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# Making the EU Emissions Trading System: The European Commission as an entrepreneurial epistemic leader

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## ABSTRACT

The EU has developed the first and largest international emissions trading system in the world. This development is puzzling due to the EU's scepticism to international emissions trading in greenhouse gases (GHGs) in the run-up to the 1997 Kyoto Protocol. This article analyses how the EU ETS was initiated in the first place mainly from the perspectives of Liberal Intergovernmentalism (LI) and Multi-level Governance (MLG). LI emphasises change in the positions of the EU member states as the key to understand what happened and why, whereas MLG opens up for change in the position of supranational entrepreneurial leaders as the key explanation. The main conclusion is that entrepreneurial epistemic leadership exercised by the European Commission was crucial for making the EU ETS. The principal means of leadership involved building up independent expertise on how an EU ETS could be designed, and mobilizing support from state and non-state actors at various levels of decision-making. This type of leadership may be needed more generally to deal with challenges characterized by high scientific uncertainty and social complexity in which learning is pertinent, such as climate change.

*Key words:* Climate change; emissions trading; EU Emissions Trading System; entrepreneurial leadership.

## 1. Introduction

In December 2008, the EU adopted a new climate and energy policy for Europe. The policy consists of a package of binding measures designed to reach the EU's 20% reduction target by 2020.<sup>1</sup> The cornerstone of the package is a reformed and more centralized and harmonized EU Emissions Trading System (ETS) for the post-2012 period, building on the 2003 Emissions Trading Directive.<sup>2</sup> The 2003 Directive introduced the first and largest international emissions trading system in the world. This development is puzzling due to the EU's scepticism to international emissions trading in

greenhouse gases (GHGs) in the run-up to the 1997 Kyoto Protocol (Grubb, 1999).

This article aims to analyse EU policy-making in light of this puzzle. Understanding EU policy-making is important also for non-EU specialists. First, the entrepreneurial leadership needed to change the EU's position from laggard to leader on emissions trading provides lessons for interstate negotiation and cooperation, even though the EU is a special case due to its supranational powers (Young, 1999). Second, the EU is a major emitter of GHGs, is a key actor in international climate policies, and represents to some extent a micro-cosmos of the international climate negotiations.<sup>3</sup> Third, the EU ETS is important for an emerging global carbon market (Hoffman and Betsill, 2009). The US president, Barack Obama, has for example announced that a national cap and trade system will be a key element in the stepped-up US climate policy. Hence, lessons about the driving forces

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<sup>1</sup> The package was composed of four binding measures to realize the target: 1) revision of the EU ETS; 2) decision on effort sharing in non-ETS sectors; 3) promotion of renewable energy sources, and 4) carbon capture and storage.

<sup>2</sup> And the 2004 supplementary directive linking the EU ETS to the Kyoto Protocol's flexible mechanisms (Linking Directive).

<sup>3</sup> Since 2004, 12 new member states, mainly from Central and Eastern Europe, have joined the EU. Fairness of burden sharing has thus become more important in developing EU climate policy among the 27 member states.

and the roles played by key actors in the initiation and development of the ETS should be increasingly relevant and interesting.

The initiation of the ETS in the first place and the turn towards a harmonized and centralized system indicates a significant change in the distribution of authority between the EU institutions and the member states. This article analyses the initiation of the ETS focused on the roles played by the European Commission and the EU member states. The main question to be considered is to what extent, how and why these actors affected the development of the ETS.

The story of how the EU ETS evolved provides insight into two major approaches to EU integration and policymaking – Multi-level governance (MLG) and Liberal intergovernmentalism (LI). LI emphasises change in the positions of the EU member states as the key to understanding what happened and why. “Why should governments, with millions of diverse and highly-trained professional employees, massive information-gathering capacity, and long standing experience with international negotiations at their disposal, ever require the services of a handful of supranational entrepreneurs to generate and disseminate useful information and ideas?” (Moravcsik, 1999, p. 273). Conversely, MLG emphasises, or at least opens up for, a change in the positions of supranational entrepreneurial leaders as the key explanation.

There is a large body of social science literature on the EU ETS (see literature review in Asselt, 2009; Convery, 2009). This literature is dominated by economic and legal perspectives. The EU ETS is, however, to a large extent a product of political factors that shape the outcomes of EU decision-making. Political science literature on the EU ETS is increasing, and part of this literature has hinted at the entrepreneurial role of the European Commission (Wettstad, 2005; Skjørseth and Wettstad, 2008a). The main contribution of this paper is to dig deeper into the role of the Commission and the member states based on systematic application of theories of leadership and EU policy-making. The analysis seeks to explore whether, why and particularly how the Commission exercised its leadership. Second, the article relates the role of the Commission in the initial phase to the outcome of the latest revision of the EU ETS. The study is based on several rounds of interviews with key representatives for the EU institutions, member states and non-state actors.<sup>4</sup>

In the following section, the analytical framework is presented. Section three describes the relationship between the theoretical expectations and the empirical observations. In section four, the observations are analysed in light of the analytical approach. Finally, section five presents the conclusions.

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<sup>4</sup> See list of interviews in Skjørseth and Wettstad 2008a and 2009a.

## 2. Analytical point of departure

During the Kyoto Protocol negotiations in 1997, most EU institutions, member states, environmental organizations and business federations were opposed, or at least highly sceptical, to emissions trading (Grubb et al., 1999, p. 94). Even though some of this scepticism can be traced back to negotiations tactics rooted in the different positions of the EU and the USA, Europe had scant knowledge about and no experience with emissions trading as a policy instrument in environmental policy. In such a situation, it seems logical that some form of leadership was necessary to bring the EU from opposition to crafting the world's first and largest international emissions trading system in a very short time.

Leadership describes a particular type of behaviour in institutionalized cooperation, which can be defined as “an asymmetrical relationship of influence, where one actor guides or directs the behaviour of others towards a certain goal over a certain period of time” (Underdal, 1991, p. 140). Entrepreneurial leadership represents one type of leadership which is integrated into the study of EU policy-making as well as international cooperation more generally (Young, 1991; Underdal, 1991; Malnes 1995; Moravcsik 1999; Fairbrass and Jordan 2004).<sup>5</sup> Entrepreneurial leadership can be conceived as: “...a matter of finding means to achieve common ends ... one actor's guidance is accepted by others either because they become convinced about the (substantive) merits of the specific ‘diagnosis’ he offers or the ‘cure’ he prescribes, or because a more or less diffuse faith in his ability to ‘find the way’” (Underdal, 1991, p. 145). According to Young (1991, p. 293), an entrepreneurial leader “...relies on negotiation skill to frame issues in ways that foster integrative bargaining...”.

Underdal and Young base their discussion of entrepreneurial leadership on a situation characterized by higher uncertainty with regard to actor preferences and possible solutions than formal bargaining theory would suggest. The means at the disposal of entrepreneurial leaders to “reap the bargainer's surplus” are thus solutions or tools to achieve common ends. The resources needed are related to substantive and political skill, energy and formal status, i.e. an actor's role in a formal organization or informal social order (Underdal, 1991, pp. 146–7). These resources may be used to set the agenda, attract attention, invent policy options and mobilize support (Young, 1991, p. 294). Entrepreneurial leadership is likely to be particularly relevant in the early phases of a policy-making process

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<sup>5</sup> The literature on leadership in international cooperation distinguishes among types of leadership such as entrepreneurial, structural and intellectual in terms of the resources needed to succeed and the means or mechanisms whereby leadership is exercised.

when institutional processes are fluid and openness to new ideas is high. It should thus be well-suited for understanding the initiation of the EU ETS.

### 2.1. LI: Member states as leaders

The literature on entrepreneurial leadership referred to above is not well integrated in Liberal intergovernmentalism: indeed, it is partly rejected. Andrew Moravcsik is generally sceptical to the idea of leadership in international cooperation, particularly leadership exercised by supranational EU entrepreneurs (Moravcsik, 1999). Such scepticism is based on assumptions underlying formal bargaining theory which assumes that rational actors can manage to find their way without assistance from entrepreneurial leaders. “Demand for cooperation tends to create its own supply. Decentralized bargaining is ‘naturally’ efficient” (Moravcsik, 1999, p. 298. See also Young, 1991, 1999; Underdal, 1991). According to LI, bargaining outcomes are mainly shaped by the relative interests and preferences of national governments, leaving scant room for autonomous supranational institutions to influence policy-making significantly (Marks et al, 1996; Hooghe and Marks, 2001, p. 3). Moreover, policy outcomes reflect the relative interests and strength of the most powerful member states and little flexibility to make concessions drives EU agreements toward the “lowest common denominator” (Marks et al, 1996; Fairbrass and Jordan, 2004). Second, national arenas provide the sole channel for domestic pressure group influence at the EU level. It is the state that “keeps the gate” between national and international politics.

From this perspective it follows, first, that entrepreneurial leadership is unlikely in international and regional cooperation. Second, if entrepreneurial leadership is needed, it is most likely to be exercised by representatives of national governments. Third, if entrepreneurial leadership is exercised, it will be based on asymmetries in information and ideas. How then would the EU ETS have been initiated according to LI?

Most EU member states were, as noted, sceptical or even hostile to emissions trading during the 1997 Kyoto negotiations. The first possible explanation for why the EU ETS was adopted is thus simply that the member states changed their positions. In the policy initiation phase, it is the European Commission that has the formal and exclusive right to propose new legislation. At least three channels can be utilized by member states in this phase. First, the EU Presidency chairing the Council of Ministers rotates every six months, passing to a new member state. The state occupying the presidency is responsible for chairing the meetings and dealing with unresolved problems through negotiations. Even though the agenda is inherited from the former presidency, countries may take new initiatives or complete earlier ones (Grant et al., 2000). Second, and related to the first point, the Council of Ministers may

collectively request legislative proposals from the Commission. Third, member states can also influence the early stages of policy-making informally through advisory committees, hearings organized by the Commission, and consultations with the Commission.

Against the backdrop of LI, it would seem reasonable to expect that *change in the positions of the majority of the member states led to the initiation of EU ETS. The Commission acted on a request from leader(s) representing member states, and anticipated broad-based support.*

The EU ETS would further reflect the position of the least enthusiastic and most powerful member-state.<sup>6</sup>

### 2.2. MLG: The Commission as leader

An alternative explanation to the above is that the European Commission changed its position and acted as an entrepreneurial leader by initiating the EU ETS. The notion of entrepreneurial leadership rests on the assumption that actors often have incomplete and imperfect information and vague preferences. Typically, actors enter a cooperative process by discovering, inventing and exploring both their own interests and possible solutions. To the extent that negotiations involve search, learning and innovation, there is scope for entrepreneurial leadership (Underdal, 1991; Young, 1991).

These conditions fit well with (parts of) neofunctional theory which underlies Multi-level governance theory’s emphasis on uncertainty, complexity and contested decision-making (Jordan, 2001; Fairbrass and Jordan, 2004). One key claim of neofunctionalism is that integration is accelerated due to learning in issue areas where scientists and technicians play a central role such as climate policy. Epistemic communities, representing high level of technical and expert knowledge, may play a role in the acceleration process (Farrell and Héritier, 2006, pp. 59–60). Building on broader conceptions of epistemic communities, Peter Haas narrows the terminology of an epistemic community to consist of “... a network of professionals with recognized expertise and competence in a particular domain and an authoritative claim to policy-relevant knowledge within that domain or issue-area” (Haas, 1992, p. 3).

Like entrepreneurial leadership, the notion of epistemic communities has been integrated into EU studies as well as international cooperation, particularly international environmental cooperation (Haas, 1989; Haas, 1990 and 1992; Farrell and Héritier, 2006). There is also a rich literature centred around the concept of

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<sup>6</sup> The concept “expectation” is used instead of a proposition or hypothesis, as “grand theories” or approaches, are difficult to test empirically in any strict sense because central claims are hard to operationalize. For a critique of both LI and MLG, see Fairbrass and Jordan, 2004.

policy networks, in which EU institutions such as the Commission play a central role (see e.g. Peterson, 2004). Complex social conditions have been coined as “turbulent fields” in which the policies and institutions of the EU represent an attempt to deal with turbulence rather than to achieve regional political integration (Haas, 1976). This can be seen as attempts of governance, replacing government by moving authority “up” to supranational actors and “down” to sub national actors (Rosenau, 1992, p.2). Governance by supranational institutions and the multi-level dimension (sub-national, national, EU, international-level) constitute central aspects of the Multi-level governance approach, which has been depicted as one alternative to state-centred Liberal intergovernmentalist approaches of European integration and policy-making (Marks et al., 1996; Hooghe and Marks, 2001; Fairbrass and Jordan, 2004).

Different variants of MLG have developed since Gary Marks’ original model, but they all share some common assumptions implying that European integration has weakened the state (Marks, 1992; Marks et al., 1996; Hooghe and Marks, 2001). The first underlying assumption is particularly relevant with regard to entrepreneurial leadership: supranational institutional actors such as the European Commission, are held to have an independent influence on policy-making that exceeds their role as agents for national governments.<sup>7</sup> This means that individual governments do not have full control over collective decision-making. Second, non-state actors influence policy-making through both the formation of national preferences and directly at EU level. The distinction between domestic and international politics is thus blurred by the multi-level governance approach. National governments are still important, but they share control over many activities. It follows that “lowest common denominator” outcomes can be expected only for some activities, mainly related to the scope of integration (Hooghe and Marks, 2001, p. 4).

In the phase of policy initiation, we would expect a prominent role for the European Commission, as it is the main formal agenda-setter in the EU. Moreover, the need for external information opens up for policy learning by the Commission and gives non-state actors a possibility to influence policy initiation by their expertise. This forms the basis for a more far-reaching expectation – that it was the Commission which *independently* launched emissions trading as a major EU climate policy instrument. In essence, the alternative expectation is that *the Commission changed*

*its position on emissions trading and initiated the EU ETS independently as an entrepreneurial leader (and not as a response to a specific request from member states) and anticipated broad-based support.* We would also expect that non-state pressure groups mobilised at EU level to influence the initiation of the EU ETS and that the final outcome did not reflect the position of most powerful and least enthusiastic member state.

The research strategy chosen to assess the explanatory merits of the LI and MLG expectations and distinguish between independent leadership, and leadership exercised by the Commission as agent for national governments involves: (1) seeing whether some member states acted as leaders by initiating the EU ETS whereas others acted as “laggards” by shaping the final outcome; (2) examining the extent to which the Commission responded to a member-state request or could anticipate broad-based support; (3) showing why and particularly how the Commission acted as an entrepreneurial leader with a particular view to the relationship between the Commission and non-state actors.

### **3. Making the EU ETS: Confronting expectations with observations**

We proceed in three stages. First, the making of the EU ETS in the form of various policy papers is briefly described. Second, the expectations derived from LI are assessed. Third, the expectations based on MLG focusing mainly on the Commission as an entrepreneurial leader is discussed.

#### *3.1. Making the EU ETS*

In Kyoto, international emissions trading became the issue that nearly killed the Protocol – but finally saved it (Grubb et al., 1999). The USA could not accept a binding emission target without flexibility, and the EU could not accept a protocol without a binding target. In this situation, the UK proposed amending the text to clarify that emissions trading could not start until appropriate rules and guidelines had been developed by subsequent conferences of the parties (ibid., p. 12). This compromise proposal gained the support of both the USA and the EU. The final text, which appears as Article 17 in the Kyoto Protocol, does not mandate emissions trading in any way – it merely states that parties *may* utilize this instrument.

After the Kyoto Protocol was concluded in December 1997, various policy papers relevant to emissions trading were produced by the European Commission. In June 1998, the Commission published *Climate Change – Towards an EU post-Kyoto Strategy*, which can be seen as the first step in the development of an EU ETS: “...the Community could set up its own internal trading regime by 2005...” (European Commission, 1998, p. 20). This communication was followed up by other policy papers and a Green Paper

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<sup>7</sup> Different strands of new institutionalist approaches and public administration applied to study European integration make the same claim, see for example Trondal (2007). In this study, the term *institution* mainly refers to organizational actors rather than institutions as arenas (Underdal 2002, p. 24).

arguing directly and indirectly for auctioning and centralized setting of national caps determining the stringency of the system (European Commission, 1999; European Commission, 8 March 2000). This was a point of vital importance, as the aggregate of national caps determine the stringency of the system. If the system is to make any sense as a climate-policy instrument for reducing emissions, fewer allowances should be handed out than are projected to be needed.

In October 2001, the Commission formally proposed the ET Directive (European Commission, 23 October 2001). Compared to the Green Paper, the major changes here was that the system was to be based mainly on free allocation of allowances and decentralized cap-setting, as “the total quantity of allowances issued under the proposal would essentially be left to the member states” (ibid., p. 11). This would make the stringency of the system a central element in implementing the directive in the form of National Allocation Plans (NAPs). The Council formally adopted the directive in July 2003. It became formal EU law in October the same year (European Parliament and the Council, 2003).<sup>8</sup> The final text shows that the main shape and content of the proposed directive remained roughly intact throughout the complicated EU decision-making process. The most significant change was perhaps the specification that national allocation plans should be consistent with a “Kyoto path” (see Skjærseth and Wettestad, 2008a).<sup>9</sup>

The ETS became operational in 2005. Experience from the first trading period (2005-2007) showed that the decentralized system and lack of verified emissions data contributed to excessive allocation of allowances and a sharp fall in the carbon price which reduced incentives for participating industries to invest in carbon “friendly” technology.<sup>10</sup> In addition, auctioning instead of receiving allowances for free would ensure the greatest incentives and avoid windfall profits for energy producers which could pass on the estimated cost of allowances to consumers despite receiving them for free (European Commission, 2008).

The revised ETS was adopted in December 2008 by the European Council and the Parliament (European Commission, 2008). The revised system responded to the problems experienced in the first trading period by introducing one EU-wide cap on the number of emission allowances that will decrease annually in the third trading period (2013-2020) and beyond. The National Allocation Plans will not be needed any

longer. In addition, allocation of allowances will be based on harmonized rules and auctioning will be the main allocation method. Auctioning will increase from less than 4% in the 2008-2012 trading period to more than 50% in the third period (Skjærseth and Wettestad, 2009a).

The conclusion is that the EU ETS was initiated by the European Commission which in the end succeeded to establish a system largely in line with its original intentions.

### 3.2 *The role of the EU member states*

Even though the policy papers leading up to the ET Directive proposal were produced by the European Commission, we can identify various possible ways that the Commission might simply have been acting on behalf of the member states. The LI perspective would lead us to expect that: (1) a member state occupying the presidency acted as a leader by taking the initiative to the EU ETS; (2) the Council of Ministers requested the Commission to initiate the EU ETS; (3) there was broad-based support among member states for an EU ETS, and this pushed the Commission on this issue; (4) the EU ETS reflected the most powerful “laggard”.<sup>11</sup>

The UK government would be our prime suspect among the member states for the initiation of the EU ETS. The UK had been most positive to international emissions trading during the Kyoto negotiations and it held the EU Presidency of the Council of Ministers from January to June 1998. There are, however, no indications that the UK initiated the EU ETS. The attention of the UK was directed towards private-sector involvement in developing a domestic emissions trading system – not a Community-wide system (Chasek et al., 1998). Austria assumed the Presidency of the Council of Ministers after the UK – and Austria was not enthusiastic about emissions trading (ibid.).

Denmark also paid significant attention to emissions trading. Danish legislation on emissions trading was drafted and discussed in May 1998. To a large extent, the Danish system was developed independently of the initiation of the EU ETS. The Danes undersold their system, and it received scant notice outside particularly interested and informed circles. Also Sweden, Ireland and the Netherlands undertook preparatory work on establishing domestic emissions trading systems in this period (Oberthür and Tänzler, 2007). These plans were, however, overtaken by the EU ETS. Although the *idea* of emissions trading had its supporters among the member states, we must conclude that none of them took the initiative to a system at the EU level.

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<sup>8</sup> The Council also adopted the so-called linking directive in 2004, which links the EU ETS to the flexibility mechanisms under the Kyoto Protocol.

<sup>9</sup> The proposal was based on Article 175 (1) of the Treaty, which requires adoption by qualified majority in the Council and co-decision with the European Parliament.

<sup>10</sup> The over-allocation of allowances could not be “banked” for use in the second trading period

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<sup>11</sup> These ways in which the member states can influence proposals can work concurrently. Our confidence in this explanatory perspective will increase the more of them that can be detected.

Seen from the perspective of the Council of Ministers, the impression that the member states did not sit in the driver seat is further strengthened. The minutes of Council meetings in this period show that it was the Commission which took the initiative and set the premises for discussions on emissions trading. The Council of Ministers officially and explicitly addressed the idea of an EU ETS for the first time in June 2000 by welcoming the Green Paper on emissions trading. Most member states also replied to the questions included in the Green Paper, although with varying degrees of elaboration and specificity (European Commission, 14 May 2001). The replies indicate that a small majority of the member states now supported the idea of an emissions trading system in Europe – far from the 62 votes needed to achieve a qualified majority (Skjærseth and Wettestad, 2008a). Key member states such as France and Germany were not among the supporters.

Germany, the largest and most powerful member state in terms of size, votes, CO<sub>2</sub> emissions and activities covered by the EU ETS, opposed a mandatory EU ETS in the first trading period (2005-2007) right up until the common position on the Emissions Trading Directive was adopted by the Council of Ministers in December 2002. German climate policy was partly based on voluntary agreements with industry. These agreements were perceived by industry to entail lower abatement costs than emissions trading. Germany, supported by the UK, thus preferred voluntary participation and emerged as both the most powerful and the “least enthusiastic actor” to the emerging EU ETS (see also below). Nevertheless, Germany had to give in and accept a mandatory system differing significantly from its own preferences. The main reasons were a combination of internal rivalry that weakened its negotiating position and the possibility to become outvoted by a qualified majority (Skjærseth and Wettestad, 2008a, pp. 108–112).

In September 2001, a consultation meeting was convened with the member states (and a separate meeting with industry and green groups). It became clear that everyone now supported the idea of an emissions trading framework at EU level, even though Germany preferred a voluntary system. This change in attitude can be traced back at least partly to the US exit from Kyoto Protocol in March 2001 (see below). There was also broad agreement on several other design principles, including a more decentralized system than indicated in the Green Paper, i.e. based on allocation of allowances at the member state level. A majority of the member states also preferred allocation free of charge. These elements were included in the Commission’s proposal for the ET Directive in October 2001, indicating that member states had made a significant imprint on the ET directive even before the formal decision-making process was initiated.

We can conclude this section by noting that we found no evidence of any member state acting as a leader to develop the EU ETS, or that the final outcome

reflected the position of the most powerful and least enthusiastic state, Germany. Furthermore, the Council of Ministers did not request the Commission to initiate the EU ETS and there was initially no broad-based support for this. However, this does not mean that the member states did not influence the design of the EU ETS prior to the 2008 reform. The most important influence – to make the system decentralized – actually took place before the ET directive was formally proposed to the Council of Ministers and the European Parliament.

### 3.3 *The role of the European Commission*

The main expectation based on MLG is that it was the European Commission which took the initiative, built up independent knowledge and mobilized support for the EU ETS. In line with this expectation, we would expect to find that: (1) the European Commission actually changed its position and announced the plans for an EU ETS to the member states; (2) the Commission built up independent internal knowledge on emissions trading design; (3) the Commission mobilized support for an EU Emissions Trading Scheme, but was influenced by non-state actors.

In the wake of the Kyoto Protocol, the Directorate General (DG) Environment underwent a change in staff, and in its position on emissions trading. Most of the staff of the climate change unit in the Commission left, including the leader Jørgen Henningsen (Lefevere, 2005, p. 96). Henningsen, who has been described as favouring command-and-control approaches, was replaced by Jos Delbeke, who became the leader of a team developing the EU ETS. Delbeke had been responsible for economic and fiscal instruments in the sphere of the environment in the DG Environment, being involved among other things in the futile efforts to get a EU carbon/energy tax adopted (Skjærseth, 1994). During the first half of 1998, Delbeke was able to persuade environment commissioner Ritt Bjerrgaard to support the plans for emissions trading as the key EU climate policy instrument (Skjærseth and Wettestad, 2008a).

One of the first challenges for Delbeke’s group was to build up knowledge on what an EU ETS could look like. Emissions trading emerged in economic science in the 1960s and in US practice from the 1980s (Voss, 2007). While Europe lacked experience with emissions trading, there are many types and variants of emissions trading schemes, and the issues involved are numerous (Grubb et al., 1999; Delbeke, 2006). Moreover, emissions trading had not been tried out in an international context. The development from vague idea to a specific design proposal can be traced back to deliberate expertise-building in the European Commission. In January 1999 the Foundation for International Environmental Law and Development (FIELD), together with the Center for Clean Air Policy (CCAP) in Washington DC, were commissioned by the

European Commission to undertake a study of design options for implementing an emissions trading system for greenhouse gases in the European Union (FIELD, 2000; CCAP, 2000). Their work and reports discussed all the main design issues subsequently taken up in the Green Paper issued in March 2000. From the spring of 1998 until the publication of the Green Paper, Delbeke's group gained a lead of almost two-years over most member states in terms of expertise on what an EU ETS could look like.

The second challenge for Delbeke's group was to muster support for emissions trading among various types of stakeholders. As noted, few member states were enthusiastic about the emerging ET plans; and some of the important states, Germany among them, initially opposed the idea of an EU ETS. As the power producers were singled out as the core target group in the Green Paper, it was clear at an early stage that German industry would represent a large share of the ET market.<sup>12</sup> Industry was in general more positive to emissions trading than to taxes, but most of the energy-intensive industry would have preferred voluntary agreements. However, the oil majors BP and Shell did implement company-internal emissions trading that inspired the EU ETS (Skjærseth and Skodvin, 2003). The green groups were also sceptical or in opposition, and had become known for their slogan "trading pollution is not a solution" during the Kyoto negotiations. Other parts of the Commission, such as DG Enterprise, did not like the idea of introducing potentially competitive disadvantages to European energy-intensive industry, and early statements by the Environment Committee of the European Parliament indicated diverging views. Thus, Delbeke and his group faced a formidable challenge that would require significant energy and skill across a range of levels of society and public-private relations.

In parallel to an inclusive consultation process based on the Green Paper involving the member states, the European Parliament, industry and green groups, the Commission initiated exclusive stakeholder meetings under the umbrella of the European Climate Change Programme, ECCP. Its Working Group 1 (WG1) focused on "Flexible Mechanisms", and a total of ten meetings were held between July 2000 and 2001. This working group served at least three functions. First, it represented a forum for exchanging views on the emerging EU ETS. Second, as pointed out by Lefevre (2005, pp. 98-9), it served as a capacity-building exercise where participants helped to clarify various concepts and generate new ideas. Finally, WG1 was set up to agree on the need for an EU ETS among participants from different backgrounds and

representing a range of interests. Where consensus could not be reached, differences of opinion were to be recorded (European Commission, 5 June 2000).

The latter function in particular was facilitated by how the meeting process was organized. First, the participants were selected by Delbeke and his team to include representatives that were positive to emissions trading, and those with a substantial interest in the issue.<sup>13</sup> The composition of industrial interests shows how the Commission balanced different concerns. The Emissions Trading Group UK was positive to emissions trading and worked under the auspices of the Confederation of British Industries to submit proposals to the UK ETS. The German BDI was the only national employer organization present in WG1. This was no coincidence, as support from German industry – the chemical industry in particular – was perceived at the time as the key to support from the German government.<sup>14</sup>

Finally, environmental groups had three representatives, from FIELD, the CNE and the WWF (ibid.). Support from the environmental organisations was seen as crucial for support from the "environmental friendly" European Parliament, which was necessary according to the co-decision procedure. In addition to careful selection of participants, stability and continuity in personal representation were encouraged. Meeting procedures were set up to create a stable network of relatively few people representing different interests. According to the mandate "...it is not envisaged to rotate members of the Working Group" (ibid.). The aim of stability in personal representation was achieved in practice (Summary Records, 2000-2001). Of the 17 organizations and entities involved, all were represented by at least one and the same person at more than half of the ten meetings. A situation in which the same representatives met almost every month for almost a year served to promote strong interpersonal relationships based on mutual confidence and understanding.

It was Delbeke and his team who chaired the meetings, presented various background documents and wrote proceedings, and hence framed the developing

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<sup>13</sup> The mandate listed 19 main participants representing 17 organizations, all with one alternate, except for some of the Commission DGs, which were set up with several alternates. Participants included four DGs, five national experts and representatives from five industry bodies

<sup>14</sup> However, the chemical industry, which was included in the Green Paper, was excluded from the EU ETS for a number of reasons, of which two were particularly important. First, the European chemical industry represented by CEFIC is powerful, and stood forth as the most sceptical among the industry federations to the emerging EU ETS. Second, excluding the chemical industry would serve to silence the German Chemical Industry Association (VCI) and thereby weaken internal opposition to emissions trading within Germany.

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<sup>12</sup> The distribution of allowances under the EU ETS for 2005-07 shows that Germany had the largest share in EU allowances (22.8%), more than twice that of the UK, which had the second-largest share.

consensus within the group to a certain extent. In these meetings and in general, the Commission emphasized that emissions trading had something for everybody. To industry, the instrument was framed as a cost-effective tool that could even provide economic opportunities for shrinking emitters to sell allowances. To ENGOs (and the European Parliament), the instrument was framed as environmentally effective as it would automatically lead to the cap set (given various conditions). To governments, both these arguments were combined and linked to implementing the burden-sharing agreement and the Kyoto Protocol targets. A red thread running throughout the meetings was that the Kyoto targets were fixed, ratification expected and that emissions trading would represent a cost-effective way for governments and industry to achieve them. The European Commission expected the Kyoto Protocol to enter into force from the first 1998 Communication even though it did not enter into force until 2005.

Emissions trading was thus “marketed” as a magic formula for development and environmental protection. This formula proved effective in reducing resistance and building support within the Commission, member states, industry and ENGOs. In the final report from WG1, the group unanimously recommended that emissions trading should start as soon as practicable. However, there was still disagreement on important design issues.

As mentioned, the US exit from the Kyoto Protocol in March 2001 made the Commission significantly advance its agenda on the ET Directive proposal. As noted by Brussels insiders, Bush’s withdrawal served to unite the EU in an extraordinary way. It made the entry into force of the Kyoto Protocol uncertain, and the EU was determined to take the lead in winning support from the other states needed for the Protocol to enter into force (Skjærseth and Wettestad, 2008a). The Protocol requires ratification by 55 Parties accounting for at least 55% of 1990 CO<sub>2</sub> emissions from that group. The EU ETS became important in the EU’s efforts to show the world that it was indeed taking action on climate change. The US rejection thus placed the draft ET proposal in the spotlight, boosting emissions trading to the top of the EU agenda. Delbeke and his group saw this as an opportunity for advancing the plans for a European emissions trading system, and for the EU to demonstrate leadership in global climate diplomacy.

#### **4. Analysis of expectations and observations**

The first expectations, based on Liberal intergovernmentalism, have not found much empirical support in this study. First, the data analysed here show that the EU member states did not take the initiative to the EU ETS, neither individually nor collectively. Moreover, there was no broad-based support for an EU ETS until 2001. Only a handful of the member states supported the idea of EU emissions trading in the

formative years of the system. Second, the most powerful state in this case – Germany – was also the “least enthusiastic”. Nevertheless, the final outcome did not reflect the position of Germany as “lowest common denominator”, partly due to the provision of a qualified majority. As noted, this does not mean that the member states did not influence the design of the EU ETS in the initiation phase. The broad agreement on a system more decentralized than that indicated by the Commission in the 2000 Green Paper was included in the Commission’s proposal for the ET Directive in October 2001.

However, it can be argued that this influence was temporary as the Commission prevailed in the end with a highly harmonized and centralized system adopted in the revised Directive. The 2008 revised Directive replaced the National Allocation Plans with an EU-wide cap and harmonized allocation rules. That does not necessarily imply that the Commission played an equally important role in the revision of the system, but it laid the foundation for the reform by initiating the system in the first place. We have pointed to poor experience with the first trading period largely as a result of the member states’ influence as one important explanation for the change in actors’ positions. In fact, a number of conditions changed in the negotiations on the revised ETS, but that is another story told elsewhere (see Skjærseth and Wettestad, 2009b).

By contrast, we find at first glance significant support for the alternative expectations based on Multi-level governance. First, the initiation of the EU ETS was surrounded by high uncertainty and complexity. In essence, this case fits well with the notion of collaborative processes in which actors discover, invent and explore both own interests and possible solutions. This situation provided the Commission with good opportunities for affecting the positions of key actors. Second, we have seen how the European Commission took the initiative, built up independent knowledge and crafted support among stakeholders. In essence, it acted as a leader in the making of the EU ETS. The type of leadership exercised by the Commission can be broadly categorized as entrepreneurial leadership, emphasizing substantive and political skill in finding the means to achieve common ends. Of particular interest here is how Delbeke and his team in DG Environment mobilized support at various levels of society across state and non-state actors, by combining inclusive and exclusive consultation and consensus-building processes. Political engineering was facilitated by the Commission’s control over relevant expertise and information on emissions trading, which was a new idea for many actors, and a new and complex policy instrument. Control over knowledge contributed to change and form the positions and strategies of state and non-state actors.

Delbeke’s core team within the Commission was dominated by economists, but gradually came to include individuals from a range of disciplines and

backgrounds. The group resembled an epistemic community with a shared set of beliefs in emissions trading as an effective means for reducing emissions of GHGs. A community is, however, more than a leader. Delbeke's group, acting as an epistemic leader on behalf of the European Commission, was more coherent than a loose network, but at the same time less fixed and more dynamic than a bureaucratic body.

At second glance, however, other observations point to the need for modifying the MLG perspective as applied here. First, even though non-state actors were important at EU level for the making of the EU ETS, the main mobilisation and influence went from the Commission to non-state actors, not the other way around. With the exceptions of knowledge provided from FIELD and CCAP and inspiration from internal emissions trading adopted by the oil majors Shell and BP prior to the EU ETS, the Commission contributed to shape the positions of most industrial actors and green organizations. Furthermore, local authorities that gained a prominent place in early accounts of MLG have been virtually absent in the making of the EU ETS. Second, MLG (and LI) emphasises EU internal factors to explain EU integration and policy making and say little about external factors. Change in international environmental agreements, here represented by the Kyoto Protocol and political developments within the climate regime are important to understand what happened in at least three ways (Oberthür and Tänzler, 2007; Skjærseth and Wettstad, 2008a). First, the Kyoto Protocol originally included the idea of emissions trading against the position of the EU. Second, the EU ETS was developed by the Commission as an instrument to comply with the EU's Kyoto commitments. Third, the US exit from the Kyoto-protocol and resulting uncertainty about ratification unified EU actors in support for the EU ETS. In essence, international commitments empowered the European Commissions to take the lead.

Why did the European Commission and not the member states take the lead? There were factors that prevented the EU member states from taking the lead and factors that facilitated leadership on the part of the Commission. First, lack of fit between domestic climate policy and emissions trading prevented the majority of EU member states from embracing emissions trading. Germany, for example, has applied voluntary agreements with industry as an important climate policy instrument. The German government and industry had intended to continue with the voluntary agreements despite the plans of the European Commission. Thus, incompatibility between existing German climate policy and the proposed EU ETS contributed to the German resistance.

Second, the European Commission had some comparative advantages. In addition to its skill, energy, independent position (i.e. independent of member-state interests) and formal policy-initiating role, the Commission enjoyed wide access to relevant

stakeholders at all levels. A certain degree of cooperation was necessary at various levels of decision-making, as the EU ETS encompasses various levels of policy competencies from private companies designated as the key operators within the system to the flexible mechanisms at the heart of the Kyoto Protocol (ibid.). The failure of the EU carbon/energy tax also provided the Commission with extra motivation. Ever since the early 1990s, the Commission had been working for a common and highly structured carbon/energy tax as the core climate policy instrument of the EU. However, due to the requirement of unanimity, and to persistent opposition from industry and certain member states, it became clear around the time of the Kyoto Protocol that the carbon/energy tax would not materialize in its intended form. The EU ETS represented a promising way out of this deadlock, and it could be adopted by a qualified majority.

## 5. Conclusions

This article has explored the merits of Liberal intergovernmentalism and Multi-level governance approaches to EU policy-making particularly on the role of the European Commission and member states, seeking to understand why the EU came to adopt the world's first international emissions trading system only a few years after it had opposed emission trading during the Kyoto Protocol negotiations. The system has since developed into a highly harmonized instrument in line with Commission's original positions. The first conclusion is that the entrepreneurial epistemic leadership exercised by the European Commission was crucial for the making of the EU ETS. Most EU member states, green groups and industry knew little about emissions trading and were initially opposed, sceptical or indifferent to this policy instrument. Emissions trading had significantly more opponents than supporters in Europe, and leadership was required to change this situation. These observations generally strengthen the core expectations of Multi-level governance and weaken state-centred Liberal intergovernmentalism in this case.

The concept of "epistemic leadership" was introduced in this study to capture how a small group of dedicated individuals working in the European Commission and sharing the same belief in emissions trading as a good idea, initiated the system, built up independent knowledge and mobilized support. Epistemic leadership can be seen as a sub-category within the broad category of entrepreneurial leadership applied by scholars of EU policy as well as international cooperation. This type of leadership may be needed more generally to deal with challenges characterized by high scientific uncertainty and social complexity in which learning is pertinent, such as climate change. Searching, learning and innovation are emerging as standard features of negotiations rather than exceptions. Actors in the international climate

change negotiations must discover and explore both their own interests and possible solutions, as interests and solutions are becoming increasingly intertwined. One reason for this is the importance of technological change and innovation as part of the solution to such problems. As future technological change is surrounded by high uncertainty, the emergence or choice of a specific technology may act to change the interests and positions of key actors.

Second, the principal means of leadership involved building up independent expertise on how an EU ETS could be designed, and mobilizing support from state and non-state actors at various levels of decision-making. The Commission accomplished this by deliberate knowledge building and by organizing both inclusive and exclusive processes of consultation and consensus building. This required skill, energy and formal status as well as access to a multilevel network of concerned actors. The reasons why the Commission initiated the EU ETS can be found in a combination of motivation and ability compared to the member states. There was a need for a new climate policy instrument after the failure of the EU energy/carbon tax. This need was acted upon when, shortly after the Kyoto Protocol, the Commission experienced a change of staff and, in consequence, of position on emissions trading. Although the member states may have had economic incentives and the same access to information as the Commission, lack of fit between domestic climate policy instruments and emissions trading served to prevent them from taking the lead.

The leadership role of the EU member states is likely to diminish as a result of the enlargement to 27 member states (Wurzel, 2008). The enlargement has led to increased diversity in goals, policy instruments and regulatory styles. The entrepreneurial leadership role played by the European Commission in the EU ETS process is thus likely to be increasingly needed for further development of EU climate and environmental policy. The provision of entrepreneurial leadership is not restricted to the EU. This type of leadership can be exercised by representatives for international secretariats more generally. Even though the EU is a special case due to its supranational power, independent actors may help and facilitate common solutions when the parties are locked into negotiation problems, such as misfit between national and international policy instruments. In addition to skill, creativity and access to information and stakeholders, their most important asset is that they are not a direct part to the negotiations and obligations themselves.

## References

- Asselt, H. (2009). Study the effectiveness of the EU ETS: The EU ETS in the European climate policy mix: past, present and future. ADAM Report Project no. 018476-GOCE. Vrije Universiteit Amsterdam (IVM-VU).
- CCAP (2000) Design of a Practical Approach to Greenhouse Gas Emissions Trading Combined with Policies and Measures in the EC. Center for Clean Air Policy, Washington DC.
- Chasek, P. et. al. (1998), European Union Views on International Greenhouse Gas Emissions Trading. Working Paper 3. Columbia University, School of International and Public Affairs, Environmental Policy Studies, New York, NY.
- Convery, F. (2009), Reflections—The Emerging Literature on Emissions Trading in Europe. *Review of Environmental Economics and Policy*, vol. 3, no.1, Winter 2009, 121-137.
- Delbeke, J. (ed) (2006) EU Energy Law, Volume IV. EU Environmental Law: The EU Greenhouse Gas Emissions Trading Scheme. Claeys & Casteels, Leuven.
- European Commission (June 1998) Climate Change – Towards an EU Post-Kyoto Strategy. Commission Communication. COM (98) 353, Brussels.
- European Commission (19 May 1999) Preparing for Implementation of the Kyoto Protocol. Commission Communication to the Council and the Parliament. COM (99) 230, Brussels.
- European Commission (8 March 2000) Green Paper on Greenhouse Gas Emissions Trading within the European Union. COM (2000) 87 final, Brussels.
- European Commission (5 June 2000) Mandate – Working Group 1 of the European Climate Change Programme: “Flexible Mechanisms”, European Commission, Brussels.
- European Commission (14 May 2001) Green Paper on Greenhouse Gas Emissions Trading within the European Union: Summary of Submissions. European Commission, Brussels.
- European Commission (23 October 2001) Proposal for a Directive of the European Parliament and of the Council Establishing a Framework for Greenhouse Gas Emissions Trading within the European Community and Amending Council Directive 96/61/EC. COM (2001) 581, Brussels.
- European Commission (17 December 2008) Questions and Answers on the Revised EU Emissions Trading System. Memo/08/796. European Commission, Brussels.
- European Parliament and the Council (13 October 2003) Establishing a Scheme for Greenhouse Gas Emission Allowance Trading within the Community. Directive 2003/87/EC, Brussels.
- Fairbrass, J. and Jordan, A. (2004) Multi-level governance and environmental policy. In: Bache, I. and Flinders, M. (eds), Multi-level Governance. Oxford University Press, Oxford.
- Farrell, H. and Héritier, A. (2006) A rationalist-institutionalist explanation of endogenous regional integration. In: Börzel, T. A. (2006) The Disparity of European Integration. Revisiting Neofunctionalism in Honour of Ernst B. Haas. Routledge, New York, 57-74.
- FIELD (2000) Designing Options for Implementing an Emissions Trading Regime for Greenhouse Gases in the EC. Final report to the European Commission DG Environment, February 22. FIELD, London.
- Grant, W., Matthews D. and Newell, P. (2000) The Effectiveness of European Union Environmental Policy. Macmillan, London.
- Grubb, M., Vrolijk, C. and Brack, D. (1999) The Kyoto Protocol: A Guide and Assessment. Earthscan and Royal Institute of International Affairs, London.
- Haas, E. B. (1976) Turbulent field and the theory of international integration. *International Organization* 30, 173-212.
- Haas, E. B. (1989) When Knowledge is Power. University of California Press, Berkeley.

- Haas, P. M. (1990) *Saving the Mediterranean: The Politics of International Environmental Cooperation*. Columbia University Press, New York.
- Haas, P. M. (ed.) (1992) Knowledge, power and international policy coordination. Special issue of *International Organization* 46, 1-35.
- Hoffman, M. J. and Betsill, M. M. (2009) *The Evolution of Emission Trading Systems for Greenhouse Gases: Mapping the Cap and Trade Policy Domain*. Paper for ISA Convention in New York, 15-18 February 2009.
- Hooghe, L. and Marks, G. (2001) *Multi-Level Governance and European Integration*. Rowman & Littlefield, Oxford.
- Jordan, A. (2001) The European Union: an evolving system of multi-level governance ... or government? *Policy & Politics* 29, no.2, 193-208.
- Lefevre, J. (2005) The EU greenhouse gas emission allowance trading scheme. In: Yamin, F. (ed.), *Climate Change and Carbon Markets: A Handbook of Emissions Reduction Mechanisms*. Earthscan, London.
- Malnes, R. (1995) 'Leader' and 'entrepreneur' in international negotiations: a conceptual analysis. *European Journal of International Relations* 1, 87-112.
- Marks, G. (1992). Structural policy in the European Community. In: Sbragia, A., *Euro-Politics*. Brookings Institute, Washington DC, pp. 191-224.
- Marks, G., Hooghe, L. and Blank, K. (1996) European integration from the 1980s: State centric vs multi-level governance. *Journal of Common Market Studies* 34, 341-78.
- Moravcsik, A. (1999) A new statecraft? Supranational entrepreneurs and international cooperation. *International Organization* 53, 267-396.
- Oberthür, S. and Tänzler, D. (2007) Climate policies in the European Union: The influence of international regimes in policy diffusion. In: Harris, P. G. (ed.), *Europe and Global Climate Change: Politics, Foreign Policy, and Regional Cooperation*. Edward Elgar, Cheltenham, 255-278.
- Peterson, J. (2004) Policy networks. In: Wiener, A. and Diez, T. (eds.), *European Integration Theory*. Oxford University Press, Oxford, pp. 117-135.
- Rosenau, J. N (1992) Governance, order and change in world politics. In Rosenau, J. N. and Cziempel, E. O., *Governance without Government*. Cambridge University Press, Cambridge, pp. 1-29.
- Skjærseth, J. B. (1994) The climate policy of the EC: Too hot to handle? *Journal of Common Market Studies* 32, 25-45.
- Skjærseth, J.B. and T. Skodvin 2003. *Climate change and the oil industry: Common problem, varying strategies*. Manchester: Manchester University Press.
- Skjærseth, J. B and Wettestad, J. (2008a) *EU Emissions Trading: Initiation, Decision-making and Implementation*. Ashgate, Aldershot.
- Skjærseth, J. B and Wettestad, J. (2008b) Implementing EU emissions trading: Success or failure? *International Environmental Agreements* 8, 275-290.
- Skjærseth, J. B. and Wettestad, J. (2009a-forthcoming) The origin, evolution and consequences of the EU emissions trading system. *Global Environmental Politics*.
- Skjærseth, J. B. and Wettestad, J. (2009b) Explaining the significant 2008 changes in EU emissions trading. Paper presented at the International Studies Association 50<sup>th</sup> Annual Convention, New York, USA, 15-18 February 2009.
- Summary Records (2000-2001). Summary Records of the 10 working groups, [http://ec.europa.eu/environment/climat/emission/history\\_en.htm](http://ec.europa.eu/environment/climat/emission/history_en.htm)
- Trondal, J. (2007) The public administration turn in integration research, *Journal of European Public Policy*, 14, 960-972.
- Underdal, A. (1991) Solving collective problems: Notes on three modes of leadership. In: *Challenges of a Changing World*, Festschrift to Willy Østregren. Fridtjof Nansen Institute, Lysaker, pp. 139-153.
- Underdal, A. (2002) One question, Two answers. In: Miles, E., Underdal, A., Andresen, S., Wettestad, J., Skjærseth, J. B. and Carlin, E.M., *Environmental Regime Effectiveness: Confronting Theory with Evidence*. MIT Press, Cambridge, MA, pp. 3-45.
- Voss, J.P (2007). Innovation processes in governance: the development of 'emissions trading' as a new policy instrument. *Science and Public Policy*, 34 (5), 329-343.
- Wettestad, J. (2005) The making of the 2003 EU emissions trading directive: Ultra-quick process due to entrepreneurial proficiency? *Global Environmental Politics* 5, 1-24.
- Wurzel, R.K.W. (2008). *Environmental Policy: EU Actors, Leader and Laggard States*. In Hayward, J. ed. *Leaderless in Europe*. Oxford: Oxford University Press.
- Young, O. R. (1991) Political leadership and regime formation: On the development of institutions in international society. *International Organization* 45, 281-308.
- Young, O. R. (1999) Comment on Andrew Moravcsik, 'A new statecraft? Supranational entrepreneurs and international cooperation', *International Organization* 53, 805-809.