ETS revenues. All countries but UK showed interest in an EU centralized management system of revenues with equitable redistribution to all member states rather than allocation to only low income or highly vulnerable countries. Later on, the UK also joined the group as result of having been affected by climate related disasters. This discussion led parties to agree on the establishment of an Adaptation and Transition Fund whose likelihood to be adopted in reality was evaluated 3.8 out of 5 (in a subsequent assessment of all participants). Although this policy option may be appealing to most EU countries, institutional barriers, above all the fact that the EU does not have power on fiscal matters, stand in the way of the actual adoption of such a policy.

The objective of the game for participants was to agree on one reform option for seven key EU ETS design elements. Here it appeared to be easier to agree on policy elements whose distributional effects are hidden than those whose impacts are more evident. Country teams could relatively easily agree on an ambitious 3% LRF while the use of revenues and carbon leakage provisions proved more controversial topics. On the one hand, this may be partly explained by the design of the exercise as the role descriptions included information on the country’s political interests in the climate negotiations, and consequently partly steered the discussion towards certain issues. On the other hand, this outcome is consistent with findings in the public policy literature. Scholars in this field, in fact, suggest that it is easier to agree on policies whose distributional effects are hidden because they are likely to be less contested. In contrast, policies whose impacts to specific societal groups are more evident are exposed to strong opposition. This latter interpretation finds support in the outcome of the EU Council negotiations on the 2030 package that took place shortly after the policy exercise. After having postponed the approval of the package for months, the Council decided on the 2030 emission targets, whose distributional impacts are not immediately apparent, but still struggles to come to a decision on key elements that have more visible effects on societal groups. In principle stakeholders who aim to ambitious environmental effectiveness of the EU ETS – but this applies to other policies too – may take advantage of this tendency of easily achieving agreement on generic policy goals to push their agenda. However, because the implementation of generic policy goals is often problematic, achieving agreement on ambitious goals has more symbolic than substantial value.

With regard to the negotiation dynamics, it is interesting to note that the negotiation style of the Council presidency influenced countries behaviour. The workshop was organized in three sessions: one session for the teams to form their initial position on EU ETS reform options,
and two cycles of negotiations. Each negotiation cycle included bilateral consultations, in-country discussions and EU Council meetings. The EU Council meetings were chaired by different presidents – the Czech Republic chaired the first Council meeting, Denmark chaired the second. Both Council presidencies were effective in advancing the negotiations, although the effect of their approach was substantially different on parties. While the Czech presidency was open to discuss all elements of the package and strived for consensus, the Danish presidency, under time pressure and urgency to reach an agreement, chose to focus on few elements of the package and did not discuss all policy elements. In general, the Czech approach created a sense of constructive, collaborative discussion, while the Danish approach led to frustration in the teams. These dynamics highlighted the importance for successful negotiations to acknowledge each nation’s position and ensure that all parties feel their concerns heard and taken into consideration. When this is not the case, frustration and opposition may arise and trust may be undermined. Even when an agreement is eventually reached, these feelings can affect the subsequent discussions on technical and implementation aspects of the policy.

The use of knowledge was a central issue in the simulation. A problem that emerged during the exercise and that is found often in real climate policy decision making is the lack of reliable assessment studies about the impacts of the policy options under discussion. In several occasions during the simulation participants felt they could not make sound decisions because they did not have sufficient understanding of the impacts of the proposed options. Later on, participants reported that what happened in the simulation is quite realistic as often the Commission impact assessment studies are perceived as not completely accurate and reliable. As decisions are based on impact assessment studies, consensus on their reliability and relevance is a precondition to successful negotiations.

The role of lobby groups in the EU ETS design was to some extent reflected in the policy exercise. Because lobby groups did not have an explicit role in the exercise, countries were not under strong lobby pressure – only some information about key interests of industry and environmental NGOs was provided in the role description. Contrary to what often happens in reality, country teams were free to aim for ambitious goals in response to citizens’ demand for climate action and eventually to agree on an ambitious cap and MSR, the key parameter of environmental effectiveness. Indeed, some participants stressed the importance of having lobby groups represented in the exercise to increase realism.

In terms of institutions, the European Commission proposal emerged as a major constraint in the discussion about policy options. Several topics that were prominent in early bilateral consultations disappeared from the discussion after they were not picked up by the Commission proposal. One example of this sort is represented by the compensation rules for indirect costs. Initially a number of low income countries demanded level playing field on this issue, something on which high income countries such as Germany were willing to consent. However, later conversations focused entirely on the Commission proposal where this topic was not included. This shows, in line with what participants also reported, that the right of policy initiative gives the Commission major power to steer the debate on specific policy
options, by at times cutting out of institutional discussions (e.g. in the Council) issues that are prominent in informal discussions (e.g. bilateral conversations). Consequently, as participants have also reported to have learned, if stakeholders want to insert their policy ideas into the debate, they should engage in discussions with the Commission at early stages of the policy process.

5.4 Focus groups

The focus group (FG) questions revolved around stakeholder preferences and performance of different typologies of policy instruments (market, regulation, voluntary, informational), and on institutional barriers. In the following the results of are presented with regard to 5 key points of the discussion: 1) biggest achievement and biggest problem of EU climate policy; 2) most important characteristics of a climate policy instrument; 3) best performing typology of instruments; 4) role of EU law and institutions in supporting/hampering ambitious climate policy; 5) centralization vs. decentralization of climate policy.

1) Biggest achievement and biggest problem of EU climate policy

According to representatives of the research community and of the industry sector, the biggest achievement of the EU climate policy was the adoption of the EU ETS, which, despite its problems, has led to a reduction of carbon emissions and has served as blueprint for non-EU countries. In contrast, environmental NGOs showed much more appreciation for the EU renewable energy target because it led to the reduction of renewable technology costs. In general, all three groups considered the whole 2020 strategy as a positive development in the EU climate policy. The research community group also pointed out the relevance of the 2020 strategy as experimental platform of different typologies and forms of policy tool which generated a large amount of data and information to assess their performance and capacity to achieve emission reduction goals.

The main criticism expressed by all three groups was that the design of the EU ETS is far from optimal because of the political compromise that constellated the decision-making process about this instrument. On top of that, the economic crisis (industry FG) and low quality offset credits entering the EU ETS market (environmental NGOs FG) increased the ineffectiveness of the instrument.

Other mentioned weaknesses of the EU climate policy were: lack of clear policy objective regarding how to achieve the renewable target (industry focus group); lack of united, coherent voice of the EC-DGs and of the External Action Service in the international negotiations (research community FG); and inability of the EU climate policy to keep up with fast-changing contextual circumstances (environmental NGOs FG).

2) Most important characteristics of a climate policy instrument

Participants mentioned various characteristics that a climate policy instrument should possess. All three groups mentioned flexibility (or resilience), stability and predictability as key performance criteria. Industry representatives also stressed the importance of cost-
effectiveness, while the research community mentioned transparency and capacity of the instrument to ensure transition to low carbon technology. In contrast, the environmental NGOs group focused on compliance and international impacts. All three groups also mentioned the importance of political support to the proposed climate policy instruments. In general, the importance of finding a balance between flexibility of the instrument and stability was mentioned across FG.

3) **Best performing typology of instrument**

On this point the research community FG and the environmental NGOs FG stressed the importance of having a mix of different tailor made policy instruments in order for the climate policy to be able to respond to different challenges and unavoidable uncertainties. In contrast, the industry FG strongly argued for market-based instruments complemented with technology support policies such as subsidies for clean technology R&D and for pushing the adoption of newly developed technology. Regulatory instruments were deemed important by the research community FG and environmental NGOs FG. Environmentalists justified their preference with the reason that market-based instruments, while having the advantage of being flexible tools, are prone to information asymmetry.

4) **Role of EU law and institutions in supporting/hampering ambitious climate policy**

Participants of all three FGs agreed that the EU law hinders the design of a coherent EU climate policy instrument mix. According to participants, this happens because the EU does not have competences in specific climate-related sectors such as the energy sector. In support of this argument participants reported two examples: lack of harmonization of energy taxation due to the fact that energy is a national policy; and the existence of the unanimity vote rule for fiscal matters in the EU Council. The latter allows MS to block decisions from being further discussed, thus limiting the possibility to design an ambitious EU climate policy and reducing the decision’s overall effectiveness. This issue would be solved if the Council decided on qualified majority, participants claimed. Besides these issues, the environmental NGOs FG emphasized the problem of insufficient transparency of the EC on policy design, and the existence within the EC of disagreement among DGs on environment and climate change issues.

5) **Centralization vs. decentralization of climate policy**

Regarding the level of implementation of climate policy instruments, the industry FC expressed preference for European policy design and implementation, and brought the EU ETS as example of successful climate policy. In contrast, environmental NGOs representatives were inclined to prefer national implementation of climate policy. For example, subsidy schemes were reported to be more effective if implemented at national level. Also, environmentalists observed that some sectors such as spatial planning are typically national issues, and that implementation at the European level might lead to inactivity of national officials who may feel deprived of their responsibility – this latter point was made also by the research community representatives. Although in favour of national implementation,
environmentalist also believed that MS should not take unilateral action without establishing a dialogue with other MS on issues that can potentially affect other MS. In support of this point, they reported the example of the unilateral decision of Germany on its national energy mix which affected other MS. Opinions were different across the research community representatives, with some arguing in favour of sectoral differentiation of emission targets at national level and others preferring overall targets set at EU level.

6 Key findings and conclusion

This report addressed the question of political feasibility of climate policy instruments in the EU. Based on extensive literature review, we hypothesized that political feasibility is affected by interest groups preferences, power dynamics among these groups, and institutional arrangements in place. Consequently, we investigated these dimensions across different interest groups, namely EU and national politicians, EU and national bureaucrats, business intermediaries, and representatives of industry, environmental NGOs and research community in Europe. We conducted semi-structured in depth interviews, focus groups, a policy simulation and an on-line survey.

The following text summarizes the key findings of the investigation and formulates the conclusions.

6.1 Stakeholder preferences for climate policy instruments

Overall, stakeholders across interest groups and countries expressed a preference for a tailored mix of climate policy instruments with a reformed EU ETS as its corner stone. Taxation and regulation were clearly preferred over voluntary and informational instruments for their perceived capacity to stimulate low carbon investment in a cost-effective manner. Industry tends to favour market-based instruments, particularly the EU ETS, complemented with technology support policies such as subsidies for clean technology R&D and acquisition. Governmental officers support the EU ETS and regulation, while environmental NGOs prefer taxation and regulation and are sceptical about the EU ETS although, they recognize, it has the advantage of putting a limit to emissions. The research community tend to prefer taxation and to a lesser extent the EU ETS, regulation and subsidies.

Strategic interest and perceptions about performance, functioning characteristics and impacts of policy were found to play a major role in stakeholder preferences for instruments. Strategic interest, namely the EU ETS already exists, explained why stakeholders prefer to keep the EU ETS in place in spite of the fact that its capacity to deliver cost-effective emission reduction was strongly criticized particularly by environmental NGOs, EII industry, and by representatives of Easter European countries such as Poland. Perceptions about the feasibility of taxation and regulations were also found important reasons of stakeholder preferences. Taxation was perceived politically unfeasible, and regulation too administratively and organizationally complex to adopt and implement. Characteristics such as flexibility, stability
and predictability of the different instruments also play a major role in stakeholder preferences. In general finding a balance between flexibility on the one hand, and predictability and stability on the other hand, was deemed important by most stakeholders. Another major factor playing a role in stakeholder preferences is the perception of distributional impacts across societal groups and across countries. The policy simulation results suggest that it is easier to agree on policies whose distributional effects are hidden because they are likely to be less contested. In contrast, policies whose impacts to specific societal groups are more evident are exposed to strong opposition.

6.2 Power dynamics among interest groups

Overall, the European Commission was perceived to have major influence on the discussion about climate policy. Its power lays mostly in the right of policy initiative, the capacity to produce knowledge, and its extended network with different interest groups. In particular, the right of initiative gives the Commission capacity to steer the debate on specific policy options by cutting out from institutional circles (e.g. the Council) issues that are prominent in informal discussions (e.g. bilateral conversations). Also, the capacity to produce knowledge, such as policy impact assessment studies, gives the Commission a strategic advantage in supporting certain policy options essentially because interest groups often do not have the resource capacity to produce extensive impact studies to support their own policy options.

Interestingly, EU politicians were not perceived to play a key role in the EU climate policy discussion. In contrast, national politicians, and particularly Eastern European ones, are deemed powerful actors as they can block climate policies in the EU Council. National bureaucrats are also among those who exert major influence as they frame the national discussion on climate policy.

Industry, and particularly EII, has, in general, the reputation of a quite powerful actor with lobbying capacity at national and (to a lesser degree) EU level to influence the formulation of the EU climate policy. Its power is mostly determined by the share of employment it represents, its political network, and the ability to build coalitions and to clearly frame its message and have it heard by the media. Knowledge, often used strategically, also plays an important role. However, not surprisingly, industry representatives did not perceive themselves as having a strong influence in the climate policy debate and attributed higher influence capacity to environmental NGOs.

Environmental NGOs, the research community and the business intermediary community were in general not deemed powerful actors in the climate policy debate. However, unlike the research community, environmental NGOs considered themselves to be to some extent influential. EU public officers and national bureaucrats also perceived themselves as stakeholders with a certain amount of influence capacity. This “self-confidence” attitude holds particularly true for the Commission which is the stakeholder that invests more money and time in networking and communication with interest groups.
In general, networking capacity at national and EU level, and economic importance of the actors was considered to increase one’s capacity to influence decisions. The relationship with the media seemed not to be so important.

6.3 Institutional arrangements

Institutions (e.g. decision-making fora, formal and informal procedural rules, voting rules, etc.) appeared not to be a major limitation to the feasibility of one specific policy proposal—such as the EU ETS reform. However, concerns were raised about the limits posed by institutions to attain a coherent climate policy instrument mix.

When it comes to discuss a comprehensive climate policy that includes all relevant sectors and potential policy instruments, institutional arrangements become critically important for two main reasons: first, the EU does not have sufficient competences in specific climate-related sectors such as the energy sector, hence the EC cannot take any policy initiative; second, when the decision about which policy instrument to adopt is, since the beginning of the discussion, confronted with the unanimity voting rule there is not much room for compromise, and consequently the chances to pass a policy proposal significantly decrease—see for example the case of the failed proposal of an EU carbon tax. In general, the unanimity voting rule was the institution that was referred to as the major barrier to the development of a coherent EU climate policy. However, even if this rule gives MSs power to block decisions from being further discussed in the Council, some noted that a policy proposal that is rather ambitious might not pass qualified majority vote either. Instead, a compromise proposal might have chances to pass unanimité vote.

6.4 Contextual factors influencing political feasibility

A number of contextual factors were found to influence the political feasibility of EU climate policy. One contextual factor considered particularly important was the degree of action taken in the international climate policy arena. On this point, the general observation across interest groups was that there is no reason for the EU to adopt an ambitious climate policy outside the framework of a major international climate agreement given the relatively low share of the total emission generated in the EU compared to other countries and the high risk of losing economic competitiveness with an ambitious climate policy.

Also, the political climate tremendously influences the political feasibility of a policy proposal. On this point two major influencing factors emerged: the global economic crisis and the Ukrainian crisis. Because the austerity policy adopted in response to the economic crisis has made it difficult for European countries to spend money, the political climate was increasingly perceived as inopportune for climate policy in general. At the same time, the Ukrainian crisis fuelled new discussion about energy security which includes discussion about alternative, low carbon energy sources.
6.5 Concluding reflections

In synthesis, the findings of this study suggest that not only the interplay of interest groups’ preferences, power dynamics among groups, and existing institutional arrangements but also contextual political and economic factors play a crucial role in influencing the political feasibility of the EU climate policy. Individual motivations and beliefs along with access to resources and economic influence seemed to be more important than institutions. Contextual factors, absent in our analytical framework, play a major role and should be included in the assessment of political feasibility.

In light of the findings, a number of considerations can be formulated:

- **About policy goals.** Results suggest that it is easier to agree on ambitious policy goals as long as the distributional impacts are not clearly evident. However, the implementation of generic policy goals is often problematic. Therefore, achieving agreement on ambitious, generic goals has more symbolic than substantive value. Yet, symbolism is important to set the limit and build intention of action for the long-term. This is particularly relevant in the context of climate policy for which clear, long-term targets are needed to ensure policy effectiveness.

- **About policy instruments.** Although most of the climate policy debate revolves around which instrument would perform best, actors indicated that the political climate is more important for feasibility than the actual instrument. The results were inconclusive with respect to the favoured instrument of relevant stakeholders. While some ambitious actors might prefer taxes or regulations over the EU ETS, they acknowledge the fact that those instruments would also have to go through the political struggle of instrument design and adoption. Accordingly, many actors focus on improving the effectiveness of the EU ETS itself.

- **About perceptions shaping policy preferences.** Results suggest that individual perceptions, such as those regarding distributional impacts of policy options, play a major role in shaping stakeholder preferences. This is relevant when discussing the impact assessment of policy options. If, based on an impact assessment study, interest groups perceive the impacts of a policy proposal as unfair they are likely to oppose it. Hence, particular attention needs to be paid to policy impact assessment studies in order to ensure their credibility and legitimacy so as to avoid misconception among affected parties.

- **About influential actors.** Results indicate that the Commission has a major influence in shaping the EU climate policy. Consequently, stakeholders who aim to insert their policy ideas into the political debate should engage in discussion with the Commission at early stages of the policy development process. At the same time, being influential puts the Commission in the position to exploit the momentum and use its power to ensure environmental effectiveness of the EU climate policy.
• **About institutions.** Results indicate that the unanimity voting rule within the EU Council is a barrier to a coherent EU climate policy. On this point, working in informal fora on a compromise policy proposal to take to the Council might be a better strategic move than focusing on a highly ambitious proposal. This holds particularly true when designing a new policy for which uncertainty about impacts is high and interest groups are more inclined to adopt a cautious approach.

• **About member state differences.** Our results indicate that national contexts shape the position of actors in different MS. While in Poland the distributional effects of policies among MSs dominated the discussion, the role of EIIs was prominent in the climate policy debate in Germany. One opportunity for policy proponents to gain political leverage might lie in identifying the distinct progressive forces in different countries and work on building a coalition for progressive action.

• **About differences among stakeholder groups.** Results show that preferences of actors strongly vary across stakeholder groups. However, at the same time groups are also heterogeneous, either in their ambition or in their beliefs. For example, environmentalists and academics vary greatly in their beliefs and perceptions of different policy instruments such as the EU ETS. Furthermore, industrialists differ with respect to their ambition depending on which sector they belong to. While some EIIs take on a generally opposing role, the power sector is a strong proponent of strong carbon pricing. Policy proponents need to be aware of this internal heterogeneity if they are to build support for policy proposals.

**About multi-level governance.** Political dynamics at different levels of policy making – national, EU-wide and international – reciprocally influence each other. For example, the analysis clearly revealed that the international climate policy debate plays a major role on the EU and national climate policy development. Similarly, what countries decide to do to tackle climate change highly influences decisions at the EU level and in turn the position of the EU in the international negotiations. The interplay of these multi-scale dynamics influences the chance of policy proposals to be taken into consideration in different policy arenas. Consequently, policy proponents need to be aware of these dynamics in order to identify the appropriate scale and momentum to lobby for new policy ideas to be taken into consideration.
7 References


Svendsen, G.T. 2002. Lobbyism and CO2 trade in the EU. Working Papers 02-16, University of Aarhus, Aarhus School of Business, Department of Economics.


Annex A

The Political Feasibility of Reforming the EU Emissions Trading Scheme. A comparison of different countries.

Master thesis by Henriette Walz
The Political Feasibility of Reforming the EU Emissions Trading Scheme

A comparison of different countries

Dr. Henriette Walz
30.6.2014

Supervisor: Dr. Stefania Munaretto
Environment and Resource Management
Research Project (468017)
14962 words
Preface

This thesis was conducted as part of a project that is embedded in the EU-funded CECILIA2050 program. CECILIA2050 aims to identify the optimal mix of climate policy instruments to achieve the EU long-term climate targets. Within CECILIA2050 Prof. Dave Huitema and Dr. Stefania Munaretto investigate the political feasibility of climate policy instruments. I am very grateful to them for letting me be part of this project and for supporting me in various ways throughout the past three months. That my thesis was part of CECILIA2050 enabled me to organize interviews with high-level stakeholders and talking to them was a unique experience for me. I also got very valuable insights into how such projects are conducted. Last but not least, I learned a lot from Stefania about political science research, interviewing in particular and writing in general and am very grateful for her being there whenever I had a question. I would also like to thank Catherine Reynolds, Valérie Labonté and Stefania for reading my thesis in earlier versions. Without them it would be much harder to read.

Abstract

EU climate policy relies heavily on its emissions trading scheme (ETS) that covers 45% of the overall emissions. However, so far the EU ETS has not been effective in stimulating emissions reductions. Political struggles between EU member states (MS) and between different levels of governance have led to an implementation that differs from theoretical optimality. This report assesses the political feasibility of EU ETS reform proposals in different MS - Germany, Poland, and the UK – and at EU-level. It assumes that the preferences of relevant stakeholders, their power constellations and the institutional setting determine the political feasibility. Interviews with relevant stakeholders revealed a general acceptance of the ETS as cornerstone of the EU climate policy. While institutions and beliefs appeared not to influence specific positions, perceptions and motivations, power constellations, and contextual factors seem to explain why stakeholders exhibit distinct positions across case studies. For example, in Poland the ETS' distributional impacts across MS played an important role, while German actors were concerned about the low effectiveness of the ETS in light of the national climate target. Opponents were mainly driven by self-interests in redistributive measures. All stakeholders clearly identified a lack of political will as the major obstacle of any ETS reform. The analysis did not identify alternative policies preferred by all actors. As it remained questionable whether alternative policies would perform better under the same political obstacles, the results underline the importance of restoring the effectiveness of the EU ETS to help reach Europe's climate targets.
List of abbreviations

Bundesministerium für Umwelt, Naturschutz, Bau und Reaktorsicherheit – BMUB
Bundesministerium für Wirtschaft und Energie – BMWi
Christlich Demokratische Union – CDU
Commission of the European Communities – CEC
Council of the European Union – CEU
Cross-sectoral correction factor – CSCF
Department of Energy and Climate Change – DECC
European Union – EU
Emissions trading scheme – ETS
Energy-intensive industries – EII
European Union Allowance – EUA
European Parliament – EP
Freie Demokratische Partei – FDP
Greenhouse gas – GHG
Linear reduction factor – LRF
Market stability reserve – MSR
Member States – MS
National allocation plan – NAP
Non-governmental organization – NGO
New environmental policy instruments – NEPI
Qualified majority voting – QMV
Umweltbundesamt – UBA
United Kingdom – UK
United States of America – US
World wildlife fund – WWF
List of Tables
Table 1: Analytical framework .............................................................................................................5
Table 2: Stakeholder representatives included in the analysis ...............................................................8
Table 3: Contextual factors in case studies .........................................................................................9
Table 4: Coverage of the EU ETS ......................................................................................................12
Table 5: Reform options mentioned in different stakeholder groups .................................................18
Table 6: Obstacles mentioned in different stakeholder groups ..........................................................20
Table 7: Overview of the criteria concerning actors' preferences as identified in the interviews ………21
Table 8: Overview over criteria concerning power constellation, institutional setting and contextual factors .................................................................................................................................................25
Table 9: Reform options mentioned in different case studies ............................................................29
Table 10: Obstacles mentioned in different case studies ...................................................................30

List of Figures
Figure 1: EUA price until April 2013 .................................................................................................13
Figure 2: Historical evolution and future projection of the number of EUA on the market ..............15
Figure 3: Emission trends and European targets ................................................................................16

Table of Contents
1. Introduction ......................................................................................................................................1
2. Analytical Framework: Factors for Political Feasibility .................................................................3
   2.1 Actors and their preferences ......................................................................................................3
   2.2 Power ......................................................................................................................................5
   2.3 Institutions ...............................................................................................................................6
3. Methods and Country Selection ......................................................................................................7
   3.1 Data acquisition and analysis ..................................................................................................7
4. EU ETS: history and current state ..................................................................................................11
5. Results ..........................................................................................................................................17
   5.1 General observations ..............................................................................................................17
   5.2 Case Studies ...........................................................................................................................29
   5.3 Comparative observations ......................................................................................................32
6. Discussion .......................................................................................................................................33
7. Conclusions .....................................................................................................................................38
   References .......................................................................................................................................39
Appendix .............................................................................................................................................42
1. Introduction

Stabilizing or reducing anthropogenic greenhouse gas (GHG) emissions necessitates an unprecedented degree of collaboration among different actors. Virtually all our daily practices relate to emissions in some way and need to be managed in order to ensure the transition to a low-carbon society. One way to collectively manage GHG emitting processes is to establish an emissions trading scheme (ETS). Such a scheme requires all actors to cover their emissions by certificates, of which the amount is limited according to emission reduction targets. Certificates are allocated each year and can then be traded by actors. The European Union (EU) aims at reducing GHG emissions by 80-95% by 2050 (compared to 1990 levels; CEU, 2010; CEU, 2011; EP, 2010). This implies a fundamental change of the nowadays very carbon-intensive industry. One cornerstone of the EU climate policy is the EU emissions trading scheme (EU ETS) (EEC, 2014). It covers about 45% of all European emissions and has been running since 2005.

So far, the EU ETS has failed to stimulate the transition of the European economy to a low-carbon future, currently primarily due to a large surplus of certificates (in the EU ETS called European Union Allowances, EUAs) on the market. Because of the economic crisis, overlap with other policies and the use of international offset credits, fewer EUAs were needed than were given out (Hermann and Matthes, 2012). The surplus undermines the short-term incentive of scarcity of certificates and endangers the achievement of the climate targets in 2020 and 2030. To address this problem, the European Commission (Commission of the European Communities, CEC) has decided to “back-load” a portion of the EUAs that were scheduled to be auctioned in the coming years, i.e. postpone their sale until later years. However, there is consensus among all stakeholders that the EU ETS needs to undergo a more structural reform. The CEC has proposed different EU ETS reform options. They include a market stability reserve (MSR) with which the total amount of EUAs can flexibly be adjusted, and a higher annual rate of cap decreasing (CEC, 2014b; CEC, 2014c). The challenge that the CEC is now faced with is to come to an agreement of a reformed EU ETS.

According to economic theory, policy instruments should be selected based on whether they achieve a certain policy objective in a cost-efficient manner (Duval, 2008). Emissions trading is cost-efficient, because emissions reductions are implemented where they are cheaper than the certificate price, and marginal abatement costs are thus equalized (Tietenberg and Lewis, 2010). In practice, however, the design and adoption of a policy instrument depends on a number of other factors which determine its political feasibility. The factors determining political feasibility include: actors’ motivations, i.e. the quality of the outcome they desire, actors’ preferences for a certain type of instrument, actors’ capacity to influence the policy design, and the political and institutional context where decisions are made (Hahn, 1989). While interests vary across different stakeholder groups (Hahn, 1989), preferences are likely to be influenced by a number of factors including the mode of
1. Introduction

governance that is prevailing in the actor's country of origin (Howlett, 2011). Consequently, the factors shaping the political feasibility of a policy proposal are expected to differ among countries (Hahn, 1989).

Coming to a compromise at European level is thus complicated by the fact that different member states (MSs) favor different proposals. Furthermore, EU policy-making happens at MS and EU level (Arts and van Tatenhove, 2004), where the institutional setting differs. Consequently, this project aims to investigate how the political feasibility of the EU ETS reform is shaped at the national and European level. The research question is: Why are some proposals for the reform of the ETS politically acceptable to the European Commission and/or to some countries but not to others?

Given the above, the political feasibility of a policy proposal can be hypothesized to depend on the existing power constellations, actors’ preferences and the institutional setting. The interplay of these factors is expected to determine the position of EU MSs and the CEC on the EU ETS reform design. Subquestions that will be addressed on the way thus include:

- What determines the political feasibility of policy instruments in the environmental policy realm?
- What are the preferences of different actors for certain EU ETS reform proposals at national and EU level?
- What are the reasons underlying actors' preferences for particular EU ETS reform proposals?
- What are the institutional constraints and opportunities for actors' preferences to be adopted at national and EU level?
- How do actors exercise power in order to support their preferences in decision-making fora at national and EU level?
- How does the interplay of preferences, institutions and power affect the political feasibility of the ETS reform proposals at national and EU level?

The factors determining the political feasibility of the EU ETS reform are identified through in-depth interviews with representatives of the relevant stakeholder groups from different countries. They are analyzed according to a political economy framework of political feasibility. The report is organized as follows: The next chapter will elaborate the analytical framework. Chapter 3 will introduce the method and justify the selection of the countries used for the case studies, followed by
1. Introduction

Chapter 4 outlining the history of the EU ETS and the current situation. Which of the factors play a role for the stakeholder will be analyzed in Chapter 5, elaborating on the differences between stakeholder groups and countries. The results will be critically assessed in comparison to the literature and with regard to policy advice in Chapter 6. In Chapter 7 the conclusions are presented.

2. Analytical Framework: Factors for Political Feasibility

Policy instruments are the tools with which governments aim to achieve their policy goals (Howlett, 2011). Theoretically, governments would design a policy instrument to effectively and efficiently reach their goals (Duval, 2008). However, policy instrument design is embedded in a permanent political struggle (Jordan et al., 2013). Political feasibility describes the likelihood that a policy proposal will be adopted by relevant political actors. Theories of political feasibility describe the political processes underlying policy design as the interplay of different actors who try to support their interests (Majone, 1975, Hahn, 1989, Dror, 1969, Keohane et al., 1998). What determine the outcome are the interests of these actors as well as the contextual factors that shape the interplay of those interests. This report divides the contextual factors further into power relations and institutions. These three categories are introduced in this section in relation to the case at hand. A summary of all criteria elaborated in this section is presented in Table 1.

2.1 Actors and their preferences

Policy instruments are designed in a political struggle of relevant stakeholder, i.e. actors who have a genuine interest in the outcome of the policy process. In general, actors involved in policy-making are divided in theory into public and private (Pappi and Henning, 1998), or between a policy’s demand and supply side (Keohane et al., 1998), according to the control they have over policy related decisions. The demand side of policies is subdivided into industry and individuals, where individuals are usually organized in different groups such as environmentalists, consumers or workers (Keohane et al., 1998). As they are especially important in climate policy and often represent views opposing those of industry (Hahn, 1989), a focus is put here on environmentalists. On the supply side of policy, actors are subdivided into legislators and bureaucrats (Bressers and Huijtema, 1999), as well as according to whether they are subject to (re-)election or not (Dür, 2008) and whether they are agenda-setters or veto-players (Skodvin et al., 2010). In addition to these groups, well established in the literature, the number of other influential actors has increased in recent years (Pappi and Henning, 1998). Especially in the design of market-based instruments, academics and “bureaucratic entrepreneurs” play an important role (Hahn, 1989). The evolution of emissions trading has also led to the formation of another stakeholder group, the constituents (Voß, 2007). An example is carbon market business intermediaries.

Drawing from the above, the subsequent analysis focuses on the following six stakeholder groups:

- Bureaucrats, who are policy-makers not subject to re-election and/or who have more power over agenda-setting than over policy adoption
2. Analytical Framework: Factors for Political Feasibility

- Politicians subject to re-election and/or having veto power
- Environmentalists
- Industry
- Academics/ policy entrepreneurs
- Emissions trading constituents

Note that voters are not always represented by interest groups and are sometimes viewed as another stakeholder (see for example Pappi and Henning, 1998). Here it is assumed that voters influence the interests of stakeholder groups via the ideas dominating public opinion.

The actors are assumed to have a certain utility function that they try to maximize during the course of the policy process (Hahn, 1989). The utility function of an actor combines his different interests. Whether an actor can maximize his utility function depends on his position in the decision-making process. For simplification it is often assumed that legislators are in charge and influenced by interest groups (Hahn, 1989). However, recent years have seen a shift of governance practices from government to network (Arts and van Tatenhove, 2004). This report analyzes the interests and constraints of all actors with a unified framework.

The utility function of an actor materializes in his preference for a certain policy proposal. The preference is shaped by different factors, which can be broken down into criteria (highlighted here in bold letters) and sub-criteria (presented in italics). The first influencing factor that is identified is the motivation of an actor (Meltsner, 1972). Motivation is made up of three sub-criteria. The first, self-interest, is exhibited, for example, when representatives of industry aim to minimize costs, or when environmental organizations strive for their wellbeing, or legislators follow their constituents' preferences (Keohane et al., 1998). Strategic interests serve self-interests but indirectly, for example, when industrialists support strict regulatory policies in order to manage collective risks or when environmentalists favor symbolic policies because they increase the likelihood of stricter action in the future (Hahn, 1989). However, especially environmentalists and legislator may also be motivated to strive for a high environmental status due to ideological interests (Hahn, 1989; Keohane et al., 1998).
2. Analytical Framework: Factors for Political Feasibility

Table 1: Analytical framework. The factors determining the political feasibility of a policy proposal as derived from literature are listed. The main categories are divided into criteria, which are further divided into sub-criteria.

<table>
<thead>
<tr>
<th>Category</th>
<th>Criteria</th>
<th>Subcriteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preferences</td>
<td>Motivations</td>
<td>Self-interest, strategic interest, ideological interest</td>
</tr>
<tr>
<td></td>
<td>Beliefs</td>
<td>Ideology, experiences, modes of governance</td>
</tr>
<tr>
<td></td>
<td>Perceptions</td>
<td>About distributional effects, policy saliency, flexibility</td>
</tr>
<tr>
<td>Power</td>
<td>Resources</td>
<td>Financial, knowledge, legitimacy</td>
</tr>
<tr>
<td></td>
<td>Relations</td>
<td>Resource exchange, coalitions, networks</td>
</tr>
<tr>
<td></td>
<td>Influence</td>
<td>Attributed influence of actor and other actors</td>
</tr>
<tr>
<td>Institutional setting</td>
<td>Institutional requirements</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Existing set of rules</td>
<td>Fora, voting rules</td>
</tr>
</tbody>
</table>

Which policy an actor prefers to support in order to serve his motivation is influenced by his beliefs about policy instruments (Meltsner, 1972). These are shaped by experiences (Howlett, 2011) and historical attitudes (Dror, 1969), but also by the current mode of governance (Howlett, 2011). This term describes a prevailing occurrence of certain state-society interactions and governance aims. A preferential use of certain policy instruments and the discourse about policies reflects the mode of governance. Furthermore, ideology shapes beliefs about policy instruments, both regarding intended goals as well as the type of instrument employed (Keohane et al., 1998).

In addition to motivations and beliefs, perceptions about the effect of a policy influence the preference of an actor (Bressers and Huitema, 1999; Keohane et al., 1998). Possibly the most important perception is that of distributional effects, i.e. the perception of who is going to win and lose on account of the policy (Majone, 1975, Hahn, 1989, Keohane et al., 1998). The perception of the urgency or saliency of the policy also plays an important role. Another factor, particularly important for policy-makers, is the flexibility of an instrument, i.e. how well it can be adapted to changing circumstances and uncertainties in the future (Bressers and Huitema, 1999).

2.2 Power

To which extent an actor can influence the decision-making process in his favor depends on his power. Power is central to the bargaining process of political decision-making (van Dyke, 1968). It is one of the most contested concepts in political science and a thorough review of its conceptualization is beyond the scope of this report. In this report the definition of Arts and van
2. Analytical Framework: Factors for Political Feasibility

Tatenhove (2004) is used who describe power as “the ability of different actors to mobilize resources in order to achieve a certain outcome in social relations”. They acknowledge that different definitions of power describe it either as a dispositional or as a relational phenomenon. The focus in the first definition lies on the capacity of actors to make use of resources to support their own position. In the second one power is defined over the actual act of influence of one actor on another one. There are two underlying differences in these definitions: First, the emphasis is either on resources or on the relation between actors; second, the focus is either on the capacity to act or the actual outcome. This is connected to the difference between power and influence: An actor can possess power without exercising it, while his influence is a causal concept and necessitates the exercise of power (Dür, 2008).

Following from the above, power is subdivided into three categories: resources, relations and influence. **Resources** can be of different type depending on the stakeholder group (Dür, 2008): Industrialists and legislators have substantial **financial** resources to their disposal; many target groups possess expertise and **knowledge**; environmentalists, on the other hand, often fall back on a high **legitimacy**. An important resource is also the degree of organization that a certain interest group exhibits (Dür, 2008; Svendsen, 2002). Similar to resources, **relations** can be of different kind (Pappi and Henning, 1998). They can be characterized by a resource exchange common in the relation between private and public actors: public actors trade the control over the legislative agenda and decision-making in exchange for expert knowledge and public support from private actors (Skodvin et al., 2010; Pappi and Henning, 1998). Whether or not the possibility of resource exchange also crystallizes into **influence** of an actor on another depends on the interdependence of the two, i.e., for example, on how much the public actor needs the resource of the private actor (Skodvin et al., 2010). Influence can be assessed by letting all stakeholders estimate their own influence and that of others involved (Dür, 2008).

### 2.3 Institutions

Whether or not actors can use their power to push their positions is constrained by the institutional setting. Institutions can be defined as the **existing rules of the game** (Majone, 1975) which include the **forum** in which a proposal is discussed (Bressers and Huitema, 1999) and the **voting rules** with which it is adopted (Jordan et al., 2013). The forum determines the actors that decide over the proposal and thereby the aspects that gain importance. For example, the Ministry of Finance has different priorities over policy targets than the Ministry of the Environment (Bressers and Huitema, 1999). If a policy is classified as a fiscal policy and handled by the Ministry of Finance, it might be designed and evaluated with respect to different goals than if it was classified as an environmental one and developed by the Ministry of the Environment. The stricter the voting rule, on the other hand, the easier it is for interest groups to block proposals, because it is sufficient to convince one decision-maker (Skodvin et al., 2010). The voting rules and fora for an upcoming decision need to be considered as given for an actor (Majone, 1975). However, interest groups can decide where to lobby (Dür, 2008) and take the institutional constraints into account in their strategy.
2. Analytical Framework: Factors for Political Feasibility

A policy might also demand an institutional change, i.e. a change of the authority or the rules with which a problem is handled. Different policy proposals thus differ in the institutional requirements they demand and the constraints they face. Actors might anticipate these constraints and include them in their preference for a certain proposal.

3. Methods and Country Selection

3.1 Data acquisition and analysis

The factors contributing to the political feasibility of the EU ETS reform were assessed by 21 semi-structured in-depth interviews with representatives of the relevant stakeholder groups (Section 2.1). The criteria developed in the analytical framework (Section 2) were operationalized into an interview guide (Appendix A). For each stakeholder group the following representatives were chosen:

- Bureaucracy: In the EU this group is represented by the CEC (Svendsen, 2002), in the national cases by the agencies that are responsible for the operational activities of the EU ETS.

- Politicians: this group is presented by the EP on EU-level and by representatives of the ministry that is responsible for climate policies and thus for implementing the EU ETS in each country (Section 4.2). As it was not possible to reach actual politicians, advisors for the politicians were interviewed.

- Environmentalists: represented by non-governmental organizations (NGO) with an environmental focus.

- Industry: representatives of the covered sectors. Since this group encompasses several subgroups that have different characteristics in terms of their interests at stake (Skodvin et al., 2010) two sectors were chosen: electricity and steel. The reason of this choice is that these two sectors are those with the biggest emissions (EEA, 2014a) and employ the two allocation methods: free allocation and auctioning, respectively.

- Academics: researchers who conduct policy-oriented analyses of the EU ETS in think-tanks or academic institutions.

- Business intermediaries: this group includes both associations of companies participating in the ETS and service providers specialized on the ETS.

This study is based on an assessment of the positions of the relevant stakeholder groups at the EU level as well as in three countries: Germany, Poland and the United Kingdom (UK). In order to have a balanced representation of the EU MS, countries are chosen that vary in institutional setting,
3. Methods and Country Selection

prevailing form of governance, climate ambition and historical experiences with the ETS (Section 3.2). The interviews were conducted in person in Brussels and in Berlin and over the phone with representatives in Warsaw and London. All interviews were recorded and subsequently summarized. It was not possible to get representatives of all stakeholder groups in all countries (Table 2). Because there was only one interview with business intermediaries, the interview was only included in the general analysis and the group was discarded from the analysis.

Table 2: Stakeholder representatives included in the analysis. Invitations were sent out to representatives of all stakeholder groups in all case studies, but not all were willing to participate.

<table>
<thead>
<tr>
<th></th>
<th>EU-level</th>
<th>Germany</th>
<th>Poland</th>
<th>UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bureaucracy</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Politicians</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Environmentalists</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Industry – power sector</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Industry – steel sector</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academics</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Business intermediaries</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Qualitative data analysis of the interviews was then conducted with help of the computer program atlas.ti (www.atlasti.com). An initial coding frame was based on the analytical framework and the occurrence of the different criteria marked in the interviews. The codes were then refined in a bottom-up matter during the coding process. In the end 142 codes were used. After identifying the occurrence of the criteria in all interviews, information was retrieved about their occurrence per stakeholder group, per country and in the whole sample. The co-occurrence of different codes was used when analyzing the data. Codes that appeared only once were not considered in the analysis.

3.2 Country Selection

Germany is a federal, parliamentary democracy (Mehling et al., 2013) with a social market economy (Wurzel, 2008). Climate policy is a federal responsibility primarily by the federal ministry in charge of environmental affairs (BMUB, Bundesministerium für Umwelt, Naturschutz,
3. Methods and Country Selection

Bau und Reaktorsicherheit). However, the coordination with other ministries plays an important role, particularly with regard to the federal ministry of economic affairs (BMWi, Bundesministerium für Wirtschaft und Energie) which now also holds the exclusive responsibilities for energy policies. The BMUB is supported by the federal environment agency (Umweltbundesamt, UBA) with scientific assistance. Within the UBA the Deutsche Emissionshandelststelle implements and monitors the EU ETS.

Table 3: Contextual factors in case studies.

<table>
<thead>
<tr>
<th></th>
<th>EU</th>
<th>Germany</th>
<th>Poland</th>
<th>UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Binding national GHG emissions targets</td>
<td>20% by 2020</td>
<td>40% by 2020</td>
<td>80% by 2050 and 5 year budgets</td>
<td></td>
</tr>
<tr>
<td>National features of the ETS</td>
<td></td>
<td>Free allocation to power sector</td>
<td>Carbon top up price</td>
<td></td>
</tr>
<tr>
<td>Kyoto target for 2012</td>
<td>8%</td>
<td>21%</td>
<td>6%</td>
<td>12.5%</td>
</tr>
<tr>
<td>Emissions reductions Kyoto base year-2012</td>
<td>19,23%*</td>
<td>23.8%*</td>
<td>29.1%*</td>
<td>25,2%*</td>
</tr>
<tr>
<td>Share of ETS emissions in 2013</td>
<td>100%</td>
<td>25,26%**</td>
<td>10,8%**</td>
<td>11,84%**</td>
</tr>
<tr>
<td>Emissions reductions in ETS sectors 2005-2013</td>
<td>12,8%**</td>
<td>5,57%**</td>
<td>6,13%***</td>
<td>17,06%****</td>
</tr>
<tr>
<td>Share of EU ETS emissions in total GHG emissions (2011)</td>
<td>41,2%*</td>
<td>49,1%**</td>
<td>49,6%***</td>
<td>40,2%****</td>
</tr>
</tbody>
</table>

*Data taken from EEA, 2014b; **Data taken from EEA, 2014a; ***data taken from EEA, 2012a; ****data taken from EEA, 2012b; *****data taken from EEA, 2012c.

Germany is by far the greatest emitter of GHG in Europe. Within the ETS it is responsible for roughly a fourth of the emissions (Table 3). It is generally seen as a progressive actor in climate policies (Mehling et al., 2013) and had a high Kyoto target of 21% by 2012 which was achieved by a small margin (23.8%, Table 3). It has announced national targets of 40% by 2020 and 80-95% by 2050. The 2020 target of 40% is purely declaratory and conflicts with the the legal commitments.
3. Methods and Country Selection

made to the EU which amount to about 33%. However, there is a general consensus among all parties in the Parliament about the target (Geden and Tils, 2013).

Germany's climate policy mix traditionally consists of regulations, informational instruments (such as eco-labelling, for example, Blauer Engel) and voluntary agreements (Mehling et al., 2013). In 1999, an ecological tax reform was adopted. Germany became a laggard of implementing the ETS during the first years of the ETS maybe due to the lack of experience with the instrument (Wurzel, 2008). For example, Germany had to deal with a high number of law cases (799 of 1849 in the ETS included companies filed law cases, Mehling et al., 2013) and developed a NAP of generous overallocation of EUA in 2008 that became corrected downwards by the CEC (Wurzel, 2008).

Poland is a constitutional republic and employs a representative form of democracy with an economy that rapidly changed to a market-based economy since 1989 (Mehling et al., 2013). The responsibility for climate policy lies with the environmental ministry, while energy policies are done by the ministry of economic affairs. It has little history of climate legislation. Before 1989 it employed charges on polluting emissions which also dominated environmental policy thereafter (Mehling et al., 2013).

Poland joined the EU in 2004 which means that both the Kyoto protocol and the EU ETS were negotiated before it became a MS. Meanwhile, it has become the leader of opposition among MS against climate policies in the EU (Mehling et al., 2013). This was seen, for example, in the way it blocked a more ambitious EU GHG emission target for 2020 in the CEU twice and opposed back-loading (Section 4). It also lobbied strongly for special allocation rules for new MS and now is one of the eight countries who may allocate free EUA to their power sector (while the power sectors of other countries have to purchase EUA in auctions, Section 4). Furthermore, it is reluctant when it comes to implementing European climate and energy legislation and has not implemented the revised ETS Directive (Client Earth, 2013), although it was fast to implement the ETS in the beginning (Mehling et al., 2013).

In contrast to its role in EU negotiations, Poland is outperforming virtually all its targets on reducing GHG emissions (Table 3). In relation to its Kyoto base year 1988 it reduced emissions by 29.1%, a multiple of the target of 6%. However, the Polish economy is still about twice as carbon intensive as the European average and 90% of the energy is produced by burning coal and thus highly emissions intensive (Mehling et al., 2013).

The UK is a unitary parliamentary constitutional monarchy. It is a front-runner of climate policies in Europe. Its first climate change program dates back to 1994 and as the first country in the world the UK adopted legally binding GHG emissions targets for 2050 in 2008 (UK Government, 2008). In the same year the Department of Energy and Climate Change (DECC) was set up, which now is responsible for climate policies. According to the 2050 target, GHG emission budgets are set up in periods of 5 years that are split between trading sectors (covered by the ETS) and non-trading
3. Methods and Country Selection

sectors. Its climate policy mix consists of levies, agreements and ETS. Its regulatory tradition is described as more flexible (Mehling et al., 2013) and therefore fits to the ETS better than, for example, the German tradition.

Accordingly, the UK is an ETS pioneer (Wurzel, 2008). This is reflected in the fact that it established a voluntary ETS between 1999-2002. It also set NAPs that – in contrast to the German and Polish ones – did not have to be revised by the CEC. Since 2013 it has a unilateral floor price for EUA. According to the DECC the Carbon Floor Price was set up in order to “encourage sufficient investment in low-carbon electricity generation in the UK“ (DECC, 2011) to stay within the national GHG budget. British coal and gas producers have to pay the difference between an announced floor price and the real price of EUAs. This top-up price is assessed ex-ante, i.e. calculated in advance for two years based on a prediction of the EUA price.

To sum up, the three countries are different in their institutional setting: unitary vs. federal; constitution: monarchy vs. democracy; regulatory tradition: regulatory vs. flexible; climate ambition: front-runner vs. blocker; and experiences with the ETS: pioneer vs. laggard. All three countries are on track with reaching their international GHG emission targets. However, in Germany and the UK the weak ETS threatens the achievement of the national goals.

4. EU ETS: history and current state

The next section gives an overview of the history of the EU ETS with a focus on the aspects relevant to the current situation. Specific problems facing the EU ETS today and their possible solutions are also presented.

Emissions trading emerged as one of the 'new' environmental policy instruments (NEPI, Jordan, 2013) in the 1980s in the United States of America (US) to manage air pollution. Traditionally, the environmental policy realm was dominated by regulations, which are not cost-efficient. With the NEPIs (mainly taxes and ETS), governments thought to overcome the shortcomings of regulations. In the EU policy-makers first focused on taxes and were skeptical about ETS (van Asselt, 2010). However, strenuous efforts to introduce an EU-wide energy or carbon tax were blocked repeatedly, because fiscal policies require unanimity in the Council of the European Union (CEU). Two different developments subsequently pushed emissions trading onto the EU agenda: First, during the adoption process of the Kyoto protocol, the US pushed heavily for the inclusion of ETS in the design (Wurzel, 2008). Second, following Treaty changes applied in the 1990s, environmental policies (that included ETS) could be adopted by qualified majority voting (QMV) in the CEU (van Asselt, 2010). The CEC first mentioned ETS in a 1998 communication (CEC, 1998), after which the adoption went quickly: A Green Paper was published in 2000 (COM(2000)87), a Directive proposal issued in 2001 (COM(2001)581) and eventually the Directive was adopted by the

---

4 Qualified majority requires a majority in the CEU that also resembles represents/reflects? the majority of the European population. Therefore, the votes of bigger MS are weighted more heavily. The percentage of the population that is required used to be 62% but is changing to 55% in 2014 (EU, 2014).
4. EU ETS: history and current state

European Parliament (EP) and the CEU in 2003 (03/87/EC).

The Directive established the ETS in consecutive phases to allow for improving the very new policy. A trial phase ran from 2005 to 2007 to build up the infrastructure for the scheme (Ellerman et al., 2007), leading to a second phase in line with the Kyoto protocol’s commitment period from 2008-2012. For the third phase, the period was increased to 8 years. It is running from 2013 until 2020. The main decisions to be made in designing an ETS concern the sectors covered, the cap and the allocation method, all of which have changed over the course of the first 10 years. Covered are, roughly, power generators and energy-intensive industries (EII, Table 4), and aviation was included in 2012. The cap was specified by MS in national allocation plans (NAP) in the first two phases. However, in the second phase they had to be compatible with the Kyoto targets and were accordingly revised by the CEC. While the Green Paper of the CEC had planned to auction all EUA, the Directive proposal and following legislations prescribed free allocation (Svendsen, 2002). In the second phase MSs were allowed to auction up to 10% of the EUA, but hardly any MS did. The free allocations in the first two phases were generally done via grandfathering, i.e. based on historical emissions.

Table 4: Coverage of the EU ETS (from CEC, 2014a).

<table>
<thead>
<tr>
<th>Carbon dioxide from</th>
<th>Power and heat generation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Energy-intensive industry sectors including oil refineries, steel works and production of iron, aluminum, metals, cement, lime, glass, ceramics, pulp, paper, cardboard, acids and bulk organic chemical</td>
</tr>
<tr>
<td></td>
<td>Commercial aviation</td>
</tr>
<tr>
<td>Nitrous oxide from</td>
<td>Production of nitric, adipic, glyoxal and glyoxic acids</td>
</tr>
<tr>
<td>Perfluorocarbons from</td>
<td>Aluminum production</td>
</tr>
</tbody>
</table>
Especially the first phase saw tremendous overallocation of EUAs in NAPs following lobbying by national industries. The European institutions therefore decided that the cap would be centrally determined starting in 2013. It decreases by 1.74% each year to meet the goal of 20% reductions in 2020 (EP, 2009). This linear reduction factor (LRF) does not have any expiration date and will thus continue beyond the third phase if not changed in newer legislation. EUAs are now auctioned by default; only those industries that stand in international competition are allocated free EUA. Because it had become apparent that the grandfathering mechanism privileges emissions-intensive installations, free allocation is now carried out according to benchmarks. These are reference numbers for each sector that resemble the emissions of the 10% most efficient installations. The benchmarks are multiplied by the cross-sectoral correction factor (CSCF) to make sure the total allocation stays below the cap. The revenues from auctioning are spent nationally, but the Directive instructs that at least half the funds be devoted to climate protection.

The effectiveness of an ETS in stimulating emissions reductions and technological change hinges on price incentives. The current EUA price internalizes the cost of GHG emissions for the short term and the planned path sheds light on the availability of certificates in the future and thus anticipated future costs (CEPS, 2012). Both are incorporated into investment decisions and may motivate direct expenditure on low-carbon technologies. Accordingly, the EUA price over the first two phases is an important indicator of how effective the instrument has been so far (Fig. 1).
4. EU ETS: history and current state

In phase I the EUA price rose to 30€ and stayed between 20€ and 30€ in the first year. According to a preliminary study it led to 90 Mio. tonnes of emissions reductions during that time (Grubb, 2014). However, when the first verified emissions levels were published in April 2006 it became clear that everyone had emitted less than their allocations. Subsequently the price fell suddenly by 20€ to about 10€ (van Asselt, 2010). It remained low and eventually even collapsed to 0€ in 2007.

Building on this experience, the second phase allowed the practice of banking, i.e. reserving EUAs for use in later periods. Because the economic crisis led to decreases in production, and international offset credits were very cheap and used abundantly, the allocation in the second phase was again above the actual demand of EUAs and the price fell to around 15€ in 2009. The price stayed stable between 10-15€ as the UK and Germany pushed for increasing the 2020 reduction target to 30% (Grubb, 2014) and more ambitious goals were anticipated. However, when no action followed, the price collapsed again to under 5€ in early 2013 (Fig. 1).

The CEC has made extensive use of the possibility to learn from experience and the ETS-setup is now clearly more effective than during the first two phases (Grubb, 2014). However, the decision to allow banking led to a substantial problem that has become apparent at the start of the third phase: the phase began with a surplus of about 2 billion EUAs on the market (CEC, 2014a). This surplus accumulated because of the lower production levels due to the economic crisis as well as the extensive use of international credits (Hermann and Matthes, 2012). Considering that the verified emissions amounted to 1.9 billion t of CO2 in 2013, there are about twice as many EUAs on the market as needed (Fig. 2). This imbalance between supply and demand has lead to the current very low EUA price. Furthermore, the huge surplus endangers the longer term targets, as installations can cover increased emissions in the future with their banked EUA.

---

5 Covered installations are required to have a monitoring plan under which they monitor and report their GHG emissions in the course of a year. The emissions then have to be verified by an accredited investigator. This monitoring, reporting and verifying procedure is called the compliance cycle of the ETS (CEC, 2014).

6 The Linking Directive in 2004 allowed the use of the flexible mechanisms of the Kyoto protocol and EUA could thus be acquired by buying international credits from CDM or JI.
4. EU ETS: history and current state

To address this issue the CEC proposed in 2012 to amend the auctioning regulation such as to postpone (“back-load”) the auctioning of 900 billion EUAs to later years. The proposal was first defeated in the EP in April 2013, but was eventually approved in July. After the CEU had passed it, the final legislation was adopted in December 2013 following 1.5 years of debate. However, since the back-loaded EUA will be put back on the market, this only provides a temporary measure against the surplus problem. The CEC therefore proposed in its Report on the Carbon Market six measures for a more structural reform of the ETS (CEC, 2012): (a) increasing the 2020 EU reduction target to 30%, (b) retiring EUA in phase 3, (c) revising the annual LRF, (d) extending the scope to other sectors, (e) limiting access to international carbon credits and (f) a price management mechanism. These proposals differ in the implications they have for the level of ambition, degree of flexibility of the EU ETS or the institutional requirements (opening or amending the Directive, requiring unanimity or QMV).

Interestingly, following stakeholder consultations, the CEC in January 2014 put forward a completely different proposal (CEC, 2014c). The proposal recommends the establishment of a MSR for the ETS, a quantity-based mechanism to introduce flexibility in the supply of EUA. Based on two triggers, namely EUAs in circulation and price volatility, EUAs are resigned to or released from a reserve. The mechanism is parametrized as follows: if the number of EUAs in circulation exceeds 833 Mio. EUA, 12% of the EUAs in circulation (whose number shall be published once a year starting in 2017) or 100 Mio. EUAs – whichever is greater – shall be put into the reserve. If there is
4. EU ETS: history and current state

a deficit of EUAs on the market greater than 400 Mio. EUAs or a price jump as defined in Article 29a of the Directive\(^7\), 100 Mio. EUAs shall be introduced into the market. The mechanism shall start in 2021. This proposal was published simultaneously with a Green Paper on the general climate and energy roadmap leading up to 2030 (CEC, 2014b). The Green Paper proposes an overall emissions reduction target of 40% by 2030 and to increase the LRF for 2021-2030 to 2.2%.

The ETS is, of course, embedded in a bigger policy framework on climate change. Other policies are incorporated in the design especially of the cap. In general, the cap resembles the policy goal, which in the EU is reflected by the overall goal of climate policies of a 80-95% reduction of GHG emissions by 2050. This long-term goal has repeatedly been affirmed by both the CEU and the EP (CEU 2010, CEU 2011, EP 2010). In addition to the ETS, complementary policies on renewable energy and climate policies in non-ETS sectors will also lead to emissions reductions. They are therefore considered when designing the cap. The former are incorporated via predictions on the development of renewable energies. The predictions from 2008 have approximately met the actual development (Hermann and Matthes, 2012). The share of emissions reductions in ETS- and non-ETS sectors are regulated via the so-called effort sharing decision. Overall, up to 2020 the non-ETS sectors shall achieve a reduction of 10% as compared to 2005 levels (CEC, 2014a). The different

\(^7\) A price that is more than three times the price of the preceding 2 years for three consecutive months.
4. EU ETS: history and current state

Policies taken together should then lead to an emissions reductions path to meet the overall target in 2050 in a cost-efficient manner, i.e. with intertemporal efficiency. Whether the EU is on an intertemporally efficient track remains questionable. The intermediate targets for 2020 (20%) and 2030 (40% as proposed in CEC, 2014b) do not lie on a linear track to 80% in 2050 (Fig. 3). Furthermore, the surplus endangers the achievement of these set targets.

5. Results

This report aims to identify the factors determining the political feasibility of distinct EU ETS reform options in different countries. In a first step the analytical framework is applied to all interviews to see which factors are relevant for the case at hand. Subsequently, differences among stakeholder groups and across case studies are elaborated. In all case studies, the acceptable reform options and their obstacles are first reviewed, before the factors that influence this situation are investigated. The analytical framework was applied to the data by marking and analyzing the occurrence of the criteria in all interviews. How many times each criterion occurred in the data is stated in the text. Note that multiple referencing by one person was counted as multiple occurrences. The number of occurrences thus differs from the number of people who referred to a certain criterion. The complete list of result tables is included in the Appendix C.

5.1 General observations

Reform options

Removing the EUA surplus was by far considered the most necessary reform of the current ETS system (mentioned 17 times in the interviews). The main reasoning behind this was that an ETS does not work with such a big surplus of allowances (4). According to the interviewees, removing the surplus would rebuild credibility (2), ensure intertemporal efficiency (2), give long-term incentives (2) as well as a short-term price signal (4). Related popular reform options were lowering the cap (8), aligning the reduction path to the long-term targets (2) and accelerating the reduction path by increasing the LFR (3). Several interviewees mentioned the need to increase the flexibility of the EUA supply (6). This is precisely what the MSR is meant for and reflects that the issue of supply flexibility is on the political agenda.
5. Results

**Table 5: Reform options mentioned in different stakeholder groups.** The numbers specify how often a certain reform proposals was mentioned by representatives from the different stakeholder groups.

<table>
<thead>
<tr>
<th></th>
<th>Academics</th>
<th>Bureaucrats</th>
<th>Environmentalists</th>
<th>Legislators</th>
<th>Power sector</th>
<th>Steel sector</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remove surplus</td>
<td>2</td>
<td>4</td>
<td>7</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>17</td>
</tr>
<tr>
<td>Lower cap</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>Supply flexibility</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Different treatment EIs</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Accelerate reduction path</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Different treatment MS</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Align reduction path</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Ex-post allocation</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Different carbon leakage rules</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Price control</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Remove CSCF</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

Interviewees also recognized that those industrial sectors prone to international competition need special attention in the ETS design. There was, however, controversy about how that should be addressed. While environmentalists pointed out that the current carbon leakage rules are based on wrong assumptions\(^8\) and have to be revised (2), and the power sector was skeptical about a “two

\(^8\) Whether a certain sector is prone to a risk of carbon leakage and thus granted free EUA is determined by the carbon
5. Results

speeds ETS”, the steel industry and a representative from politics supported the idea of either exempting certain sectors from the ETS scheme or granting them full coverage with free EUA (3). Associated reform options included to remove the CSCR\textsuperscript{9} (2), and to allocate them ex-post \textsuperscript{10} (2).

Most interviewees highlighted that the MSR is a good reform option to introduce the necessary flexibility in the supply (14). Several interviewees appreciated that it is rule-based and that it works on the quantity of EUAs. In fact, several interviewees claimed to have come up with the concept themselves (5). However, some were concerned that the MSR alone will not be sufficient to tackle the surplus (6) and many interviewees stressed that it should be introduced earlier (9) in order to not create a zigzag course\textsuperscript{11}. One interviewee would have preferred using a “macro” factor such as GDP to parametrize the introduction and release of EUA from the reserve. Another one criticized the number of EUA that is taken as the threshold for taking EUA out of the market (Felix Matthes, interview). This number (833Mio.) is based on the assumption that hedging demand can balance a surplus of 1100-1600 EUA (Schopp and Neuhoff, 2013). This assumption is, however, disputed. Those that were more negative about the MSR (3) were concerned that it would tighten the targets by working more stringently on taking EUA out of than releasing them back into the market (2) and that it would interfere with the market mechanism of the ETS (1).

More interviewees were in favor of unilateral actions to improve the effectiveness of the EU ETS\textsuperscript{12} (14) than against it (8). Nevertheless, these interviewees recognized that such actions are not environmentally effective if they don't change the cap – through for example national cancellation – and that they potentially make emissions reductions more expensive. Supporters of unilateral actions considered them as a legitimate means to exert pressure on the CEC to increase ambition and as an important policy option to increase incentives in national industries for low-carbon investments. In contrast, the opponents of these actions highlighted the fact that unilateral action distorts the market and creates complexities and increased costs for carbon market participants.

There was a general appreciation among respondents that the ETS is institutionally well established. The only aspect that was repeatedly mentioned as demanding decentralized organization was the spending of revenues. Apart from the revenue spending the centralizing trend of the ETS

\textsuperscript{9} Free allocation is now based on the number of a production benchmark of the 10% most efficient installations multiplied with the production level and the CSCR. The CSCR normalizes the number such that the sum of all allowances equals the cap. Removing the CSCR corresponds to giving out free allowances that would fully cover the benchmark.

\textsuperscript{10} Free allowances are now given out ex-ante, i.e. in the beginning of the year in relation to the production level of a certain installation in 2005-2007. Ex-post allocation denotes an allocation in the end of the year according to the actual production level.

\textsuperscript{11} In the later year of this trading period the back-loaded EUA are reintroduced and lead to a peak in the number of auctioned allowances. If the MSR would be introduced in 2021, this would create a dip right after that.

\textsuperscript{12} MS have the freedom to introduce national measures in the ETS. The UK took advantage of that (Section 3).
5. Results

organization was appreciated. The only doubts came from the German Environment Agency who claimed that the CEC might overextend itself by wanting to handle an increasing number of issues with limited capacity (Christoph Kühleis, interview). This interviewee was concerned that consultants get a problematic degree of influence. Furthermore, he emphasized that those aspects of ETS management for which knowledge specific to MS is needed, as for example, reviewing the reports of covered installation, should be handled by national agencies.

Table 6: Obstacles mentioned in different stakeholder groups.

<table>
<thead>
<tr>
<th>Obstacles</th>
<th>Academics</th>
<th>Bureaucrats</th>
<th>Environmentalists</th>
<th>Legislators</th>
<th>Power sector</th>
<th>Steel sector</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political will</td>
<td>2</td>
<td>2</td>
<td>5</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Political will – Eastern European MS</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Political will – climate skeptics</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>MS</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>EII</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>money</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

From all possible obstacles to an EU ETS reform respondents clearly identified the lack of political will as the most important (10). Where this lack of will originates from was more controversial. Because the economic crisis and the austerity policies have made it difficult for European countries to spend money, the political climate is perceived as inopportune for climate policies in general. However, one interviewee highlighted that technology policies are still possible at the moment. Thus, not the general political climate but rather the narrative about policy instruments has changed (Felix Matthes, interview). The lack of political will on MS level was more prominently denounced (5) than that of the EP (1), although the problem of climate skeptics in the EP was often mentioned (5). Among MSs the Eastern European MSs are perceived as those blocking climate policies. The “old” MSs were blamed co-responsible of this stalemate because they did not sufficiently take into consideration the concerns of the Eastern European countries about climate policy in the beginning. Also, several interviewees highlighted that big MSs, especially Germany, have a higher responsibility in how the negotiations go and have not always been as progressive as they claim.
5. Results

Lobbying of EIIs and the will to protect national industries were perceived as the motives for MSs to be hesitant to strengthen the ETS.

Preferences

After having reviewed the reform options that are acceptable to the actors, the factors that played a role in their considerations are looked at now. According to the analytical framework, the preferences of actors are shaped by their beliefs, their perception on the EU ETS and their motivations.

Table 7: Overview of the criteria concerning actors’ preferences as identified in the interviews. The categories and criteria from the analytical framework are listed together with the according criteria found in the interviews. The interview codes are ordered according to their occurrence frequency.

<table>
<thead>
<tr>
<th>Category</th>
<th>Criteria (Subcriteria)</th>
<th>Criteria in interviews ordered according to number of occurrence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preferences</td>
<td>Beliefs (Ideology, experiences, modes of governance)</td>
<td>ETS important</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Carbon pricing important</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cost-efficiency</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ETS skepticism</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ETS harmonized, comprehensive policy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ETS theoretical concept</td>
</tr>
<tr>
<td></td>
<td></td>
<td>R&amp;D more effective</td>
</tr>
<tr>
<td>Perceptions</td>
<td>Distributional effects across MS</td>
<td>EU ETS not working</td>
</tr>
<tr>
<td></td>
<td>EU ETS too complex</td>
<td>Distributional effects within MS small</td>
</tr>
<tr>
<td></td>
<td>Small adjustments sufficient</td>
<td>Distributional impacts internationally</td>
</tr>
<tr>
<td></td>
<td>Targets not feasible</td>
<td>Policy overlap with other policies problematic</td>
</tr>
<tr>
<td></td>
<td>Alternative policies important</td>
<td>Small adjustments sufficient</td>
</tr>
<tr>
<td></td>
<td>EU ETS too complex</td>
<td>Targets not feasible</td>
</tr>
<tr>
<td></td>
<td>Distributional effects within MS relevant</td>
<td>Alternative policies important</td>
</tr>
<tr>
<td></td>
<td>Distributional effects within MS relevant</td>
<td>EU ETS too complex</td>
</tr>
<tr>
<td></td>
<td>Distributional impacts internationally</td>
<td>Distributional effects within MS relevant</td>
</tr>
<tr>
<td></td>
<td>Policy overlap with other policies problematic</td>
<td>Fundamental reform needed</td>
</tr>
<tr>
<td></td>
<td>Small adjustments sufficient</td>
<td>Urgent reform needed</td>
</tr>
<tr>
<td></td>
<td>Targets not feasible</td>
<td>ETS nontransparent</td>
</tr>
<tr>
<td></td>
<td>Alternative policies important</td>
<td>Long-term function</td>
</tr>
</tbody>
</table>
5. Results

<table>
<thead>
<tr>
<th>Category</th>
<th>Criteria (Subcriteria)</th>
<th>Criteria in interviews ordered according to number of occurrence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Merit points</td>
<td>Price signal</td>
<td></td>
</tr>
<tr>
<td>Motivations</td>
<td>Increasing the price signal (strategic)</td>
<td></td>
</tr>
<tr>
<td>(ideological interest, self-interest, strategic interest)</td>
<td>Level of ambition (ideological)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Decreasing price (Self-interest)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Environmental effectiveness (ideological)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Protecting industries (self-interest)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Credibility (strategic)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Giving long-term incentives (strategic)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Intertemporal efficiency (strategic)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Recycling revenues (strategic)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ETS in place (strategic)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Protecting the market nature of the ETS (strategic)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Transparency (strategic)</td>
<td></td>
</tr>
</tbody>
</table>

Beliefs

Most interviewees agreed that the ETS should remain a cornerstone of EU climate policies (14), because it is cost-efficient (7) and because carbon pricing is an appropriate way of internalizing the cost of GHG emissions (6). Furthermore, they favored the ETS because it is a comprehensive policy and harmonized across Europe (4). Criticism was expressed (5) by those who believed that emissions trading is a good theoretical concept, but fails to be effective in practice because it is too prone to influence by industry (2). This group of critics also mentioned a number of positive aspects of the ETS, including the fact that it potentially raises revenues that can support decarbonization projects and that it can be used as monitoring tool to make the carbon intensity of different industries transparent. A second skeptical group questioned the feasibility of the targets (2) especially in EII.

The findings did not identify a preferred alternative policy. Alternatives that were mentioned include taxes (12), regulations (7) and R&D policies (2), but the opinions about taxes and regulations were controversial. Taxes were generally evaluated positively in the sense of combining the advantages of the ETS (cost-efficient way to price carbon) with good predictability. However, interviewees considered them as politically infeasible because of the EU decision-making procedures (Section 4). Standards were controversial (2 positive, 3 negative). Because many different standards would be needed for the different power stations and industrial installations interviewees perceived them as complicated to adopt and implement (3).
5. Results

Perceptions

In contrast to the positive valuation of the ETS in general, interviewees consistently appraised the ETS as not working properly (10). The ETS works through incentives on the short-term through EUA price and on the long-term through the anticipated path of the cap (Section 4). While most interviewees agreed that the current price does not give an incentive to invest in low-carbon technologies (4), there was more controversy about how to estimate the importance of price and long-term signals. A representative from the power sector emphasized that the long-term signal is much more relevant than the exact price and that it would therefore be most important to re-establish the credibility of the scheme: “The fear is that national actions will come that are not predictable. The danger of such actions is much more important to the power sector than precise details in the debate, whether 1.74 or 2.2 or 2.5% [LFR], or carbon prices of 5, 10 or 15 €” (Martin Ruhrberg, interview). Another interviewee described the situation as leaving to a wait-and-see, because the short-term signal (a low price of carbon emissions) and the long-term signal (the decreasing cap) contradict each other (Felix Matthes, interview).

Regarding distributional impacts of the ETS, findings revealed that the most important effect for interviewees is the distribution of benefits and costs across MSs (12). The ETS includes measures to counteract such effects (Section 4). However, there was controversy among interviewees whether these measures are sufficient. Another important point were the distributional impacts on the international level in the sense that the ETS might now or in the future discriminate European firms because it unilaterally puts a cost burden on them (8). Interviewees highlighted that the distributional impacts within MS (across societal groups or sectors) have been low because of the low EUA price (8).

Energy policies are perceived as overlapping with the ETS and possibly undermining its functioning (8). However, several respondents pointed out that this is already incorporated in the design of the cap (Section 4). The weak ETS was perceived as threatening progress on climate policies, because the opponents use the ETS as an argument against other policies. The proponents of climate policies exhibited a strong notion that it is important that alternative policies are developed as fall-back options (6). Concerning the saliency of the reform, more interviewees assessed the required reform as small (8) rather than fundamental (5). They regarded the reform options as rather minor adjustments. However, they also highlighted that this does not mean that they are politically feasible.

---

13 As the climate targets for ETS sectors are higher than for non-ETS sectors, the current climate policies are perceived to discriminate countries whose economies have a higher share of ETS sectors.
14 Revenues are overproportionally directed to poorer MS and Eastern MS can allocate free allowances to their power sector.
15 National governments have the authority to decide over the national policy mixes. Since the energy mix determines the GHG emissions in the power sector, this also affects the ETS.
5. Results

Motivations

Many actors were driven by strategic interests in their position on the EU ETS. They wanted to strengthen the ETS, for example, because it is in place already. It was perceived easier to reform the ETS than to set-up another policy from scratch (2). Participants were often focused on a certain purpose that the ETS should fulfill, such as giving a price signal (6), providing for revenues that can be earmarked (3), giving long-term incentives for low-carbon investments (4) and contributing to inter-temporal efficiency (3). Also, some interviewees embraced the ETS as an cost-efficient instrument to achieve the climate targets, that they accepted rather than supported ideologically.

These interviewees were usually interested in reestablishing credibility of the scheme (4), making it predictable (4) and transparent (2). Interviewees demanded transparency about the exact effects the ETS has, such as which cost burdens it generates and which investments it drives. This was perceived as important for policy-makers to influence decisions, but also for investors to see which effects the ETS might have now and in the future.

Many actors were also driven by ideological interests, in terms of aiming for a high level of ambition in climate policy (5) or establishing environmental effectiveness (4). Self-interest (5) was usually financial and concerned free allowances or compensation to industries and MS. One European representative also acknowledged that the ETS could increase public support for European policies, because climate policies are popular with the public.

Power

Power constellations played an important role for the respondents in evaluating the feasibility of a reform proposal (Table 8). Many perceived EIIs as having the strongest voice (12) and presenting a great obstacle to an ambitious ETS, as EIIs generally take on an opposing position. The influence of EIIs was perceived as greater on national level (5), because a particular national company represents a bigger clout on national than on European level and because politicians are elected locally. As Felix Matthes stated: “If EdF\(^{16}\) says no in France, that is no, but in Europe it is not.” Also, interviewees stressed MS specific circumstances: some countries as Germany and Poland are shaped more strongly by EIIs than others as the UK. This further waters down the influence of EIIs on European level. Many interviewees acknowledged that Germany plays an important role in the EU ETS reform negotiations (11). They highlighted that one of the major burdens in the back-loading debate was the indecisiveness of Germany\(^{17}\). The impasse in the biggest and most powerful country offered smaller countries an opportunity to hide in opposition.

\(^{16}\) Électricité de France is the biggest producer of electricity in France, the second biggest in the world, and majority-owned by the French state.

\(^{17}\) During that time the BMWi was led by the Freie Demokratische Partei (FDP) and the BMUB by the Christlich Demokratische Union (CDU). While the FDP was against back-loading, the CDU was in favor. The ministries could not come to an agreement.
5. Results

Table 8: Overview over criteria concerning power constellation, institutional setting and contextual factors (set-up as Table 7).

<table>
<thead>
<tr>
<th>Category</th>
<th>Criteria</th>
<th>Subcriteria</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Power</strong></td>
<td>Resources (financial, knowledge)</td>
<td>Relevance for employment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Knowledge</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dishonest use of knowledge by industry</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Media access</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Clarity of message</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Closeness to public opinion</td>
</tr>
<tr>
<td>Relations (Resource exchange, coalitions, networks)</td>
<td>Germany’s role</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Progressive alliance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Coalitions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Political network</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Access to governments</td>
</tr>
<tr>
<td><strong>Influence</strong></td>
<td></td>
<td>Influence of industry</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Influence of NGOs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Influence of power sector</td>
</tr>
<tr>
<td><strong>Institutional setting</strong></td>
<td>Required rule changes</td>
<td>No difference between directive, amendment or comitology</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Against opening the Directive</td>
</tr>
<tr>
<td>Existing set of rules</td>
<td></td>
<td>Lobbying strategy depends on policy process</td>
</tr>
<tr>
<td><strong>Contextual factors</strong></td>
<td>International action</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Debate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Political climate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>German national target</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Energy security</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Targets</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Economic crisis</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Achieved process</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Church</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Technology</td>
<td></td>
</tr>
</tbody>
</table>
5. Results

Overall, there was no clear consensus whether proponents or opponents are more influential in shaping the EU ETS reform. Proponents seemed to be perceived as having had more influence in the past (4), but because of growing influence of opponents (5) the influence is now perceived as a tie (3). The growing influence of opponents was explained by a change in the political climate because of the economic crisis.

According to the interviewees, the level of influence that participants have is determined by the share of employment they represent (4), their political network (3) and the access they have to governments (MS and CEC/EP)(2), by the clarity of their message (4), their ability to build coalitions (3) and to make their message heard by the media (4). Knowledge also plays an important role (4), however, it seems to be used strategically. While bureaucrats, academics and environmental NGOs commission and conduct studies of the effects of the ETS, the EII is in general reluctant to disclose information. The German representative of the world wildlife fund (WWF) noted: “I would like to know what the benchmarks mean for the German industry. But nobody knows. The EII says the benchmarks are a big burden, but I don't even know what to say or think about it” (Juliette de Grandpré, interview). Accordingly, several participants acknowledged a dishonest use of knowledge by the EII (4).

Institutions

Institutional burdens were not perceived as crucial when determining the feasibility of an EU ETS reform proposal. Institutional burdens of a proposal include the change of rules that it requires, such as amending or re-opening the directive, and the procedure it has to go through in terms of voting rules (QMV or unanimity) or institutions involved (such as comitology or codecision18). All these aspects were considered less important than the actual substance of the reform (6). Several participants recognized that proposals are adopted easier by QMV, but that, on the other hand, an ambitious proposal might not pass QMV, while a compromise might pass unanimity. More interviewees were against a re-opening of the Directive at the moment (4) than in favor of it (1). They feared that the political climate is such that the current good setup of the ETS might be washed out.

Furthermore, stakeholder groups decide which institution to lobby depending on the circumstances of the policy process, i.e. which institution is responsible at a specific moment. There was a small tendency that academics and environmentalists felt heard more in the CEC and the steel representatives more in the EP and the MS governments.

---

18 The ordinary legislative procedure today is the codecision procedure, in which both the EP and the CEU have to approve a legislative proposal of the CEC. Powers can also be attributed to only the CEC or the CEU. The CEC is thereby then supported by MS in committees, which is why this procedure is called comitology (EU, 2014).
5. Results

Contextual factors

According to the interviewees, contextual factors strongly influence the feasibility of EU ETS reform proposals. Among them, the degree of action in the international context stuck out as most important (22). Respondents saw the need to balance the level of ambition and the treatment of EII to international action. They perceived a possible relocation of EIIs due to a high burden of the EU ETS as both unacceptable and counter-productive, because it would increase emissions in other countries. However, in order to not fall behind with regard to innovations in a low-carbon future the level of ambition should not be too low either. A majority of the participants acknowledged that there is a lot of climate action in other countries such as China, South Korea and also the US. A minority found these actions not comparable to the level of action in the EU. The actual carbon intensity and carbon price in different economies seems to be up to political interpretation, because countries employ different policies at different starting points. A representative from academia suggested that linking different ETS systems could help to overcome this intransparency, even if it was not environmentally effective (Sarah Riesenberg, interview).

Another strong determinant of the feasibility of an EU ETS reform proposal regards the framing of the associated debate, particularly how it is influenced and politicized (15). One factor that was mentioned with respect to the back-loading debate, was the impact that actors can have on the debate, that are not expected to raise their voice on the topic (3). An example was the German church that spoke out in favor of back-loading and probably influenced some conservative German Parliamentarians. Overall, the long lasting back-loading debate was perceived – surprisingly by all stakeholder groups – as unjustified, sidetracked and as a substitute debate for a reform that is yet to come. Several participants acknowledged that the negative influence of the long discussion on the credibility of the ETS by far overruns the impact of back-loading itself. Several participants said they were disillusioned by this debate, as the Juliette de Grandpré put it: “The back-loading debate is the Copenhagen of the ETS”.

The political climate also tremendously influences the political feasibility according to the interviewees (10). They mentioned two major influencing factors: the economic (4) as well as the Ukrainian crisis that fueled new discussions about energy security (5). Both were largely perceived as complicating ambitious climate policies. The economic crisis because it causes politics to largely focus on economic growth, which stands in the way of a policy that increases costs. The Ukrainian crisis because it increased the skepticism about importing gas from Russia. Prominent in this debate was an article by the Polish Prime minister Donald Tusk in the Financial Times where he proposed the establishment of a European energy union that negotiates and secures the European energy supply and makes sure the available fossil fuels are used (Tusk, 2014). Especially the focus on available fossil fuels worried interviewees that the crisis will lead to a coal revival.
5. Results

Differences of the criteria across stakeholder groups

The overall analysis has shown that preferences, power constellations and contextual factors influence stakeholders in their evaluation of the political feasibility of different reform options. In the following the situation in each stakeholder group is described with respect to specific characteristics of the group's position on the EU ETS reform.

Academics were the most heterogeneous group in terms of their perceptions and beliefs. Some representatives addressed fundamental skepticism about the EU ETS, while others appreciated the opportunities of the ETS to provide a cost-efficient way to achieve the climate targets. Several interviewees from this group highlighted that the effectiveness of the price signal is limited. Academics were also aware of the overlap with other policies, but did not regard that as an unsolvable problem.

Similarly, there was heterogeneity among environmentalists concerning the fundamental view of the ETS. They expressed no big enthusiasm about the instrument itself. To a higher degree than other stakeholders representatives perceived it as not working. However, the majority of environmentalists still endorsed the instrument out of strategic reasons, such as that it is in place already. In this group, the call for a stronger price signal was very prominent. This might be due to a stronger perception of the urgency of the policy and short-term effects mainly work through the price. However, there was also some double discourse, as environmentalists often highlighted that the advantage of the ETS is to put a limit on emissions. Environmentalists generally regarded the employment of unilateral or alternative policies as necessary to ensure that emissions are also reduced if the ETS continues to provide low incentives.

Representatives from politics and bureaucracy were almost exclusively affirmative about the EU ETS as an instrument. They were not as aware of the overlap with other policies as other stakeholders. Some acknowledged the distributional impacts and especially the representatives from politics often aimed at protecting their industries from distributional impacts that could cause relocation.

The power sector is in a quite unique position that leads to a very progressive position on the EU ETS reform. Because investments are necessary in the sector, it is particularly struck by the contradiction of long-term incentives and short-term prices (see above). Therefore, the positions are strongly influenced by strategic interests such as predictability, credibility and transparency. The claim for higher prices was also very prominent, because this would realign short- and long-term incentives. A different position was taken by the Polish representative of this sector. In Poland about 90% of the electricity is coal-based (Section 4) and higher carbon prices hit Poland hard.

The views in the steel industry opposed the views in other stakeholder groups in many ways. The reform options that representatives of this sector mentioned (ex-post, free allocation for full benchmarks) were not mentioned by anyone else. Furthermore, the desired reform was perceived as
5. Results

Fundamentally changing the ETS, while most other stakeholders found minor adjustments sufficient. There seemed to be a fundamental opposition against the overall climate targets, that the representatives regarded as infeasible. In Germany the sector is interconnected with climate skeptics, as was pointed out by a German representative from academia. This is embodied for example in the move of the director of the German steel association to the climate skeptic institute Eike. Preferred policies in the steel sector would be R&D for innovation technologies. This represents a small double discourse, as representatives, on the one hand, repeatedly underlined the low potential of alternative production technologies, while they on the other hand lay expectations in R&D support. In contrast to other stakeholders, steel representatives regard the influence of EIIs as low and that of environmental NGOs as high. The debate about back-loading was perceived by the steel industry as too technical and not offering points for political discussion, while all other stakeholder groups perceived it as too politicized. The motivation within the steel sector was exclusively self-interest in the sense of avoiding additional costs.

5.2 Case Studies

While the last subsection assessed the criteria that came up in all interviews and the differences across stakeholder groups, this section describes variabilities in perceptions and preferences across case studies, i.e. MSs and EU-level. Only those factors are taken into consideration that are particularly salient in a certain country or level. A table of the criteria that stuck out is included in Appendix D together with the result tables of the case studies. In the following, the popular reform options, their perceived obstacles and the differences in the political feasibility criteria are elaborated for each case study.

Table 9: Reform options mentioned in different case studies.

<table>
<thead>
<tr>
<th>Reform option</th>
<th>EU-level</th>
<th>Germany</th>
<th>Poland</th>
<th>UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Removing surplus</td>
<td>4</td>
<td>9</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Lowering cap</td>
<td>4</td>
<td>3</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Different treatment of EIIs</td>
<td>0</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Supply flexibility</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Accelerating reduction path</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Aligning reduction path</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Different treatment MS</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>
5. Results

<table>
<thead>
<tr>
<th>Obstacle</th>
<th>EU-level</th>
<th>Germany</th>
<th>Poland</th>
<th>UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ex-post allocation</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Different carbon leakage rules</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Price control</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Removing CSRF</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Unilateral action – positive</td>
<td>2</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Unilateral action – negative</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

EU level

Removing the EUA surplus and lowering the cap were the most important reform options for representatives at EU level (Table 9). No European representatives mentioned a differential treatment of EIIs or of MSs as possible reform options. Also, representatives evaluated unilateral action rather negatively. The observed obstacles to an EU ETS reform resembled those found in general: respondents identified the lack of political will as the most important factor, connected the blockage of the Eastern MSs as well as the climate skeptics on European level to it (Table 10).

Table 10: Obstacles mentioned in different case studies.

<table>
<thead>
<tr>
<th>Obstacle</th>
<th>EU-level</th>
<th>Germany</th>
<th>Poland</th>
<th>UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political will</td>
<td>4</td>
<td>9</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Political will – Eastern MSs</td>
<td>4</td>
<td>3</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Political will – climate skeptics</td>
<td>0</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>EIIs</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Money</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

The notion that the EU ETS overlaps with other policies was rather low on EU-level. The targets were disputed on this level. Especially the steel industry's representatives perceived them as infeasible. None of the European representatives mentioned the influence of EIIs as being too high. On the other hand, the influence of the media on the ETS was almost exclusively mentioned here.

30
5. Results

Germany

Removing the EUA surplus, lowering the cap and accelerating or aligning the reduction path were the most important reform options for German representatives. These are in line with the general observations. A particularly strong attention was put on the treatment of EIIs. Many representatives evaluated a differential treatment as non-desirable. The interviewees identified the same obstacle to an EU ETS reform as in the other countries: the political will of MS and climate skeptics in the EP. In particular, German interviewees also referred to the EII as an obstacle.

Accordingly, the influence of the EII was a factor that dominated the perceptions of German representatives about the EU ETS. Interviewees explained the high influence of EIIs in Germany with the relevance that they have for employment. One interviewee pointed out that the focus on exports makes the German economy very dependent on the EII. Respondents also mentioned knowledge as a resource being used in the power game, however, its role was disputed (Section 5.). German representatives stressed more than representatives from other countries that the EU ETS is not working properly and that it necessitates an urgent reform. It was perceived as nontransparent and complex. Respondents focused on its long-term functioning. While representatives did not regard policy overlap as a problem, there was a strong urge to look into alternative policies. One factor that played a big role in the reasoning of the representatives was the national target of 40% emissions reductions by 2020. Representatives repeatedly mentioned that a strong EU ETS is needed to achieve the target. The target also served as a justification for unilateral action.

Interviewees acknowledged an important role of Germany in the international negotiation dynamics. They perceived it as positive that the BMUB and the BMWi are now led by one party, the Sozialdemokratische Partei Deutschlands, and that an impasse as in the back-loading debate is less likely to happen again.

Poland

Surprisingly, none of the Polish representatives mentioned removing the EUA surplus or changing the cap or the reduction path as possible EU ETS reform options. Instead, a differential treatment of MSs in the form of, for example, national targets, was the most popular reform proposal. Representatives also mentioned a different treatment of EIIs, a price floor or a price cap and flexibility of supply as other reform proposals. The representatives focused on the political will of MSs as the obstacle to a reform, as well as money, which would have to be transferred from richer to poorer countries if MSs had different treatment.

Not surprisingly, given the most popular reform option, the Polish representatives focused on the distributional impacts across MSs. Even the representative of the environmental NGO said: “Although I see my role in looking over the implementation of climate policy in Poland, I understands the point made by the Polish government that the burden is too high on Central and Eastern new MSs” (Marcin Stoczkiewicz, interview). Interviewees used two main arguments to support that newer MSs are discriminated by the ETS: first, through the effort sharing decision the
5. Results

ETS sectors have to abate more than non-ETS sectors. Since the newer MSs traditionally have more EII, the overall burden on their economy is higher (Table 3). Second, if reductions are made where they are cheapest, most of the reductions are made in the newer MSs, as prices are lower and industries still more carbon-intensive. A third factor that was mentioned by a German representative is that richer MSs benefit from the fact that compensations for indirect effects are handled nationally. Richer MSs can pay the compensation without problems, whereas poorer countries might not have the means to pay them.

Interestingly, Polish representatives were mainly driven by national self-interest rather than strategic or ideological motivations. They observed the ETS as needing a fundamental reform. The NGO representative highlighted that an urgent reform is required because there are current plans for more Polish coal plants (Marcin Stoczkiewicz, interview). The overlap with energy policies was perceived as problematic in this group and representatives were very aware of the discussion about energy security, not surprising given the big role Donald Tusk played in it (Section 5.1). The influence of the EII was not mentioned as an important factor.

**UK**

The British views of EU ETS reform options and their obstacles resembled in large part those of the overall picture: removing the EUA surplus was the most popular reform proposal, lowering the cap, flexibility of the supply and a price control got some attention. No representative mentioned the distributional impacts across MSs, and there was no sign of self-interest in this group. Interviewees mentioned policy overlap with energy policies prominently as well as the influence of EIIs. The influence of international action received comparably little attention. There was a general positive evaluation of unilateral action.

5.3 Comparative observations

In the following, the findings of the preceding subsections on each of the case study are brought together to show how different preferences, institutional settings and power constellations lead to the distinct positions on the EU ETS reform proposals.

Polish representatives perceived the distribution of costs and benefits across MSs as very important, while none of the British interviewees mentioned them. At the same time, self-interest was particularly high in Poland and remarkably low in the UK. Because the distributional impacts disadvantage Poland, the Polish representatives were interested to protect their economy. This explains that a different treatment of MS was the most popular reform option in this group. In contrast, in the UK this reform option did not get any attention.

The findings in Germany and on EU-level reveal the importance of power constellations. German representatives highlighted repeatedly the high influence of the EII in shaping the EU ETS. They explained great influence of the EII by the political climate after the economic crisis. In contrast,
5. Results

Interviewees on EU-level did neither mention the influence of EIIs nor the political climate as major influencing factors. Consequently, the different treatment of EIIs got attention by German representatives when speaking about reform options while none of the representatives on EU-level mentioned it.

German and the EU-level representatives also revealed very different perceptions about unilateral actions and alternative policies. On European level, representatives evaluated unilateral actions more negatively than on national level. The ETS is a unifying and centralized policy and EU-level representatives are inclined to support these characteristics, because they give them more influence. On the other hand, German representatives mentioned unilateral actions particularly often and related them to the national 2020 climate target. The target was used to justify unilateral action, but also to apply pressure on the German government to take on a stronger role in European negotiations of an EU ETS reform. Interestingly, the UK target was not mentioned during the interviews. This might be attributable to the fact that the UK target already led to unilateral action.

Overall, institutions and beliefs did not turn out to cause different situations in the case studies. With respect to the research question it can be concluded that perceptions, motivations, power constellations and contextual factors bring about differences in the feasibility of different EU ETS design proposals in the different case studies.

6. Discussion

This chapter reflects on the findings reported in the last chapter with respect to relevant literature and their implications for the policy design process. Limits that the methodology places on the generalizability of the findings are elaborated along the way. Those factors that cause distinct positions on reform proposals in the different case studies are discussed first. Subsequently, the overall findings and implications for a successful strengthening of the EU ETS are elaborated.

Actors in different countries preferred distinct reform proposals. The variability could be explained by perceptions, motivations, power constellations and contextual factors. Surprisingly, beliefs and institutions did not emerge as factors determining distinct views in different countries. Fundamental views and beliefs about the ETS were similarly distributed in MS: most actors embraced the instruments and a minority was critical about it. In theory, the mode of governance and experiences with policy instruments determine the actors’ preference for certain instruments (Howlett, 2011). The three countries included in the analysis employ different modes of governance in the environmental policy field and have different experiences with the implementation of ETS (Section 4). They would thus be expected to embrace the instrument to differing degrees. Theoretically, German actors would be inclined to be more critical of the EU ETS than British ones, as Germany has traditionally used regulations in the environmental field, while the UK has embraced this instrument from the beginning (Section 3). This was indeed shown for the first two phases of the EU ETS (Wurzel, 2008). The fact that this difference does not emerge from the data at hand might
6. Discussion

reflect the positive experience that actors had with the ETS or it might simply come out of opportunism (strategic motivation of actors), which would mean that actors accept this policy because it has already been established and implemented. This seems very likely, since many interviewees exhibited such strategic interests.

In contrast to the MS analysis, the analysis of stakeholder groups revealed belief variability across groups. While bureaucrats and legislators were in general enthusiastic and EII representatives skeptical, academics and environmentalists were divided. The affiliation to a stakeholder group thus determined beliefs to a greater degree than nationality. This supports the theory of Hahn (1989), who describes the beliefs and motivations of actors as depending on their stakeholder group.

No interviewee mentioned the institutional setting in a MS as a factor contributing to the feasibility of EU ETS proposals. However, power constellations emerged as a very important determinant of feasibility and accounted for the influence of EII in Germany as well as the position of Poland. Indeed, power constellations are shaped by the institutional setting, to the point that some researchers include institutional settings in the definition of dispositional power (Arts and van Tatenhove, 2004). In this thesis institutional aspects might thus be hidden behind power constellations.

Actors appreciated the institutional set-up of the EU ETS. In the two first phases of the EU ETS European and national institutions engaged in a power struggle over the design of the ETS and NAPs (Grubb, 2014). This seems to be resolved to a large degree, but a remainder of that power game can be found in today’s unilateral actions. European representatives evaluated these actions less positively than national representatives. Furthermore, one motivation behind promoting unilateral action by national representatives was to exert pressure on the European institutions to reform the EU ETS.

Power constellations are not only shaped by the institutional setup, but also by contextual factors. Among those the overall emission targets play a particularly interesting role. Many German actors from bureaucracy, academia, politics and NGOs used the German national target in their political narrative to justify unilateral action or pressure on the German government. Overall emissions targets had also appeared to be important in the earlier phases of the EU ETS. The Kyoto targets helped the European Commission in the beginning of phase II to prevent too generous over-allocation in the NAPs (Grubb, 2014). The finding about Germany supports Grubb's (2014) point that targets are more important politically than economically.

The analysis of differences across countries is, of course, constrained by the choice of the case studies. The three countries differ in their institutional setting, regulatory tradition, climate ambition and experiences with the ETS (Section 3). It can thus be assumed that they represent the variability found under European MS. However, there might be other country groups, such as Southern European countries, where climate change might have a bigger impact in the future, or Northern European countries such as Denmark which have a high share of renewable energy and rely less on EIIs. Future studies should evaluate the policy instrument preferences for these country groups also.
6. Discussion

Furthermore, the number and type of interviewees that participated in this study differed across case studies (Table 3). Germany and the EU-level are better represented than the UK and Poland. However, British and Polish representatives exhibited unique motivations and perceptions that cannot be explained by their stakeholder group affiliation. It can therefore be assumed that the findings are robust and resemble actual differences between the countries.

In the following the implications of the findings with respect to a successful strengthening of the EU ETS are elaborated. Removing the surplus of EUAs was clearly identified as the key EU ETS reform option. The proponents of a strengthening of the low-carbon incentives of the ETS strongly felt that this is the essential measure required at the moment. This is surprising, since this option was included in the proposals of the CEC on structural reform (CEC, 2012), but did not emerge from the stakeholder consultations as one of the feasible options (CEC, 2014d).

The fact that this option is prominent in this dataset partly depends on the selection of representatives and the identification of the relevant stakeholder groups. This list of stakeholder groups might be biased. For example, legislators are represented by the environmental ministries. However, those ministries responsible for energy and economic affairs are also involved in the policy design process and have different interests. This report focused on environmental ministries as they are in charge of implementing the EU ETS, but the position of other involved ministries should be a focus of future studies. Also, some stakeholder groups were more keen on participating in this research than others (environmentalists, the power sector and academics, Table 3). Their claims are therefore more prominent than those of the others. Finally, one representative was chosen for each identified stakeholder group, but the influence of the groups varies. This, however, reflects the actual situation: the proponents represent a larger group of stakeholders, but their influence is at a tie with the opponents. The opponents represent a larger share of GDP, which might explain their greater influence.

Opponents of a strengthening of the EU ETS are strongly opposed to removing the EUA surplus. From all case studies considered in this report, Poland and the steel industry represent the most fundamental opposition as their viewpoints are often contrary to other groups' positions. Both Polish and steel representatives were mainly driven by self-interest based on redistributive claims. Negotiations among stakeholders and consequent distributive measures, such as redistributive measures across MS as well as special rules for EIIs, are part of the ETS. However, it is hard to imagine an ETS that excepts the EII on the long term which was essentially what the steel representatives demanded. They seemed to be against any climate policy that would go beyond currently feasible benchmarks (or the potential as anticipated in current roadmaps). In contrast, the power sector embraced the ETS on the prospect that its alternative is another climate policy of similar ambition. This could also be a way to get the EII on board. As the German representative of the power sector puts it: “Industry has to be persuaded that 'no-action' is not an option and that a common EU-wide market-based instrument is better for them than fragmented national measures” (Ruhrberg, interview). While the EII sectors have to realize this, it also necessitates clear signals
6. Discussion

from politicians.

In general, those forces that are in favor of ambitious climate action are rather heterogeneous in their positions on the ETS. Especially among environmentalists there is skepticism as to whether the ETS can in principle work. This skepticism is growing with the time the EU ETS does not work. An association of NGOs already demands to shut down the EU ETS (Scrap the EU ETS\textsuperscript{19}). Even the very dedicated German WWF representative said: “We have been on board of the ETS since the beginning, but the ship is getting empty, because everyone says, what shall we do here, the ETS is not working. We will also take this step if nothing is going to happen” (Juliette de Grandpré, interview). The reasoning behind the “scrap the EU ETS” campaign is that the EU ETS does not lead to emissions reductions, has led to windfall profits and gives perverse incentives (Scrap the EU ETS, 2013). However, the question is whether such problems would not occur with other instruments if the political constellation remained unchanged.

The fundamental question whether other instruments could work better was a reoccurring topic in the interviews: Would other instruments encounter less obstacles than the ETS? Would they have bigger chances to function effectively? Interviewees mentioned taxes, standards and R&D policies as possible alternative policies. Taxes and standards were, however, disputed and for the implementation of R&D policies some revenues had first to be generated. Thus, representatives did not agree on a clear, feasible alternative to the EU ETS.

According to the interviewees, the main obstacle for reforming the EU ETS itself is the lack of political will of relevant decision-makers at the European level, which include MS representatives and Parliamentarians in the EP. While one interviewee stressed that the political will is still there to implement technology policies, most perceived it as if the political majorities are lacking to undertake ambitious climate action independent of the type of instrument. However, the ETS does differ from other instruments in several aspects. First of all, it includes target groups that are very diverse. Through the cap system, ambitious action in one group does not always imply overall emissions to decrease. Also, in negotiations progressive positions in one group might be thwarted by opposition in another. This holds true for MS as well as for sectors. The power sector now accepts much more ambitious targets than the EII. If the policies treated the two separately, it would potentially be possible to adopt more stringent measures in the power sector. At the same time the ETS could offer an opportunity to set more stringent measures for the EII than would otherwise be possible. It remains speculative whether alternative policies would overall be more or less ambitious.

In the case of MSs, the more ambitious countries might now be hindered in their action by the fact that laggards and front-runners are treated similarly. This claim was particularly prominent in the interviews with German representatives. However, some interviewees also noted that it is questionable whether the political majorities would be there for ambitious national action while

\textsuperscript{19} http://scrap-the-euets.makenoise.org (assessed on 20.6.2014).
6. Discussion

they are not there to negotiate ambitious action on a European level. Germany is the biggest player in the EU ETS and a clear progressive German position would seem to have great influence. A reform on European level is preferred over unilateral action by all stakeholders. It therefore would seem more straightforward if Germany used its political will to act on European level.

Surprisingly, the German Environmental Minister, Barbara Hendricks, announced (after the interviews for this research had been conducted) that Germany will buy off allowances, thus doing a national set-aside, in case the EU ETS was not strengthened (Germanwatch, 2014). This action reflects a change in the circumstances: first, the German government has changed in 2013 and second, both US and China announced to take climate action in their countries. In fact, shortly after the interviews for this study were conducted, US president Barack Obama announced a plan to cut emissions from US power plants by 30% below 2005 level by 2030 (Goldenberg, 2014). A Chinese official, He Jiankun, consequently announced that China is also planning to put an absolute cap on its carbon emissions – something they had precluded previously (Vaughan and Branigan, 2014).

This shows how important international action and overall climate targets are for the political feasibility of a policy proposal. In this light ambitious 2030 targets and a global agreement in Paris in 2015 are highly important for the EU ETS reform. While the German position has not always been very progressive on the EU ETS reform, the German government takes on a very progressive position in the international negotiations on overall targets. The reason of this behavior is opportunistic: German citizens are strongly in favor of climate action and the negotiations on targets are highly symbolic and extremely visible to the public.

The political obstacles vary across countries: Germany wants to protect their EIIs, while Poland is more focused on preventing actions that harm their carbon-intensive power sector. One opportunity for proponents to gain political leverage might lie in identifying the distinct progressive forces in different countries and building a strong coalition for progressive action. Traditionally, networks run along stakeholder groups – Eurofer as the European steel association or Eurelectric for the power sector. In the past, unexpected actors such as the German church have shown to have a strong influence. A similar role could be played by more unexpected coalitions.

The ETS is fundamentally different from other policies also in the smaller number of key political decisions required to set up the scheme – basically, only the cap and the allocation method have to be set. This is thought to increase the democratic legitimacy of the instrument (van Asselt, 2010) and seems easier to pass the legislative procedure than setting many different standards for a variety of installations (Kühleis, interview). However, the New Institutional Economic theory also points to the effect that a more centralized organization facilitates lobbying, because a target group only has to lobby one institution (Svendsen, 2002). Similarly, less decisions might make the system more vulnerable to lobbying. However, the European case might be different in that sense that industrial

\[20\] The Conference of the Parties to the United Nations Framework Convention on Climate Change and to the Kyoto Protocol with be held in Paris in 2015. Its objective is to come up with a new world-wide binding agreement on climate action.
6. Discussion

groups seem to have more influence at national level. Also, a centralized organization makes lobbying easier for environmentalists as well.

Overall, it is not straightforward whether other policies would be less vulnerable to fundamental opposition or not. One option could be to have additional policies as a fallback. Here the ineffective ETS takes on a very negative role, as some interviewees pointed out (2). The ineffectiveness of ETS is used by opponents as an argument against additional policies in the sense of “We are already targeted by a climate policy”. The objective should be the opposite: in order to prevent additional policies, the EU ETS has to be strengthened.

7. Conclusions

The EU ETS is a classic example of a policy exhibiting a gap between the theoretical optimum and the actual implementation. While the instrument is embraced as a cost-efficient and easy-to-manage way to reduce emissions, political struggles between EU MSs and actors at different levels of policy-making have made it ineffective in the past and endanger a successful reform. This report assessed the factors that shape the political feasibility of EU ETS reform options in different MS and at EU level. From the three categories of factors influencing political feasibility, actors' preferences and their power constellations emerged as the most important. Beliefs – one aspect influencing the preferences – varied more along stakeholder groups than along country borders. Institutional requirements of a reform proposal did not explicitly influence actors' preferences. Crucial for country differences was whether actors perceive the ETS as leading to an unfair distribution of costs and benefits and whether they perceive the ETS as not working. The standing of industries is especially important regarding power constellations. In the analysis, important contextual factors were identified. These include national policies and the energy mix. Institutional setting did not emerge as a determinant variable for country specific positions, but might partly explain the different power constellations.

Overall, there is a consensus among actors that the EU ETS must be reformed. Actors consistently referred to the lack of political will as the biggest obstacle to successful reform. The proponents perceive the necessary reform as rather simple adjustments. However, the political forces against such a reform are very strong. This report considered three European MS: Germany, Poland and the UK; and five stakeholder groups: bureaucrats, politicians, academics, environmentalists and industrialists. The analysis was focused on politicians from the environmental ministries. Future studies should include also legislators from other fields and carbon market intermediaries which were excluded from the analysis due to procedural reasons. Representatives from the industry – in this case the steel sector – emerged as taking on a position that contrasted with most other positions. Furthermore, they were referred to as very influential and as presenting one of the obstacles to a successful reform. How their opposition can be softened or included in a reform of the EU ETS appeared as the biggest challenge for a successful strengthening of the scheme and more work is needed on how this could be done.
7. Conclusions

Overall, it is not clear whether other policies would perform better under the same political circumstances. That the majority of stakeholders embraces the instrument, that they agree that a reform is needed, that they do not identify fundamental burdens and that the climate problem becomes more prominent on the international political agenda, should give the European institutions momentum to make sure the cornerstone of European climate policy helps Europe to reach its climate targets.

References


Commission of the European Communities (CEC) (1998) Climate change – towards an EU
References


European Environment Agency (EEA) (2012a) GHG trends and projections in Germany. EEA, Brussels, Belgium.

European Environment Agency (EEA) (2012b) GHG trends and projections in Poland. EEA, Brussels, Belgium.

European Environment Agency (EEA) (2012c) GHG trends and projections in the United Kingdom. EEA, Brussels, Belgium.


References

http://europa.eu/]


Scrap the EU ETS (2013) EU ETS myth busting: Why it can't be reformed and shouldn't be replicated. [online (17.6.2014): http://www.thecornerhouse.org.uk/sites/thecornerhouse.org.uk/files/Myths_internet_Final.pdf]

References


Tusk D. (2014) A united Europe can end Russia's energy stranglehold. [online (15.5.2014): http://www.ft.com/cms/s/0/91508464-c661-11e3-ba0e-00144feabdc0.html#axzz33BdAHqrM]


Appendix

A) Interview Guide

A) Preferences (Beliefs, Perceptions)
Let us start with the questions. We will start with some general questions about the EU ETS and its reform. Think of your preferences regardless of whether they are realistic to be adopted.

2. Do you think the EU ETS should be or remain an important cornerstone of EU climate policy or not, and why?

3. If you could change one thing about the ETS, what would you change?

4. Why do you think that this is the most important thing to change?

5. In general, do you think it is necessary to radically reform the EU ETS or do you think that small adjustments would be sufficient and why?

In their report of the state of the carbon market, the EC proposed a number of reform options. They included tightening the reduction targets, retiring some allowances permanently, increasing the annual reduction factor, extending the scope to other sectors, limiting the access to international credits, or a price management mechanism. Eventually, a stability reserve was proposed.

6. Each ETS reform option has different implications for example in terms of distributional
impacts, level of ambition, flexibility of the instrument, source of authority. Which are the implications that most significantly contribute to form your opinion on ETS reform proposals?

7. Which element do you think is most prominent in the current debate about ETS structural reform? Do you think that these implications that you have just mentioned are reflected in the current debate about ETS structural reform?

8. I would now like you to focus on the distributional impacts. How do you perceive the distribution of costs and benefits of the current ETS and the proposed reform?

In January 2014, the Commission then published the directive proposal in which an increase of the annual reduction factor is assumed (linked to the 2030 target of 40%), but which particularly proposes the establishment of a market stability reserve.

9. Could you share your view of the market stability reserve with me?

10. Do you think the current plans for the reserve regarding for instance the level of automation or discretion, size of reserve, timing of introduction and withdrawal) will work to produce a more effective ETS?

11. Do you think the Commission proposal of ETS reform should have been more ambitious? Why and how?

Let’s now think of the long-term perspective of decarbonizing the European economy by 2050 in a cost-efficient manner.

12. What are relevant future socio-economic and environmental developments that might require changes of the ETS?

13. Based on these developments, what changes might the ETS need in the future?

B) Institutional constraints

The EU ETS is of course not an emergent phenomenon but embedded in an institutional and legal framework as well as in political struggles. I would now like to learn how these contextual constraints play a role for your position.

14. You said earlier that you think the most important thing that needs changing is X. This change has obviously not happened yet. What do you think is the biggest obstacle for this to change?

15. Various reform proposals have different institutional and legal requirements to fulfill. For
Appendix

example some might be handled by an amendment of the Directive, while others need a re-opening of the Directive. How do institutional and legal barriers play a role in shaping your position on the reform proposals?

Can you think of a case where institutional barriers stand in the way of an efficient EU ETS?

16. Member states might try to get around the institutional barriers on EU level by implementing unilateral policies. What do you think about unilateral actions such as the British floor price?

17. Is there any element that should in general be subject to decentralized organization – at the level of the Member States, or even below? Why?

18. Which administrative and organizational implications do you see for the ETS reform, if any?

19. Can you think of any European law either constitutional, environmental or any other law that imposes a barrier to a more ambitious or more coherent EU ETS?

20. Are there any measures or approaches you can think of that are suitable to prevent such conflicts in the first place?

C) Power constraints

Transitional remarks: From now on I am interested in the reform process.

21. When you think of the recent EU ETS reform processes of the - such as the backloading discussion and the consultation phase on the structural reform - which were in your view factors that positively or negatively played a role in initiating and shaping the development of the policy?

22. When you think of the current debate of the EU ETS reform who are the opponents to the further strengthening of ETS, and who are the proponents?

23. Who do you think are of these opponents and proponents the most influential in the reform process and why?

24. What in your view determines the level of influence that participants in the debate have?

25. Different proposals have different political support from different interest groups. There may be proposals that you would support but that lack support from other interest groups. How does the support that other interest groups give to a proposal influence your preferences on that proposal?

  ◦ Can you give an example of a reform proposal that you would support but that is not realistic to be adopted because it lacks the support of other key players? Who would these players be and what are their concerns?
Appendix

D) Current activities of the organization (Motivation, Strategies)

I would now like to focus on your organization, what you are doing, and the reasons why you are engaged in shaping the EU ETS.

26. In general, what do you see as the role of your organization in shaping the EU ETS? Are there any benefits for the organization (like more publicity)?

27. Please tell me about how you push your views in different policy making circles and why you think that this is especially effective?

Make sure the following is covered:

1. Who do you address? When you think of political fora, such as the Parliament, the Council or the Court, they involve different actors and have different voting rules. What aspect plays a role in your decision where to push your proposal?

2. Which partnerships, collaborations, alliances have you set in place regarding the EU ETS?

3. How many resources do you devote to the EU ETS in terms of employees and financial resources?

Closing question

28. We have reached the end of the questions that I had prepared for you. Can you think of important aspects about the political process of shaping the EU ETS that we haven't touched upon yet?

B) List of Interviewees

Hanna Arnold, Deutsche Emissionshandelsstelle
Andrzej Blachowicz, Climate Strategies
Krysztof Bolesta, Polish Environment Ministry
Tom Burke, E3G London
Maciej Burny, PGE Polska Grupa Energetyczna S.A.
Danny Croon, Eurofer
Sarah Deblock, International Emissions Trading Association
Paul Drummond, University College London
Christian Egenhofer, Center for European Policy Studies
Alex Egger, Eurofer

45
Appendix

Juliette de Grandpré, WWF Deutschland
Roderik Hömann, Deutsche Wirtschaftsvereinigung Stahl
Haydn Jones, British Environment Agency
Christoph Kühleis, Deutsche Emissionshandelsstelle
Andy Limbrick, UK Energy
Felix Matthes, Öko-Institut
Damien Meadows, European Commission DG Climate Action
Julia Michalak, Carbon Action Network
Sarah Rieseberg, arepo consult
Martin Ruhrberg, Bund Deutscher Energie- und Wasserbetriebe
Jesse Scott, Eurelectric
Meike Söker, BMUB
Marcin Stoczkiewicz, Client Earth

C) Criteria Tables for General Analysis

Beliefs in different interest groups

<table>
<thead>
<tr>
<th></th>
<th>academics</th>
<th>bureaucracy</th>
<th>environmentalist</th>
<th>politics</th>
<th>power</th>
<th>steel</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETS important</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td>carbon pricing</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>cost-effectiveness</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>ETS skeptical</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>harmonizing, comprehensive policy</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>ETS theoretical concept</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>policy instrument - R&amp;D</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

Perceptions

46
### Appendix

<table>
<thead>
<tr>
<th></th>
<th>academics</th>
<th>bureaucracy</th>
<th>environmentalist</th>
<th>politics</th>
<th>power</th>
<th>steel</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>distributional impacts - MS</strong></td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td><strong>policy not working</strong></td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td><strong>distributional impacts - domestic - small</strong></td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td><strong>distributional impacts - international</strong></td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td><strong>policy overlap</strong></td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td><strong>small adjustments sufficient</strong></td>
<td>0</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td><strong>Targets not feasible</strong></td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td><strong>alternative policies important</strong></td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td><strong>complexity</strong></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td><strong>distributional impacts - domestic</strong></td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td><strong>fundamental reform needed</strong></td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td><strong>urgency</strong></td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td><strong>intransparent</strong></td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td><strong>long-term function</strong></td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td><strong>merit points</strong></td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td><strong>price signal</strong></td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
</tbody>
</table>

### Motivations

<table>
<thead>
<tr>
<th></th>
<th>ideologic interest</th>
<th>ideologic interest - environmental effectiveness</th>
<th>acad.</th>
<th>bur.</th>
<th>envi</th>
<th>politics</th>
<th>power</th>
<th>steel</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>level of ambition</strong></td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td><strong>self-interest</strong></td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td><strong>self-interest - protect industries</strong></td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td><strong>strategic interest</strong></td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td><strong>credibility</strong></td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td><strong>intertemporal efficiency</strong></td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td><strong>long-term incentives</strong></td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td><strong>price signal</strong></td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td><strong>recycling revenues</strong></td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td><strong>strategic interest</strong></td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>6</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td><strong>already in place</strong></td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td><strong>markt</strong></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>predictability</strong></td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td><strong>transparency</strong></td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

### Power

47
### Appendix

#### Institutions

<table>
<thead>
<tr>
<th></th>
<th>academics</th>
<th>bureaucracy</th>
<th>environmentalist</th>
<th>politics</th>
<th>power</th>
<th>steel</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>influence of industry</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>Germany’s role</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>employment</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>knowledge</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>knowledge - dishonest information by industry</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>media</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>message</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>progressive alliance</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>coalitions</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>influence of NGOs</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>influence of power sector</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>political network</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>public opinion</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>access to governments</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

#### Contextual factors:

<table>
<thead>
<tr>
<th></th>
<th>academics</th>
<th>bureaucracy</th>
<th>environmentalist</th>
<th>politics</th>
<th>power</th>
<th>steel</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>institutions - directive, comitology, amendment does not matter</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>institutions - against opening directive</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>institutions - lobby</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

#### D) Criteria Tables for Case Studies

Criteria that were found to differ between case studies

<table>
<thead>
<tr>
<th></th>
<th>EU</th>
<th>Germany</th>
<th>Poland</th>
<th>UK</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceptions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distributional impacts - MS</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>Policy not working</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>2</td>
<td>9</td>
</tr>
</tbody>
</table>
## Appendix

<table>
<thead>
<tr>
<th>Category</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small adjustments</td>
<td>4</td>
</tr>
<tr>
<td>Policy overlap</td>
<td>0</td>
</tr>
<tr>
<td>Feasibility of targets</td>
<td>4</td>
</tr>
<tr>
<td>Alternative policies</td>
<td>1</td>
</tr>
<tr>
<td>Urgency</td>
<td>1</td>
</tr>
<tr>
<td>Intransparent</td>
<td>0</td>
</tr>
<tr>
<td>Long-term function</td>
<td>0</td>
</tr>
<tr>
<td>Perspect: debate</td>
<td>0</td>
</tr>
<tr>
<td>Complexity</td>
<td>0</td>
</tr>
<tr>
<td><strong>Motivations</strong></td>
<td></td>
</tr>
<tr>
<td>Self-interest</td>
<td>4</td>
</tr>
<tr>
<td>Ideological motivation</td>
<td>2</td>
</tr>
<tr>
<td>Strategic motivation</td>
<td>11</td>
</tr>
<tr>
<td><strong>Power</strong></td>
<td></td>
</tr>
<tr>
<td>Influence of industry</td>
<td>0</td>
</tr>
<tr>
<td>Germany's role</td>
<td>1</td>
</tr>
<tr>
<td>EU/national level</td>
<td>1</td>
</tr>
<tr>
<td>Employment</td>
<td>1</td>
</tr>
<tr>
<td>Knowledge</td>
<td>1</td>
</tr>
<tr>
<td>Media</td>
<td>3</td>
</tr>
<tr>
<td><strong>Contextual factors</strong></td>
<td></td>
</tr>
<tr>
<td>International action</td>
<td>9</td>
</tr>
<tr>
<td>Political climate</td>
<td>0</td>
</tr>
<tr>
<td>Energy security</td>
<td>1</td>
</tr>
<tr>
<td>German national target</td>
<td>0</td>
</tr>
</tbody>
</table>
### Appendix

#### beliefs

<table>
<thead>
<tr>
<th></th>
<th>Berlin</th>
<th>Brussels</th>
<th>England</th>
<th>Poland</th>
<th>TOTALS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETS important</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td>policy instrument - tax</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>cost-effectiveness</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>carbon pricing</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>policy instrument - regulation</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>ETS skeptical</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>harmonized</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>ETS theoretical concept</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>experience UK unilateral</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>policy instrument - R&amp;D</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

#### Perceptions
## Appendix

<table>
<thead>
<tr>
<th></th>
<th>Berlin</th>
<th>Brussels</th>
<th>England</th>
<th>Poland</th>
<th>TOTALS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>distributional impacts - MS</td>
<td>3</td>
<td>4</td>
<td>0</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>policy not working</td>
<td>5</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>small adjustments</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>distributional impacts - domestic - small</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>distributional impacts - international</td>
<td>3</td>
<td>4</td>
<td>0</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>policy overlap</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>feasibility of targets</td>
<td>2</td>
<td>4</td>
<td>0</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>alternative policies</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>distributional impacts - domestic</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>urgency</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>intransparent</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>long-term function</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>merit points</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>perspective - debate</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>complexity</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>flexibility</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>price signal</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>radical reform</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>fundamental reform</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>new compromise difficult</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>policy working</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>technical / political debate</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

### Motivation
### Appendix

<table>
<thead>
<tr>
<th></th>
<th>Berlin</th>
<th>Brussels</th>
<th>England</th>
<th>Poland</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Self-interest</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>self-interest</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>self-interest - protect industries</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td><strong>Ideological motivation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>level of ambition</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>environmental effectiveness</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td><strong>Strategic motivation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>price signal</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>strategic interest</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>credibility</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>long-term incentives</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>predictability</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>intertemporal efficiency</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>recycling revenues</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>already in place</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>market</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>transparency</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

**Power**
Appendix

<table>
<thead>
<tr>
<th>Contextual factors</th>
<th>Berlin</th>
<th>Brussels</th>
<th>England</th>
<th>Poland</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>influence of industry</td>
<td>7</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>11</td>
</tr>
<tr>
<td>Germany's role</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>EU / national level</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>growing influence of opponents</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>employment</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>knowledge</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>knowledge - dishonest information by industry</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>lobbying depends on policy process</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>media</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>progressive alliance</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>proponents more influential</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>industry feels not heard</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>influence of NGOs</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>influence of power sector</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>message</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>political network</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>public opinion</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>coalition</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>misuse of ETS</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>resources - EC</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>tie</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>access to governments</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>credibility</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>homogeneity</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>intermediaries</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>member state coalitions</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>political capital</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>resources</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>TOTALS:</td>
<td>65</td>
<td>43</td>
<td>27</td>
<td>17</td>
<td>152</td>
</tr>
</tbody>
</table>

Contextual factors

<table>
<thead>
<tr>
<th>Contextual factors</th>
<th>Berlin</th>
<th>Brussels</th>
<th>England</th>
<th>Poland</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>international action</td>
<td>9</td>
<td>9</td>
<td>1</td>
<td>4</td>
<td>23</td>
</tr>
<tr>
<td>political climate</td>
<td>3</td>
<td>0</td>
<td>4</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>energy security</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>German national climate target</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>technology</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>economic crisis</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>targets</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>
Annex B


*Master thesis by Irini Dimitriou*
Political Feasibility of Climate Policy Instruments for Achieving the European Union Long Term Emissions Reduction Targets

An analysis of interest groups’ preferences

MSc Student: Irini Dimitriou 2519639
Supervisor: Dr. Stefania Munaretto

Word count: 10.202

MSc Thesis Research Project
VU University Amsterdam
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.
Abstract ..............................................................................................................................................1
1) Introduction .......................................................................................................................................3
2) Analytical framework .........................................................................................................................6
   a) Defining political feasibility ..........................................................................................................6
   b) Defining interest groups ..............................................................................................................6
   c) Analytical framework .................................................................................................................8
3) Methodology of focus groups and interviews ..................................................................................9
   d) Logistics of each focus group organization ...............................................................................10
4) Background information about EU climate policy instruments .....................................................12
5) Results chapter ..................................................................................................................................16
   e) Successes and achievements of EU climate policy ....................................................................16
   f) Problems of EU climate policy ..................................................................................................17
   g) Performance of the instrument ....................................................................................................18
   h) Perception of distribution of costs and benefits ..........................................................................19
   i) Nature of instrument ....................................................................................................................21
   j) Governmental level of instrument implementation ........................................................................................................................................22
6) Discussion chapter .............................................................................................................................23
   a) Performance of the instrument ....................................................................................................24
   b) Perception of distribution of costs and benefits ..........................................................................24
   c) Nature of instrument ....................................................................................................................25
   d) Governmental level of instrument implementation ..................................................................26
   e) Limitations of study ......................................................................................................................27
7) Conclusions & Recommendations ....................................................................................................28
8) Appendix .............................................................................................................................................30
   A. Questionnaire used in focus groups and in individual interviews .............................................30
   B. Summary of focus groups with industry ......................................................................................31
   C. Summary of focus group with NGOs ..........................................................................................33
   D. Summary of focus group with academic/think tank representatives .......................................35
   E. Summary of individual interview: Industry ...............................................................................36
   F. Summary of individual interview: NGO ......................................................................................37
   G. Summary of individual interview: Academia .............................................................................39
   H. List of participants .......................................................................................................................40
9) References .........................................................................................................................................43
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

\(^1\) 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.”
(CECILIA2050, 2013b). 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. 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.
Factors affecting interest group preferences | Criteria
--- | ---
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”.

11
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.

---

3 This is a theoretical advantage according to OECD, 2002 and Keohane, 1998
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

---

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 IPCC\(^5\) (European Commission, 1996), while the European Environmental Agency focuses more on the element of these agreements being a product of negotiation with public authorities\(^6\). 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).

---

\(^5\) 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:

“\textit{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 “\textit{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”.

\textit{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.”
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.
d) Governmental level of instrument implementation

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 for making decisions 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>
</tr>
</thead>
<tbody>
<tr>
<td>Mr</td>
<td>Folker Franz</td>
<td>ABB power</td>
</tr>
<tr>
<td>Ms</td>
<td>Susanne Kuschel</td>
<td>BASF - The Chemical Company</td>
</tr>
<tr>
<td>Ms</td>
<td>Katarina</td>
<td>Maaskant</td>
</tr>
<tr>
<td>------</td>
<td>----------</td>
<td>----------</td>
</tr>
<tr>
<td>Ms</td>
<td>Barbara</td>
<td>Mariani</td>
</tr>
<tr>
<td>Mr</td>
<td>Alistair</td>
<td>McGirr</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Mr</th>
<th>Jason</th>
<th>Anderson</th>
<th>WWF European Policy Office</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr</td>
<td>Joris</td>
<td>Den Blanken</td>
<td>Greenpeace</td>
</tr>
<tr>
<td>Ms</td>
<td>Manon</td>
<td>Dufour</td>
<td>E3G - an independent organization acting to accelerate the global transition to sustainable development.</td>
</tr>
<tr>
<td>Mr</td>
<td>Daniel</td>
<td>Fraile Montoro</td>
<td>Climate Action Network Europe (CAN Europe)</td>
</tr>
</tbody>
</table>

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

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

Anger N. et al. (2008), Public interest vs. Interest Groups: Allowance Allocation in the EU Emissions Trading Scheme, ZEW Discussion Paper No 08-023, Manheim: ZEW


CECILIA2050, internal research design (2014), The politics of policy alternatives: political feasibility of climate policy instruments for long term EU decarbonization targets. Theoretical and analytical considerations for WP 4.9


European Commission, (1996), Communication from the Commission on Environmental Agreements (COM (96) 561 final), Brussels


European Environment Agency (EEA), (1997), Environmental Agreements: Environmental Effectiveness, Copenhagen: EEA


energy-related products, http://eur-lex.europa.eu/legal-content/EN/ALL/?ELX_SESSIONID=Vvv0TpwQ2wKH7qNqhNgchhXmG4nyNH8bvCnvF7wH8Cfv2qyjxQtvI920714949?uri=CELEX:32009L0125


Morgan D. L. (1997), Focus groups as qualitative research (2nd ed.). Thousand Oaks, Sage


Stavins R.N., (2003), Experience with market based environmental policy instruments, chapter 9, in:
Handbook of Environmental Economics, Vol.1, Elsevier Science

Organization for Economic Co-operation and Development (OECD), (1994), Managing the environment: the role of economic instruments, Paris

Organization for Economic Co-operation and Development (OECD), (1999), Voluntary Approaches for Environmental Policy, Paris


Organization for Economic Co-operation and Development (OECD), (2006), Subsidy Reform and Sustainable Development: Economic, environmental and social aspects, OECD, Paris


Annex C

A Policy Exercise on the future of the EU Emissions Trading System.
Workshop report

By S. Munaretto and H. Walz
Choosing Efficient Combinations of Policy Instruments for Low-carbon development and Innovation to Achieve Europe's 2050 climate targets

A Policy Exercise on the future of the EU Emissions Trading System

Workshop report
AUTHORS

Dr. Stefania Munaretto, Institute for Environmental Studies, VU University Amsterdam, The Netherlands
Dr. Henriette Walz, Institute for Environmental Studies, VU University Amsterdam, The Netherlands

For any further information about this policy exercise please contact Stefania Munaretto at stefania.munaretto@vu.nl, or by phone at 0031-20-5989564.

With thanks to:
Constanze Haug, David Crookall, Dave Huitema and Igor Mayer for their feedback on the exercise design, process and analysis; Dave Huitema, Onno Kuik, Paul Drummond, Tim Rayner, Godefroy Grosjean, Andrzej Blachowicz and Gjalt Huppes for their feedback on the policy exercise material; Mikel Gonzalez and Milan Scasny for their contribution to recruiting participants; all colleagues and friends who participated to the trial session of this policy simulation, provided support for the organization and feedback afterwards. Finally, many thanks to all the participants to the policy exercise for their constructive and enthusiastic participation.

Project coordination and editing provided by Ecologic Institute.

Manuscript completed in [December, 2014]
This document is available on the Internet at: [www.cecilia2050.eu]

<table>
<thead>
<tr>
<th>Document title</th>
<th>Workshop report</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Package</td>
<td>WP4</td>
</tr>
<tr>
<td>Document type</td>
<td>Internal document</td>
</tr>
<tr>
<td>Date</td>
<td>23 December 2014</td>
</tr>
<tr>
<td>Document Status</td>
<td>Final 1.0</td>
</tr>
</tbody>
</table>

ACKNOWLEDGEMENT & DISCLAIMER

The research leading to these results has received funding from the European Union FP7 ENV.2012.6.1-4: Exploiting the full potential of economic instruments to achieve the EU’s key greenhouse gas emissions reductions targets for 2030 and 2050 under the grant agreement n° 308680.

Neither the European Commission nor any person acting on behalf of the Commission is responsible for the use which might be made of the following information. The views expressed in this publication are the sole responsibility of the author and do not necessarily reflect the views of the European Commission.

Reproduction and translation for non-commercial purposes are authorized, provided the source is acknowledged and the publisher is given prior notice and sent a copy.
# Table of Contents

1 Executive summary 3  
2 Introduction 5  
   2.1 The CECILIA2050 project 5  
   2.2 The CECILIA2050 policy exercise 5  
3 Discussions and Outcomes 9  
   3.1 Initial country positions 9  
   3.2 Commission proposal 11  
   3.3 Negotiation process 12  
   3.4 Negotiation outcomes 16  
4 Debriefing: participants' reflections on process and outcomes of the policy exercise 18  
5 Conclusion: reflections on key findings of the policy exercise 20  
6 References 23
1 Executive summary

This report presents the proceedings of the international workshop “A policy exercise on the future of the EU Emissions Trading System”, held on 16-17 October 2014 in Brussels in the context of the CECILIA2050 EU funded research project. The policy exercise aimed to advance knowledge and encourage discussion on key elements of the current debate about the reform of the European Emissions Trading System (EU ETS), thus helping understand the political feasibility of EU ETS reform options.

The exercise simulated simplified EU Council negotiations taking place in the year 2025 on redesign features of the EU ETS 5th trading period starting in 2031. Participants, who included senior officials from the European Commission (EC) and member states governmental agencies, as well as environmental NGOs, academia and think-tank representatives, were split in teams and asked to play the role of senior policy makers from the EC and seven European countries, namely Germany, Poland, Czech Republic, Italy, Spain, UK and Denmark.

The goal of the participants was to come to an EU agreement on a package of seven EU ETS design elements. Teams formed their initial position on the EU ETS design elements based on given role descriptions, a scenario, a number of options per each element, and their own knowledge and understanding of the problem.

During bilateral consultations and two rounds of Council negotiations, parties explored their differences in position as well as areas of convergence. Issues that were mostly discussed and that eventually made it into the final agreement include: a 3% linear reduction factor, focused free allocation to be phased out in 2040, price stability mechanisms, in particular a price trigger for the market stability reserve, and the use of EU ETS revenues for financing an Adaptation and Transition Fund for member states and carbon intensive industry.

The policy exercise included two debriefing sessions where participants could share their views on the experience. On the whole, the policy exercise method was felt to have worked well to enable lively exchange and substantive discussions while creating a fun and exciting experience. In terms of content, participants generally found the negotiation process reasonably similar to real life dynamics although rather simplified. However, the majority did not consider the outcome to be realistic. As from what has been learned, some participants reported to have a better understanding of negotiation dynamics and of the role and power of different actors in the process.

Three key observations can be drawn from the exercise. First, the exercise highlighted the major influence of the EC and of sound impact assessment studies for EU policy discussions and outcomes. As the exercise highlighted, the EC policy proposal steers the debate on specific policy options, thus leaving out of institutional arenas (e.g. the Council) issues that are prominent in informal discussions (such as bilateral conversations). Furthermore, the exercise showed the importance to parties of reliable impact assessment studies for sound decision making. In several occasions during the simulation participants felt they could not make decisions because they did not have sufficient understanding of the impacts of the
proposed options. Later on they reported that what happened in the simulation is quite realistic as in reality impact assessment studies are often perceived as not completely reliable.

Secondly, in agreement with the public policy literature, the exercise showed that it is easier to agree on policies whose distributional effects are hidden, namely an ambitious 3% LRF, because they are likely to be less contested. In contrast, policies whose impacts to specific societal groups are more evident such as the use of revenues and carbon leakage policies are more controversial because exposed to strong opposition. Negotiators who aim for an ambitious and environmentally effective EU ETS – but this applies to other policies too – may take advantage of this tendency to achieve their goal. However, because the implementation of generic policy goals is often problematic, achieving agreement on ambitious goals has more symbolic than substantial value.

Finally, achieving high environmental effectiveness via the EU ETS may significantly depend on lobbying capacity. The nature of the EU ETS is such that its environmental effectiveness is determined by a restricted number of decisions, such as those regarding the cap and the allocation, taken by a small number of agents. However, when decisions are concentrated in the hands of few agents, lobby groups can more effectively exercise pressure. Consequently, the capacity of lobby groups to influence decisions may significantly jeopardise, as it actually did in reality, the environmental effectiveness of the EU ETS. This may be different for other climate policy instruments for which a greater number of integrated mechanisms and criteria could contribute to environmental effectiveness. In the policy exercise, where lobby groups did not have an explicit role, countries were free to aim for ambitious goals in response to citizens’ demand for climate action and eventually agreed on an ambitious cap and MSR. This was perceived as unrealistic. Indeed, the presence of lobby groups in the exercise may have led to a different outcome.
2 Introduction

This report presents the proceedings of the international workshop “A policy exercise on the future of the EU Emissions Trading System”, held on 16-17 October 2014 in Brussels. Section 2 provides information about the CECILIA2050 project and illustrates the purpose and background of the policy exercise. Sections 3 to 5 report in more detail on the discussion among participants and the outcomes of the workshop.

2.1 The CECILIA2050 project

CECILIA2050 is about “Choosing Efficient Combinations of Policy Instruments for Low-carbon development and Innovation to Achieve Europe's 2050 climate targets”. It is a three-year research project funded by the European Union’s (EU) 7th Framework Programme for Research (FP7). The project involves 10 European research institutes and is coordinated by the Ecologic Institute Berlin.

The project aims to advance knowledge on: 1) the performance and implementation of existing climate policy instruments and their interaction; and 2) how the European climate policy instrument mix should evolve to guide the transformation to a low-carbon economy. The project aims to investigate ways to improve the economic efficiency and environmental effectiveness of the instrument mix, and to address constraints that limit their performance and feasibility. These include public acceptance, political feasibility, availability of finance and the physical infrastructure, but also the administrative and legal framework.

The Institute for Environmental Studies - Environmental Policy Department of the VU University in Amsterdam coordinates the piece of research on the political feasibility of climate policy instruments. The goal of the research is to understand the interplay of interest groups’ preferences, power dynamics and institutions. This in turn helps identify possible areas of policy consensus and conflict – hence potential opportunities and constraints – for the adoption of instruments. Such an analysis has also potential to shed light on the criteria that have to be met for a policy proposal to be successful (i.e. adopted and effectively implemented). A mix of different qualitative methodologies were used for the research, including interviews, focus groups, on-line survey and a policy exercise (whose outcomes are synthesised in this report) with relevant stakeholders.

2.2 The CECILIA2050 policy exercise

The aim of the exercise

The CECILIA2050 policy exercise aimed to advance knowledge and encourage discussion on key elements of the current debate about the reform of the EU ETS. The exercise was designed to enable its outcomes to be used to answer specific research questions on the political feasibility of EU ETS reform options.
A major problem with the current EU ETS is that the system does not provide a sufficiently high price signal to EU industry to reduce carbon emissions. The EU addressed the problem of a low carbon price and the related issue of too many allowances on the market by back-loading allowances until 2018/2019 and by proposing the creation of a market stability reserve (MSR). Many claim that these solutions are not sufficient and that more radical reform of EU ETS is needed. Many reform options have been proposed, others may come into focus. But which options are politically feasible? The CECILIA2050 policy exercise was set up to help answer this question by pointing to political constraints and opportunities for the reform of the EU ETS. Specifically the CECILIA2050 policy exercise aimed to stimulate discussion around a number of key elements of the EU ETS design, namely cap and allocation, resilience of the system, compensation measures to industry and member states, technical aspects such as trading period and carbon leakage, international measures and interaction with other policies.

**The format of the exercise**

Policy exercises are intended to facilitate exploration of problems in which the set of relevant choices, important consequences, or key valued outcomes are contested or unclear. The reform of the EU ETS is one of such problems. We chose this method to investigate political feasibility primarily to elicit research data that is difficult to grasp with conventional qualitative research methods such as interviews and focus groups. Specifically, the policy exercise aimed to explore stakeholder patterns of interactions and power dynamics as two of the key dimensions of political feasibility in the context of the EU ETS reform. Secondly, by encouraging participants to actively engage and share their knowledge and experience, the policy exercise intended to advance participants’ understanding of the problems surrounding the EU ETS reform.

The CECILIA2050 policy exercise simulated simplified EU Council negotiations taking place in the year 2025 on re-design features of the EU ETS 5th trading period that would start in 2031. The goal of the participants was to come to an EU agreement on a package of seven design elements of the EU ETS while attempting to secure the position of their own country.

Participants to the policy exercise included senior officials from the European Commission (EC) and governmental agencies of the countries represented in the exercise, environmental NGOs, think-tank representatives, and academics.

Participants were split into eight teams and asked to play the role of senior policy makers from the EC and seven European countries, namely Germany, Poland, Czech Republic, Italy, Spain, and Denmark. In principle, participants were assigned a role that was close to their real life position (so e.g. a German person would play in the German team). The set of countries was chosen to represent a wide range of different interests and agendas in the EU ETS negotiations. In addition, one participant played the role of the Commission’s expert consultant. This person held extensive expertise on EU climate policy and was there to offer advice on the impacts of the policy proposal under discussion and to bring in the perspective of the foreign offices of the Commission on the global climate policy debate.
The role description, a narrative of the country/EC in 2025, depicted the socio-economic and political situation of the country, the status of the national climate policy and EU ETS, and the government’s ambition and interests with regard to the reform of the EU ETS. The role description also provided information about the perspective of the national industry and environmental NGOs on climate policy.

Roles were designed such that each country was pursuing different EU ETS policy agendas and had the possibility to form alliances with other countries on the different policy elements without making it easy to form a majority. The content of the role description was based on scientific publications (Solano and Drummond, 2014; Skovgaard, 2014) and was intended to be challenging, yet sufficiently realistic so that participants could easily embrace their role and act accordingly.

Participants were also confronted with a scenario set in the year 2025. The scenario included information about developments between now and 2025 concerning economic growth of different world regions, organization of the international climate policy regime and emission pathways, and climate policies of important world regions and countries (see Box 1). The content was informed by scenarios developed by the OECD (Johansson et al. 2012), the EC (Global Europe) and the IPCC (5th Assessment Report, WG III).

Two reasons justify the choice of situating the exercise relatively close to present time: 1) we did not want to prevent participants to act openly and creatively by situating the exercise too close to the current climate policy negotiations - the exercise took place one week before the actual negotiations of the Council of the EU on the 2030 Climate and Energy Policy Package; 2) at the same time, by not situating the scene too far away into the future, we wanted to ensure that participants could easily embrace the scenario as a realistic option unfolding from today’s situation.

Box 1 The 2025 global and EU scenario

The scenario set a global context where, while the US implemented rigorous technology policies and the BRICS countries became major technology developers, the EU fell behind in key technology sector, because of a failure of its climate policies among other reasons. Especially the EU ETS was depicted as largely inefficient due to an insufficient price signal and no incentives for industry sectors to decarbonise as they could still benefit from exemption from the scheme. International cooperation in the climate regime was depicted as fragmented.

At the same time, the impacts of climate change were represented as increasingly apparent world-wide. In Europe agriculture and tourism in the South suffered extensive heat waves and droughts, while Central and Eastern Europe faced extensive flooding along the Rhine and in the Elbe basin. These events were told to have increased European citizens’ awareness about climate change along with the pressure on the EU to upscale its climate policies.

---

1 Agendas were developed after the current socio-economic and climate policy situation of each country and the EU overall as well as the interests of key constituencies including industry and environmental NGOs.
The workshop was organized in three sessions: one session for the teams to form their initial position on EU ETS reform options, and two cycles of negotiation. During the first session teams were given EU ETS reform options in the form of coloured cards. Each colour represented one key EU ETS design element out of the seven that we identified. Each element comprised a number of reform options (4 to 7). Teams could freely pick, combine or come up with new options as the cards were primarily meant to trigger discussion about the EU ETS reform and were not intended to be exhaustive of the issue at hand. Teams formed their initial position by sticking the card of the selected options on the so called “position form”. They also had to fill in the so called “negotiation brief”, a document in which they laid down their negotiation strategy, including which options they considered negotiable/not-negotiable, which countries they wanted to consult bilaterally, and which negotiation approach they intended to adopt in the EU Council meeting. These documents, which could be revised in due course, accompanied the teams throughout the negotiations.

The second and third sessions were designed as two negotiation cycles of 2.5 hours each. Each cycle included bilateral consultations, in-country discussions and EU Council meetings. Only two elements of the cycle were fixed: duration of the whole session, and number of Council meetings, i.e. at least one per session. Teams were free to approach whomever they wanted to discuss bilaterally their position with a view to establish a draft decision that would serve as a basis for compromise. They also could choose to discuss internally their own position and strategy if needed.

The EU Council negotiation meetings had different chairs: the Czech Republic held the Presidency of the Council in the first session, and Denmark in the second session. Before the start of the first Council meeting teams were confronted with a number of external pressures, e.g. new scientific evidence about climate change, and major climate-related disasters, in an attempt to instil a sense of urgency to come to an EU agreement. At the beginning of the first Council meeting the EC presented its EU ETS reform proposal and countries were given the possibility to comment. The President of the Council chairing the meeting was free to decide how to conduct the negotiations, namely the proposal, discussion and voting of amendments and of the full package. The second Council meeting picked up negotiations from where they were left in the previous session. Voting rules were provided: qualified majority was required when the EC was in agreement with the proposed amendments; otherwise unanimity was necessary.

Two debriefing sessions were planned in the exercise to allow reflection on the experience, discussion and feedback. The first debriefing occurred in between negotiation cycles and consisted of a questionnaire that had to be filled in by each team. The second debriefing occurred at the end of the simulation and consisted of an individual questionnaire and a plenary discussion. In addition, a pre and post on-line survey was administered to the participants to collect data about participants’ perspective on EU ETS and on what they have learned through the exercise.
3 Discussions and Outcomes

3.1 Initial country positions

Teams were asked to play according to their role description. Roles were designed with the idea to stimulate discussion around specific policy elements and to offer countries the opportunity to form alliances while making it difficult for a clear majority to emerge. For example, on the use of EU ETS revenues, the Czech and Spanish governments were depicted with an interest in financial support for countries affected by climate related disasters, while the Polish government was told to be in search for support financing renewable energy and industrial transformation in Eastern Europe. On the other hand, the UK population was described as opposing any financial transfer to poorer or more in need member states and the government was told to be interested in support for green technology. On the compensation to national industries, Germany was depicted as a strong supporter. Poland, Italy and the Czech Republic were portrayed as not particularly keen on a stringent EU ETS policy, while Denmark and to some extent Germany and UK were in favour of more ambitious and effective EU ETS. Finally, the EC was represented as the honest broker between diverging interests in search for achieving the mid- and long- term EU emission targets by ensuring the right amount of allowances on the market and a reasonable carbon leakage policy.

Teams formed their initial position based on role descriptions, scenario and their own knowledge and understanding of the problem. Regarding cap and allocation, all countries focused on the issue of allocation, either free allocation (Poland, Germany, Czech Republic and Italy) or full auctioning (UK, Spain and Denmark) while the EC considered a significant adjustment of the cap (proposal of 3.0% yearly reduction) to be more relevant. Germany and Denmark were the only two countries who, next to allocation measures, also proposed an adjustment of the cap (2.5% yearly reduction).

In relation to the resilience of the system, teams proposed the adoption of price floor and/or ceiling and adjustments to the MSR. Germany, Spain, the EC and the Czech Republic opted for adjustments to the MSR (the Czech Republic supported no changes to the mechanism) to limit the volatility of the system and ensure inflow of revenues (the latter argument was supported by Spain). Poland, UK, Denmark and Italy opted for yearly adjusted price floor, ceiling or corridor, in light of the reasoning that this measure would bring long-term price predictability thus providing clear signal for investors. The UK wanted this to be a nationally implemented measure.

Compensation to industry and compensations to member states were particularly debated across teams and often linked to one another. Claiming for fiscal sovereignty and control over revenues, the UK asked for compensation to industry to be dealt with national rules and from national budgets and refused any compensation to member states. All other countries wanted some form of EU regulated redistribution of ETS revenues to industry and member states, with the exception of the Czech Republic who also wanted national control over
compensation to industry. Denmark, Poland and the EC opted for the establishment of a Transition Fund/Green Fund to stimulate low-carbon innovation either to apply across all EU industries (Denmark and Poland in favour of this idea) or only to industries prone to carbon leakage (Italy and the EC in favour of this option) throughout Europe. Germany pursued compensation for all EU energy intensive industry across member states. Italy requested both a Transition Fund and an Adaptation Fund to support adaptation in poorer, climate prone countries. The adaptation fund was also chosen by the Czech Republic and Spain as a measure to compensate member states prone to climate related disasters.

Regarding technical aspects and timing, three teams focused on technical aspects while the others regarded timing issues as more important. On technical aspects, Denmark and Italy requested EU-managed monitoring and reporting as means to increase integrity and reduce costs for member states. Spain, instead, strategically chose to oppose the adoption of any national measure in the ETS system as negotiation chip to use with the UK. All other countries and the EC focused on timing issues related to the trading period, and the revision of the carbon leakage list and the benchmarks. While the EC proposed to maintain the same 10 year trading period to ensure stability of the system, Germany opted for its significant shortening (4 years) along with the shortening to 4 years of the revision of the benchmarks, justifying these choices with the need to maintain the ETS system close to reality. A similar timeframe for the revision of the benchmarks was also proposed by the Czech Republic, while Poland and UK asked for shortening the revision timeframe of the carbon leakage list.

As international measures teams proposed several options: unlimited use in the EU ETS of international credits (Poland and Italy) versus no use of international credits (Germany); further linkage of EU ETS with other international trading schemes (Commission and UK); introduction of border tax adjustments to control carbon leakage and motivate third countries to take climate actions (Czech Republic); and purchase of EU allowances by exporters to the EU to cover their products’ emissions, a variation of the border tax adjustment proposed by Spain to ensure revenues and prevent carbon leakage.

Finally, regarding the issue of interaction with other policies Poland, Spain and Italy were in favour of one carbon emission reduction target and no energy efficiency and renewable targets. In contrast, Germany and the Commission supported the alignment of the EU ETS with energy efficiency improvements through the withdrawal of 20% of EUAs from the market when the yearly estimated increase of energy efficiency in the EU is 5% beyond the modelled target. The Czech Republic and Denmark supported additional flexibility for governments through the introduction of trading of credits between ETS and non-ETS sectors. Finally, UK was not willing to support energy efficiency and renewable while at the same time in search for R&D support to technology innovation particularly in the field of CCS.
3.2 Commission proposal

Before the first round of Council negotiations the EC team presented the EC proposal resulting from internal and bilateral discussion (see table 3.1). As all other teams, the EC team was asked to put its position on record in the so-called position form and provide reasons for choosing the proposed measures. In the following their reasons are shortly elaborated.

The EC chose to increase the LRF substantially and to introduce a MSR in order to fulfil the EU long-term goal of reducing emissions by at least 80% by 2050. The combined effect of a more stringent policy with actions to limit the volatility of carbon price was considered as the foundation for the functioning of the EU ETS.

The reasoning behind the Transition Fund and the European Green Industry Fund targeting carbon leakage prone industries and poorer member states was to compensate the most vulnerable countries and sectors while pursuing an ambitious climate policy. Using ETS revenues for compensating vulnerable sectors and countries was considered a fair and equitable solution as long as these resources were put to constructive use for concrete actions to reduce carbon intensity.

Keeping the trading period at 10 years was seen as a reasonable compromise between the need for stability and the importance to leave the opportunity to revise the ETS system periodically.

The international measures were not fully developed but remained more at the level of general ideas such as linking to other countries’ ETS, and collaboration to advance carbon pricing, clean technology deployment and removal of fossil fuel subsidies. It is worth noticing that all these measures were framed as “constructive engagement”.

Finally, linking the EU ETS to the increase in energy efficiency was considered as a necessary action to ensure a positive interaction between the EU ETS and the energy efficiency policy, particularly when the latter performs better than expected.
Table 3.1 The EU ETS reform proposal by the European Commission team. The proposed measures are shown (right column) for the seven design elements (left column) that were pre-designed for the participants.

<table>
<thead>
<tr>
<th>Policy element</th>
<th>Proposed option</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cap &amp; allocation</td>
<td>Changing the linear reduction factor (LRF) to 3%, starting in 2031</td>
</tr>
<tr>
<td>Resilience of the scheme</td>
<td>Market-stability reserve (MRS) withdrawing (releasing) 12% EU allowances (EUA) in circulation when EUA price &lt;=20€ (&gt;=40€) per ton CO2</td>
</tr>
<tr>
<td>Compensation to industries</td>
<td><em>Transition Fund</em> from EU ETS revenues to stimulate low-carbon innovation in European industries prone to carbon leakage</td>
</tr>
<tr>
<td>Compensation to member states</td>
<td><em>European Green Industry Fund</em> from EU ETS revenues for renewable energy and industrial transition in poorer and more carbon-intensive member states</td>
</tr>
<tr>
<td>Technical aspects &amp; timing</td>
<td>Trading periods of 10 years</td>
</tr>
<tr>
<td>International measures</td>
<td>Links with other ETS. Work constructively with constituencies in 3rd countries to advance carbon pricing, clean technology deployment and removal of fossil fuel subsidies</td>
</tr>
<tr>
<td>Interaction with other polices</td>
<td>2% of EUA are permanently withdrawn when the yearly estimated increase of energy efficiency in EU is 5% beyond the modelled target</td>
</tr>
</tbody>
</table>

3.3 Negotiation process

The objective of the policy exercise for the participants was to come to an agreement on a package of seven EU ETS design elements by the end of the workshop. During bilateral consultations parties explored their differences in position as well as areas of convergence and built coalitions on key topics. Issues that were mostly discussed include: *mechanisms for price stability* (floor, ceiling, corridor, MSR adjustments), establishment of an Adaptation Fund for low income, climate change-prone countries and a Transition Fund for industry. Specifically, Spain talked to almost all other parties regarding the possibility to establish an Adaptation Fund, The Czech Republic had similar conversations about the establishment of a Transition Fund for industry, and Italy and Denmark engaged in discussions about price stability mechanisms. Also, The Czech Republic and Denmark, who held the Council Presidency, made sure to consult with the EC and with all other countries to get a sense of their priorities and main concerns in order to prepare their Presidency. Similarly, the EC consulted most countries before finalizing its position. As for alliances, Italy, Spain, Poland and Germany formed a coalition around the issue of ensuring industrial competitiveness, while the Czech Republic, Spain and Italy allied on the Adaptation Fund. Coalitions, however, changed as the Council negotiations progressed. Towards the end, for example, it became clear that Poland and Italy were aligned on the issue of offsets.
Before the beginning of the Council meeting, parties were informed of recent press news. An EU Parliament press release informed that the EU Parliament had endorsed the EU ETS reform package proposed by the Commission. Also, media reported about several climate related disasters that had occurred in a number of EU countries, and the consequent citizens’ protests demanding for urgent climate action. The rather extreme weather events built a general sense of urgency among parties to agree on a robust policy, which in the end helped the Danish Presidency to push some ambitious policy measures like the 3% LRF. Furthermore, as a consequence of the disasters that severely hit the country, the UK became more flexible on accepting an adaptation fund supported with ETS revenues.

During the first round of Council negotiations, chaired by the Czech Republic, the EC proposal was presented, countries had the chance to react on it and were subsequently asked to formulate up to 3 amendments to the proposal. The Presidency collected all proposed amendments and presented a progress report to the Council delegations.

Points of contentions immediately emerged around the questions of cap and allocation, resilience of the system and compensation to industry and member states. Although all countries acknowledged the need for tightening the cap, there was disagreement about the increase of the LRF, with Poland and the Czech Republic considering the EC proposal too ambitious especially if combined with no use of offsets and free allocation. Regarding the latter, the Commission proposal to bring to an end free allocation and instead establish a Transition Fund for carbon leakage prone industries found the opposition of Poland, Germany and the Czech Republic. Italy and UK contested the allocation of compensation funds to only low income or climate/leakage prone member states. Also, most countries considered the modalities of financing the compensation funds and the size of the funds to be fundamental issues deserving further discussion. Finally, on the resilience of the system, the Commission proposal about establishing a price trigger to enter/exit the MSR was opposed by Italy, Denmark and UK who preferred a real price collar mechanism (Italy) or a price floor (Denmark and UK). The only two issues that did not receive much attention – only one amendment each - were the international measures and the timing aspects. Basically everybody agreed with the proposal of linking the EU ETS to other emission trading systems...
and to maintain the trading period of 10 years (only Germany proposed an amendment to shorten the trading period).

**Figure 3-3 Country teams amending the EC proposal**

The second Council negotiation round, chaired by Denmark, started with a senior analyst of DG Climate and Energy raising some observations on the potential impacts of the policy package under discussion. The analyst raised concerns about the consistency of the proposal with the objectives of the climate package in terms of emissions reduction. He also stressed the fact that the weaker the package and the associated carbon price, the longer will be the dependence on state subsidies for renewable energy and the more difficult will be for CCS technology to come to maturity. This information did not have much influence on the discussion and the negotiations.

Subsequently, the Danish Presidency tabled three issues of the package which seemed important to several countries and still quite controversial. These were the establishment of an Adaptation Fund, the issue of MSR versus ceiling/floor price, and the3%LRF, the only issue for which there seemed to be emerging consensus. Parties while reaffirming their priorities, showed willingness to compromise and come to an agreement on these issues, yet felt that they needed more bilateral and Council discussion.

At this point the senior analyst of the Commission Foreign Service offices provided his inputs on the current international climate policy context. He reminded the Council of the recent unsuccessful international negotiations and the parallel emergence of a group of countries – including China, Thailand, South Korea, South Africa, Mexico, and a substantial number of US and Canadian states – working together towards the adoption and extension of carbon pricing mechanisms worldwide (so called carbon pricing club). He also pointed out the emergence of a problem in the international arena related to free allocation of allowances as China had the intention to take the EU to the World Trade Organization on ground of unfair and illegal subsidies. On this issue China tabled a proposal including border adjustment measures to non-members of the carbon pricing club and full auctioning. This information raised some discussion among parties, and led parties to agree on phasing out free allocation by 2040 and to introduce a review mechanism to pre-empt the concerns of the carbon club members and avoid a WTO law suit while transitioning to full allocation.
Right after the speech of the senior analyst, the Presidency called off the meeting to prepare a revised proposal in consultation with the Commission and to give parties time to bilaterally discuss. When parties reconvened, the Presidency illustrated the full package and opened the discussion of the last round of negotiations. The issues that at this later stage received attention were that of offsets, free allocation, Adaptation and Transition Fund, and price mechanisms. Regarding the funds and the price mechanisms, positions remained substantially unchanged apart from an opening of Poland to vote in favour of the package if the MSR ceiling was lowered to 30 Euro. The Polish proposal, however, was unacceptable to most countries. As for the funds, parties remained concerned with the actual amount of resources that would be available. Also, in reaction to the announcement of the EC foreign service analyst, parties also raised a concern about the feasibility of the transition fund which they feared it might be taken before the WTO on ground of illegal subsidy. The implications of free allocation were discussed in connection to the availability of resources for the funds and the potential risk of incurring in a lawsuit with WTO. As for offsets, Italy and Poland requested the use of offsets to counterbalance the tightened cap and the price increase that would result from the proposed package. The proposal however did not envisage any change in the offset policy other than allowing offsets in the context of linked ETS systems – which some questioned were real offsets.

Towards the end of this final round of negotiations the Presidency put quite some pressure on parties to reach an agreement by cutting discussion time and calling for a vote on the full package, which had the endorsement of the Commission. Parties, who felt the pressure, were not particularly happy with this approach as they clearly needed more discussion. Eventually a qualified majority emerged and the package was approved with the dissenting vote of Poland and Italy. The two countries felt that the tightened cap and the price increase resulting from the policy were not counterbalanced with adequate measures such as the use of offsets. An attempt of the Presidency to convince them to vote the package failed.

Figure 3-4 Parties during the EU Council meeting
3.4 Negotiation outcomes

Table 3.2 summarizes the content of the EU ETS policy package approved by the parties with qualified majority. The table also includes participants’ evaluation, on a scale from 0 to 5, about the likelihood that the approved package would be adopted in reality in 2025. In the following, the main points of discussion regarding the final package are briefly reviewed.

With surprisingly little dispute, countries agreed on keeping the Commission proposal to increase the LRF to 3% starting in 2031. However, this design feature was not considered very realistic as it received a score of only 2.7 in terms of likelihood to be adopted in reality.

During early bilateral consultations, some sort of price control – as, for example, a price corridor – was very prominent in the discussion. This point was picked up by the Commission that proposed a mechanism linking the MSR to the price of allowances. From that moment on, the debate on price control focused on the MSR. The actual price levels that would trigger the withdrawal/release of allowances were highly controversial. The proposed ceiling price of 50€, arranged between the Danish Presidency and the Commission behind closed doors, was higher than most member states wanted. This triggered substantial opposition, to the point that, as explained earlier, it became a reason for Poland and Italy to vote against the package. The measure was eventually accepted by the majority of the countries when it was decided to review the MSR parameters after one year of implementation. Similarly to the case of the LRF, participants did not regard the final design of this measure as likely to be adopted in reality (score of 2.2).

The use of EU ETS revenues was a topic of major discussion during bilateral consultations and Council negotiations. Countries exhibited great interest in using the revenues for tackling problems that were high on their national agenda. In the end, member states agreed to establish a mixed adaptation and industrial transition fund, split 50/50%. Interestingly, the topic of adaptation persisted in the discussion and eventually made it into the package although it had not been included in the initial Commission proposal. Participants judged this measure more likely to be adopted (score: 3.8) than the price and cap measures.

Connected to the establishment of the fund was the issue of whether only low income member states should be entitled to access to the fund. The UK, who firmly opposed EU centralized management of ETS revenues, accepted the establishment of the fund only after the country was included in the group of potential recipients. This decision was triggered by additional information that was provided during the policy exercise on climate change related disasters occurred in UK and other countries, and the concession that the transition part of the fund would have supported also CCS technology of which UK is a major producer.

Finally, to support carbon leakage prone industries the package envisaged focused free allocation to be phased out in 2040. Despite a number of countries pushing for free allocation, the news that WTO would regard free allocation as a protective measure led parties to decide for phasing out free allocation by 2040 the latest. This measure was judged as fairly realistic (score: 3.4).
**Table 3.2: The final agreement package. The right column shows how likely the participants evaluated each design feature to be adopted in reality (from 0 – very unlikely to 5 – very likely).**

<table>
<thead>
<tr>
<th>Policy element</th>
<th>Proposed option</th>
<th>Likelihood of the option to be adopted in reality</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cap &amp; allocation</strong></td>
<td>Changing the LRF to 3%, starting in 2031.</td>
<td>2.7</td>
</tr>
<tr>
<td><strong>Resilience of the scheme</strong></td>
<td>MRS withdrawing (releasing) 20% EUA in circulation when EUA price &lt;=20€ (&gt;=50€) per ton CO2 with the price triggers increasing by 3% each year.</td>
<td>2.2</td>
</tr>
<tr>
<td><strong>Compensation to industries</strong></td>
<td>Focused free allocation to carbon leakage prone industries. To be phased out by 2040.</td>
<td>3.4</td>
</tr>
<tr>
<td><strong>Compensation to member states</strong></td>
<td>Fund from EU ETS revenues to support by 50% renewable energy and industrial transition (and CCS) as well as climate change adaptation.</td>
<td>3.8</td>
</tr>
<tr>
<td><strong>Technical aspects &amp; timing</strong></td>
<td>Trading periods of 10 years. Benchmark review every 5 years.</td>
<td>3.9</td>
</tr>
<tr>
<td><strong>International measures</strong></td>
<td>Links with other TS/ -Work constructively with constituencies in 3rd countries to advance carbon pricing, clean technology deployment and removal of fossil fuel subsidies.</td>
<td>4.5</td>
</tr>
<tr>
<td><strong>Interaction with other polices</strong></td>
<td>National energy efficiency targets.</td>
<td>3.0</td>
</tr>
</tbody>
</table>
4 Debriefing: participants’ reflections on process and outcomes of the policy exercise

The policy exercise was followed by an individual debriefing session where each participant had to fill in a questionnaire, and a plenary debriefing session; a debriefing session took also place in between the two negotiation rounds, when teams were asked to fill in a group questionnaire. The goal of the sessions was to enable participants to share their views on the outcomes of the day and their wider implications, as well as their personal experience with taking part in a policy exercise.

In terms of content, participants generally found most of the elements of the final agreement on the EU ETS reform to be unrealistic. For example, the 3% LRF was felt too ambitious to be adopted in reality. The price trigger of 20/50 Euro for the MSR was also considered unfeasible. As one participant observed “In practice it would be nearly impossible to get agreement on prices from the different countries, industry lobbies, parliament, etc.” Another person noted that “the relation between volume and price is still very unclear in the ETS discourse – problematic”. In contrast to these views, a number of participants found the final package quite similar to the status quo, rather weak and unambitious, apart from the LRF, and for that reason quite realistic. A number of policy options were considered more realistic. These include the establishment of an adaptation and transition fund, the pursuing of linkage between EU ETS and international emission trading systems, and the trading period of 10 years with benchmark revision every 5 years.

Participants generally found the negotiation process reasonably similar to real life dynamics, although rather simplified. On a scale from 0 to 5 participants evaluated the degree of realism as 3.2. As one participant explained “It [the negotiation process] reflects the fact that it is hard to find a solution and that each one has to give up something”. Differences were reported about the limited time available to build trust and coalitions with other parties and to understand the complexity of the issues. As most participants identified forming coalitions as a major opportunity to achieve their goal, lack of time was perceived as a barrier in the negotiation process. Indeed, many reported frustration due to time pressure. On the other hand, time constraint was felt as inevitable in an exercise like this. Similarly, although perceived as inevitable, the simplification of the EU and national policy making complexity was reported by a number of participants as unrealistic. For example, the interaction between the Council Presidency and the Commission was considered less dynamic than in reality. Also, some highlighted that in domestic policy making there would be much more explicit understanding of where the political opposition comes from and why it arises in terms of internal politics. As one participant put it, “I think the political pressure makes this a lot harder in real life”.

As from what has been learned, participants reported to have a better understanding of how negotiations work, and of the role and power of different actors in the process, particularly with reference to the implications of the right of policy initiative held by the EC. Some quotes
are explicative of these elements: “negotiation is an art”; “It has helped me to better understand why certain member states or constituencies have more power than others. And how important that is to outcomes. Also the extent to which simplicity is key to achieving a deal”; “More aware of how negotiations might take place in reality. The power that the presiding country has on the overall negotiations, and also the importance of offering some benefits to MS opposing proposals (to get them on board)”; “The Commission has enormous power in its right of proposal. This shapes the entire contours of the debate thereafter. So you need to get the Commission on your side early if you want to achieve something”; “It served as a reminder that, in some countries (such as Germany, Poland, UK), the ETS takes centre stage in thinking about climate policy. In other countries, it is probably considered as one policy tool among many, not necessarily the central, overriding tool”. A number of participants found the learning experience to be potentially useful in their professional life, especially with regard to the importance to listen to different positions and be open to compromise.

On the whole, the policy exercise method was felt to have worked well to enable lively exchange and substantive discussions while creating a fun and exciting experience. Some participants expressed the opinion that the objective of the exercise should have been clearer while others would have liked to have had another negotiation round. In general, the scenario and the role description were perceived as a fairly realistic guidance, sufficiently open to allow room for manoeuvring during the negotiations. One participant, however, noted that “The exercise, and strategic priorities, encouraged a rather partial perspective - it was not necessarily in the MS' concern to keep the big picture in mind, and think through all consequences of changes they required, and whether these would be consistent with overall policy goals.” Overall, participants found the exercise useful to understand policy making dynamics and suggested to extend the use of this method to, for example, energy policy, and working groups within the EC. One person suggested conducting a similar exercise specifically for the issue of the MSR.
5 Conclusion: reflections on key findings of the policy exercise

The CECILIA2050 policy exercise aimed to advance knowledge and encourage discussion on key elements of the current debate about the reform of the EU ETS. In the following a number of key findings are discussed.

Participants easily embraced a scenario that depicted a non-functioning EU ETS. The fact that all participants could easily accept a scenario wherein 2025 the EU ETS still does not work effectively indicates that this is a likely possibility in the mind of the policy exercise participants. At the same time, the lively discussion that took place during the exercise, show understanding of problems and interest to identify solutions to improve the functioning of the instrument.

Different negotiation styles led to different reactions of countries. Both Council presidencies were effective in advancing the negotiations, although the effect of their approach was substantially different on parties. While the Czech presidency was open to discuss all elements of the package and strived for consensus, the Danish presidency, under time pressure and urgency to reach an agreement, chose to focus on few elements of the package and was not able to allow for discussion on all policy elements. In general, the Czech approach created a sense of constructive, collaborative discussion, while the Danish approach led to frustration in the teams. These dynamics highlighted the importance for successful negotiations to acknowledge each nation’s position and ensure that all parties feel their concerns heard and taken into consideration. When this is not the case, frustration and opposition may arise and trust may be undermined. Even when an agreement is eventually reached, these feelings can affect the subsequent discussions on technical and implementation aspects of the policy.

Parties showed high interest to use EU ETS revenues for climate mitigation and adaptation purposes in all member states. As negotiations moved in the direction of a stricter EU ETS policy, countries seized the opportunity to call for a focused use of the EU ETS revenues. All countries but UK showed interest in an EU centralized management system of revenues with equitable redistribution to all member states rather than allocation to only low income or highly vulnerable countries. Later on, the UK also joined the group as result of having been affected by climate related disasters. This discussion led parties to agree on the establishment of an Adaptation and Transition Fund whose likelihood to be adopted in reality was evaluated 3.8 out of 5. Although this policy option may be appealing to most EU countries, institutional barriers, above all the fact that the EU does not have power on fiscal matters, stand in the way of the actual adoption of such a policy.

It is easier to agree on policies whose distributional effects are hidden than policies whose impacts are more evident. Country teams could relatively easily agree on an ambitious 3%LRF while the use of revenues and carbon leakage provisions proved more controversial topics. On the one hand, this may be partly explained by the design of the exercise as the role descriptions included information on the country’s political interests in the climate negotiations, and consequently partly steered the discussion towards certain issues.
other hand, this outcome is consistent with findings in the public policy literature. Scholars in this field, in fact, suggest that it is easier to agree on policies whose distributional effects are hidden because they are likely to be less contested. In contrast, policies whose impacts to specific societal groups are more evident are exposed to strong opposition. This latter interpretation finds support in the outcome of the EU Council negotiations on the 2030 package that took place shortly after the policy exercise. After having postponed the approval of the package for months, the Council decided on the 2030 emission targets, whose distributional impacts are not immediately apparent, but still struggles to come to a decision on key elements that have more visible effects on societal groups. In principle stakeholders who aim to ambitious environmental effectiveness of the EU ETS – but this applies to other policies too – may take advantage of this tendency of easily achieving agreement on generic policy goals to push their agenda. However, because the implementation of generic policy goals is often problematic, achieving agreement on ambitious goals has more symbolic than substantial value.

**Achieving high environmental effectiveness via the EU ETS may significantly depend on lobbying capacity.** The environmental effectiveness of the EU ETS is determined by a restricted number of decisions on key parameters, such as those regarding the cap and the allocation, taken by a small number of agents. Thus, in principle, to ensure high environmental effectiveness it would be sufficient to build consensus around ambitious objectives for these parameters among these few agents. However, as New Institutional Economic scholars suggest, when decisions are concentrated in the hands of few agents, lobby groups can more effectively exercise pressure than when decisions are dispersed on many agents. Consequently, the capacity of lobby groups to influence decisions may significantly jeopardise, as it actually did in reality, the environmental effectiveness of the EU ETS. This may not be the case of other climate policy instruments where a higher number integrated mechanisms and specific criteria could contribute to environmental effectiveness. The role of lobby groups in the EU ETS design was to some extent reflected in the policy exercise. Because lobby groups did not have an explicit role in the exercise, countries were not under strong lobby pressure – only some information about key interests of industry and environmental NGOs was provided in the role description. Contrary to what often happens in reality, country teams were free to aim for ambitious goals in response to citizens’ demand for climate action and eventually to agree on an ambitious cap and MSR, the key parameter of environmental effectiveness. Indeed, some participants stressed the importance of having lobby groups represented in the exercise to increase realism.

**The European Commission has major influence on the discussion about policy options.** Several topics were prominent in the early bilateral consultations and disappeared from the discussion after they were not picked up by the Commission proposal. One example of this sort is represented by the compensation rules for indirect costs. Initially a number of low income countries demanded level playing field on this issue, something on which high income countries such as Germany were willing to consent. However, later conversations focused entirely on the Commission proposal where this topic was not included. This shows, in line
with what participants also reported, that the right of policy initiative gives the Commission major power to steer the debate on specific policy options, by at times cutting out of institutional discussions (e.g. in the Council) issues that are prominent in informal discussions (e.g. bilateral conversations). Consequently, as participants have also reported to have learned, if stakeholders want to insert their policy ideas into the debate, they should engage in discussions with the Commission at early stages of the policy process.

**Reliable information about the potential impacts of different policy options is crucial to sound decisions.** A problem that emerged during the exercise and that is found often in real climate policy decision making is the lack of reliable assessment studies about the impacts of the policy options under discussion. In several occasions during the simulation participants felt they could not make sound decisions because they did not have sufficient understanding of the impacts of the proposed options. Later on they reported that what happened in the simulation is quite realistic as often in reality the Commission impact assessment studies are perceived as not completely accurate and reliable. As decisions are based on impact assessment studies, consensus on their reliability and relevance is a precondition to successful negotiations.
6 References


Annex A – List of participants

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robert Jeszke</td>
<td>Polish National Center for Emissions Management</td>
</tr>
<tr>
<td>Louis Redshaw</td>
<td>Redshaw Advisors Ltd, UK; <a href="http://www.redshawadvisors.com">www.redshawadvisors.com</a></td>
</tr>
<tr>
<td>Jan Tuma</td>
<td>Ministry of Environment of Czech Republic</td>
</tr>
<tr>
<td>Matthias Duwe</td>
<td>Ecologic institute Berlin</td>
</tr>
<tr>
<td>Alexandra Zirkel</td>
<td>German Environmental Agency</td>
</tr>
<tr>
<td>Andrzej Blachowicz</td>
<td>Climate Strategies</td>
</tr>
<tr>
<td>Susanne Kuschel</td>
<td>BASF- The chemical company</td>
</tr>
<tr>
<td>Oliver Sartor</td>
<td>IDDRI – Institute for Sustainable Development and International Relations</td>
</tr>
<tr>
<td>Robert Jan Jeekel</td>
<td>ArcelorMittal</td>
</tr>
<tr>
<td>Claudio Marcantonini</td>
<td>EUI- European Institute Florence; R. Schuman Centre for Advanced Studies (RSCAS)</td>
</tr>
<tr>
<td>Benjamin Göerlach</td>
<td>Ecologic Institute Berlin</td>
</tr>
<tr>
<td>Lucy Moran</td>
<td>UK government -Department of Energy and Climate Change</td>
</tr>
<tr>
<td>Martijn Broekhof</td>
<td>ECF - European Climate Foundation</td>
</tr>
<tr>
<td>Jakob Skovgaard</td>
<td>Lund University</td>
</tr>
<tr>
<td>Timothy Fenouhlet</td>
<td>EC/DG Move</td>
</tr>
<tr>
<td>Damien Meadows</td>
<td>EC/DG CLIMA</td>
</tr>
<tr>
<td>Hans Bergman</td>
<td>EC/DG CLIMA</td>
</tr>
<tr>
<td>Serban Scrieciu</td>
<td>EC/DG ENERGY</td>
</tr>
<tr>
<td>Karolina Ubysz</td>
<td>Client Earth Warsaw</td>
</tr>
<tr>
<td>Michael Grubb</td>
<td>UCL – University College London and Climate Strategies</td>
</tr>
<tr>
<td>Thomas Legge</td>
<td>ECF – European Climate Foundation</td>
</tr>
</tbody>
</table>
Annex D

On-line survey - Figures
Figure D-1 Stakeholders perception of environmental taxation. Response of all respondents

Figure D-2 Stakeholders perception of environmental taxation. Response by stakeholder group

ENVIRONMENTAL TAXATION - Performance criteria
(0= very bad; 5= very good)

- Public costs
- Address uncertainties
- Distributive justice
- Stimulate low carbon investment
- Cost-effectiveness

EU public officers | Public officers in MS | Industry
Environmental NGOs | Research community
Political feasibility of climate policy instruments in the EU

Figure D-2 Stakeholders perception of emission trading. Response of all respondents

![EMISSION TRADING - Performance criteria](chart1)

Figure D-3 Stakeholders perception of emission trading. Response by stakeholder group

![EMISSION TRADING - Performance criteria](chart2)

Legend:
- EU public officers
- Public officers in MS
- Industry
- Environmental NGOs
- Research community
Figure D-4 Stakeholders perception of subsidies. Response of all respondents

SUBSIDIES - Performance criteria
(0= very bad; 5= very good)

- Public costs
- Address uncertainties
- Distributive justice
- Stimulate low carbon investment
- Cost-effectiveness

Figure D-5 Stakeholders perception of subsidies. Response by stakeholder group

SUBSIDIES - Performance criteria
(0= very bad; 5= very good)

- Public costs
- Address uncertainties
- Distributive justice
- Stimulate low carbon investment
- Cost-effectiveness

Legend:
- EU public officers
- Public officers in MS
- Industry
- Environmental NGOs
- Research community
Figure D-6 Stakeholders perception of direct regulatory instruments. Response of all respondents

Figure D-7 Stakeholders perception of direct regulatory instruments. Response by stakeholder group
Figure D-8 Stakeholders perception of voluntary regulation. Response of all respondents

![Voluntary Regulation Performance Criteria](image1)

Figure D-9 Stakeholders perception of voluntary regulation. Response by stakeholder group

![Voluntary Regulation Performance Criteria by Stakeholder Group](image2)
Figure D-10 Stakeholders perception of informational instruments. Response of all respondents

Figure D-11 Stakeholders perception of informational instruments. Response by stakeholder group
Figure D-12 Stakeholders perception about the importance of climate policy instruments characteristics. Response of all respondents

How important are the following characteristics of a climate policy instrument?
(0= not important; 5= very important)

- Behavioral change
- Public costs
- Address uncertainties
- Distributive justice
- Stimulate low carbon investment
- Cost-effectiveness

Figure D-13 Stakeholders perception about the importance of climate policy instruments characteristics. Response by stakeholder group

How important are the following characteristics of a climate policy instrument?
(0= not important; 5= very important)

- Behavioral change
- Public costs
- Address uncertainties
- Distributive justice
- Stimulate low carbon investment
- Cost-effectiveness

Legend:
- EU public officers
- Public officers in MS
- Industry
- Environmental NGOs
- Research community
Figure D-14 Stakeholders perception about the capacity of different instruments to achieve the EU carbon emission targets. Response of all respondents

To what extent the following instruments could help achieve the EU 2030 and 2050 emission targets? (0= very little contribution; 5= substantial contribution)

- Informational Instruments
- Voluntary regulation
- Direct regulatory instruments
- Subsidies
- Emission Trading
- Environmental taxation

![Bar chart showing the response of all respondents to the extent of instruments' contribution to EU emission targets.]

Figure D-15 Stakeholders perception about the capacity of different instruments to achieve the EU carbon emission targets. Response by stakeholder group

To what extent the following instruments could help achieve the EU 2030 and 2050 targets? (0= very little contribution; 5= substantial contribution)

- Environmental taxation
- Voluntary regulation
- Direct regulatory instruments
- Subsidies
- Emission Trading
- Informational Instruments

![Bar chart showing the response by stakeholder group to the extent of instruments' contribution to EU emission targets.]

Legend:
- EU public officers
- Public officers in MS
- Industry
- Environmental NGOs
- Research community
Figure D-16 Stakeholders perception about interest groups influence in policy making decisions. Response of all respondents

To what extent the following actors are influential in shaping the EU 2030 climate policy?  
(0=not influential; 5=very influential)

<table>
<thead>
<tr>
<th>Actor</th>
<th>EU public officers</th>
<th>Public officers in MS</th>
<th>Industry</th>
<th>Environmental NGOs</th>
<th>Business intermediaries</th>
<th>Industry</th>
<th>National bureaucrats</th>
<th>National politicians</th>
<th>EU politicians</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research community</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental NGOs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business intermediaries</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>National bureaucrats</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>European Commission</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>National politicians</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EU politicians</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure D-17 Stakeholders perception about interest groups influence in policy making decisions. Response by stakeholder group

To what extent the following actors are influential in shaping the EU 2030 climate policy?  
(0=not influential; 5=very influential)
**Figure D-18** Stakeholders perception about factors determining interest groups influence in policy making decisions. Response of all respondents

**To what extent the following factors determine the influence of actors involved in making the EU climate policy?**

(0= not important; 5= very important)

- Their economic importance
- Their relationship with the media
- Their access to important national bureaucrats
- Their access to important EU bureaucrats
- Their connection with national politicians
- Their connections with EU politicians

**Figure D-19** Stakeholders perception about factors determining interest groups influence in policy making decisions. Response by stakeholder group

**To what extent the following factors determines the influence of actors involved in climate policy?**

(0= not important; 5= very important)

- Their economic importance
- Their relationship with the media
- Their access to important national bureaucrats
- Their access to important EU bureaucrats
- Their connection with national politicians
- Their connections with EU politicians

Legend:
- EU public officers
- Public officers in MS
- Industry
- Environmental NGOs
- Research community
Figure D-20 Stakeholders perception about barriers to ambitious EU climate policy. Response of all respondents

To what extent the following options represent a barrier to an ambitious EU 2030 and 2050 climate policy? (0= not important; 5= very important)

- Insufficient prioritization of climate policy in MS agenda
- Insufficient prioritization of climate policy in EU agenda
- Competing interests and agenda of MS politicians on climate
- Competing interests and agenda of EU politicians on climate
- Lack of financial resources
- Lack of physical infrastructure
- High cost of low carbon technology
- Lack of low carbon technology
- Uncertainty about instrument effectiveness
- Uncertainty about new international agreement
- Need to change some EU laws
- Lack of clear long term targets

Figure D-21 Stakeholders perception about barriers to ambitious EU climate policy. Response by stakeholder group

To what extent the following options represent a barrier to an ambitious EU 2030 and 2050 climate policy? (0= not important; 5= very important)

- Insufficient prioritization of climate policy in MS agenda
- Insufficient prioritization of climate policy in EU agenda
- Competing interests and agenda of MS politicians on climate
- Competing interests and agenda of EU politicians on climate
- Lack of financial resources
- Lack of physical infrastructure
- High cost of low carbon technology
- Lack of low carbon technology
- Uncertainty about instrument effectiveness
- Uncertainty about new international agreement
- Need to change some EU laws
- Lack of clear long term targets

EU public officers
Public officers in MS
Industry
Environmental NGOs
Research community