## Rapid Turns in European Renewable Energy Policy

Advocacy and Framing in the Proposed Trading of Guarantees of Origin

a CANES Working Paper

Måns Nilsson, Lars J. Nilsson and Karin Ericsson





## Rapid Turns in European Renewable Energy Policy

Advocacy and Framing in the Proposed Trading of Guarantees of Origin

a CANES Working Paper

Måns Nilsson Corresponding author Stockholm Environment Institute (SEI) Kräftriket 2B, SE-10691, Sweden mans.nilsson@sei.se

Lars J. Nilsson and Karin Ericsson Environmental and Energy Systems Studies Lund University Box 118, SE-22100 Lund, Sweden

October 2008



#### Copyright © Fridtjof Nansen Institute 2008

#### Title

Rapid Turns in European Renewable Energy Policy: Advocacy and Framing in the Proposed Trading of Guarantees of Origin

Publication Type and NumberPagesFNI Report 9/200833

Author(s) ISBN

Måns Nilsson, Lars J. Nilsson and Karin
Ericsson
978-82-7613-534-3 print version
978-82-7613-535-0 online

Project ISSN

CANES 1504-9744

#### **Abstract**

The EU has assumed ambitious targets and strategies for the promotion of renewable sources of energy (RES) binding to all its member states. This report examines the proposed EU-wide policy instrument designed to help achieve the targets on renewable electricity and heat - the trading of Guarantees of Origin (GO). It analyses the rise and fall of the GO trading proposal in the European policy-making machinery during 2007 and 2008. It first discusses its origins, key components and points of contention, and then examines key factors behind the policy development leading first to its development and subsequently to its probable abandonment in 2008. Addressing these factors, the report explores first the near-term policy-making process before and after the proposal on GO trading was tabled in January 2008, focusing on processes in the European bureaucracy and how they were influenced by different interest groups and member state governments. It then looks at how competing policy frames over time have shaped the GO debate. Results show how a strong internal market frame acted as a primary driving force in the Commission throughout the 2000s to promote the GO trading instrument. The subsequent deconstruction of the GO trading proposal can be largely attributed to a) the lack of a strong lobby in favour of GO among member states and interest groups, b) the accumulated experience with and institutionalisation of national RES support policy, and c) growing general political concerns among both member states and EU bodies for supply security, innovation and competitiveness. In the end, the fall of the GO trading instrument is indicative of how the underlying political dividing line between advocates of the European internal market and guardians of national interests has moved in favour of the latter in recent years.

#### **Key Words**

Europe, renewable energy, Guarantees of Origin, certificate, feed in, policy instrument, framing, advocacy

#### Orders to:

Fridtjof Nansen Institute Postboks 326 N-1326 Lysaker, Norway. Tel: (47) 6711 1900 Fax: (47) 6711 1910

Email: post@fni.no Internet: www.fni.no

## canes

**CANES** (Climate change Altering Nordic Energy Systems) is a Norwegian-Swedish research project in which Nordic research institutions cooperate with some of the most prominent players in the energy sector to find answers to the following question:

How are the Nordic energy markets and infrastructure affected by existing and future climate policies on EU and national levels?

The Fridtjof Nansen Institute (FNI) is the co-ordinator of this 2007-2010 project. The research tasks are conducted by FNI in collaboration with the Stockholm Environment Institute (SEI) and Lund Institute of Technology. Energibedriftenes Landsforening (the Norwegian Electricity Industry Association), Norsk Industri (the Federation of Norwegian Industries), Statnett, Statkraft, Svenska Kraftnät and Vattenfall are industrial partners in the project.

Most of the project funding is provided by the RENKLIM Programme of the Research Council of Norway, with additional funding coming from the project's industrial partners.

For more information, please see www.fni.no/canes

### **Contents**

1	Introduction	1
2	Studying RES policy change from advocacy and framing perspectives	3
3	The introduction of GO trading in European RES policy	7
4	Advocacy and influence surrounding the Commission's proposal	. 9
	4.1 The Commission's RES proposal preparation	10
	4.2 The Parliamentary reading and Council deliberations	11
	4.3 The role of interest groups and alliances	14
5	Policy framing of GO trading	18
	5.1 The internal market frame	18
	5.2 The supply security frame	20
	5.3 The innovation frame	21
6	Discussion	23
7	Conclusions	25
Refer	ences	29

#### 1 Introduction

Although the European Union (EU) still lacks legal competence on energy policy, this policy area has undergone ten years of intense activity and policy development at the EU level. The initiative has been particularly pronounced in the promotion of renewable sources of energy (RES being the mainstream Euro-acronym). Since the landmark White Paper of 1997 (CEC, 1997), RES has gradually risen on the agenda and is today a core strategic priority for the EU, as one key means for combating climate change and reducing Europe's dependence on fossil fuel imports. Energy policy has reached the top of the agenda – it has been injected into the new European treaty, Commissioner Barroso has formed his own high level Advisory Group on Energy and Climate Change, and EU Heads of State now routinely discuss energy and climate issues at the European Summits.

The ever-increasing policy interest and activity regarding RES led to a particularly intense policy development in 2007–2008. In March 2007, the European Council decided on an overall binding 20% renewable energy consumption target for the EU by 2020, along with targets of 20% reduction in greenhouse gas emissions, and a 20% increase in energy efficiency, which gave the decision the popular acronym '20/20/20'. Due to previous political reluctance among member states to make farreaching commitments, this decision came as a surprise to many observers. Following the decision, the European Commission was requested to elaborate and present a proposal for a directive on renewable energy containing national targets and policy instruments, and obliging member states to implement targets for the electricity, heating/cooling and transport (biofuels) sectors. In January 2008, the Commission presented just such as proposal for a directive 'on the promotion of the use of renewable sources of energy' (CEC, 2008d) as a part of a larger climate and energy package which also contained the revision of the EU greenhouse gas emissions allowance trading system (ETS) and measures for energy efficiency and carbon capture and storage. The proposed directive contained national targets for renewable energy shares, provisions for harmonisation of RES policy across the EU through trade in 'Guarantees of Origin' ('GOs') of renewable energy, and sustainability criteria for biofuels for transport. The basic function of GOs is to certify the renewable origin of electricity produced. Under the proposed GO trading system, member states as well as private actors would be able to invest in renewable energy production in another member state in exchange for GOs, which could be counted towards the national target for renewable energy shares. The proposal was processed in the European Parliament and Council during 2008–2009 and planned for adoption in 2009.

When adopted, the new RES directive will replace two existing directives: 2001/77/EC on the promotion of electricity produced from RES (the RES-E directive) and 2003/30/EC on the promotion and use of biofuels and other renewable fuels for transport (the RF directive) (CEC, 2001; CEC, 2003a). The proposed directive differs in some important respects from the two existing ones. *First*, the proposal contains binding

targets while the existing directives set indicative targets. *Second*, the proposal has a broader scope than the existing directives combined since the 20% target refers to the total energy consumption. Hence, heating and cooling based on RES may contribute to achieving this target. *Third*, the proposal introduces environmental sustainability criteria for biofuels for transport and bioliquids used for heat and electricity production. *Fourth*, the proposal harmonises the design of GOs and introduces trade in GOs, as the main EU-wide policy instrument designed to help member states achieve the targets on renewable electricity and heat production.

Two issues in particular have been controversial: i) the target for and sustainability of biofuels for transport, and ii) the harmonisation of RES policy instruments through trading of GOs (Council of the European Union, 2008d). This paper focuses on the proposed trading of GOs. The idea of GO trading was on the agenda already in the 2001 RES-E directive but was strongly resisted at the time. In the preparation of the 2008 proposal, the Commission once again tried to push for GO trading but it met considerable resistance from lobby groups during proposal preparations, and after it was put officially forward subsequent deliberations in the Council and Parliament led to its abandonment during 2008, replacing it with a fully voluntary flexible mechanism. At first sight this abandonment may appear as puzzling, in light of a) the increasing weight given in Europe to the internal energy market functioning and harmonisation of policy instruments, b) the interest in market-based instruments in general and the relative success of the European Emissions Trading System (ETS) in particular, and c) the support for the mechanism from important industrial actors, notably the large power producers. At the same time, many important member states have been against a GO trading instrument proposal ever since the debates surrounding the 2001 directive, due to for instance uncertainties about costs, and whether it would be compatible with the feed-in tariff support schemes that were in place in 18 member states in 2007 (CEC, 2008b). Being at odds with regulatory traditions for RES support in a majority of member states, it may be considered similarly puzzling that the Commission pushed for the development.

In this paper we will unpack and discuss the political dynamics behind this rise and fall of the GO trading instrument in some detail, from its origins to its eventual rejection in the Council and Parliament. It will show how the proposed RES directive in general and GO trading in particular encapsulates several unresolved policy debates originating in different problem framings, objectives and stakeholder interests. Our first analysis examines the near-term preparation of the Commission's proposal towards tradable GOs in 2007 and early 2008, and its subsequent processing in the Parliament and Council in 2008. The focus here is on advocacy and policy making in and around the European Commission, the European Council and the European Parliament, including interactions with member states and interest groups ranging from environmental NGOs, to renewable energy advocates and large industry federations. We will also try to entangle the intricate and often fluent relationships between different interests; for instance in how different industrial lobbies ally with NGOs, academics and member states. However, the near-term advocacy influences can only tell a part of the story about the rise and fall of GO trading. The idea of GO trading has longer-term historical roots and connects to important framing developments over time. Over longer periods, the explanatory power of framing and ideas in policy change is well known. Indeed, frames and advocates can often be strongly linked; advocacy and interest group influence is to a large extent about framing, in other words, attempting to convince policy makers that issue should be seen in a particular light (Baumgartner, 2007). In a second analysis, we therefore identify and characterise adjacent energy policy frames over the last decade and look at how they have influenced the GO policy agenda.

The paper proceeds as follows. Section 2 presents some conceptual departure points and keys from existing literature that help orientate our analysis. Section 3 introduces the key features of the proposed directive and GO trading proposal, and what was new about it. It will show that GO trading was suggested as the central EU mechanism to reach EU RES targets, but that many policy makers were ambivalent to it. Section 4 focuses on the processes and interactions in the European policy-making machinery during the development of the directive in 2007 and 2008, to identify and characterise what actors have driven and shaped the process - and to what effect. The section unpacks processes in the Commission, Council and Parliament and their interactions with lobby groups and member states for and against the GO trading proposal. Section 5 traces the framing of the debate about GO trading over time, and point towards the classic conflict between the internal market and the national support for industries and public goods. Section 6 discusses and interprets our results; in particular competing framing effects, the role of stakeholder interests and influences, and the battle between national interests and European market development as keys to understanding the rise and fall of GO trading in European RES policy. Finally, Section 7 concludes the paper, summarising the key messages.

# 2 Studying RES policy change from advocacy and framing perspectives

There is relatively extensive literature on the efficiency and effectiveness of different RES policy instruments, such as quotas, feed-in tariffs (FIT), and fiscal systems (Haas et al., 2004; Midttun and Gautesen, 2007), and also some analyses of RES policy making at the member state level (Nilsson et al., 2004; Toke and Lauber, 2007). It is well-known that energy producers and large consumers, NGOs and member states have attempted to shape, influence or resist RES policy development at the EU level, for instance for fear of unwanted competition or higher costs. However, relatively little has been published about the extent to which they have been able to influence the European bureaucracy towards their desired policy outcomes, and what arguments, ideas and interests have cut the most ice over time (Jansen and Uyterlinde, 2004; Toke, 2008). As a result of this gap in empirical work, patterns of influence and drivers behind energy policy change are not well documented. Nonetheless, studies of other domains of public policy development in the EU and elsewhere certainly have generated and applied enough interesting theory to demonstrate that such studies can indeed be fruitful (Coen, 2005; Mahoney, 2007; Baumgartner, 2008).

Our approach aligns with the dominant theoretical approach to lobbying as strategic communication of specialised information, which assumes that advocacy groups have policy-relevant information that the policy makers need in order to make effective decisions, but also that since goals and interest diverge, the information transmitted will tend to be biased in favour of the senders' interests. Although 'those they are attempting to convince were not typically born yesterday and fully aware of the various possible dimensions of evaluation'. (Baumgartner, 2007; p. 485), the informational advantage is known to be a source of political influence. Policy is thus shaped by informational influences of policy actors within and outside the government. Broscheid and Coen (2007) show that the volume of lobby activity tends to be correlated to the informational demand of the policy issue at hand. They furthermore argue that this perspective is particularly relevant in EU policy studies, as the European institutions more than most national governments are dependent on outside information both on technical aspects and on preferences of actors in different member states. In fact, RES policy in particular appears to be a good case. One respondent called the Commission's climate and energy package, 'the most comprehensive policy package in the history of the EU' (interview, Commission official). Its high complexity motivates the policy makers to seek information from interest groups, and its political salience and economic consequences for key economic sectors in Europe provide a strong incentive for interest groups to supply information.

Our analysis attempts to mirror Baumgartner's (2007) research challenge of a) being clear about the *range of actors*, including government officials, who may play the role of advocates, b) understanding the various *venues of policy-making*, and c) studying *framing processes* systematically. This paper examines interest group and member state influence as a shorter-term phenomenon, zooming in on developments in late 2007 and 2008 (in Section 4) and explores policy framing over a longer term – from the end of the 1990s to 2008 (in Section 5). As Baumgartner (2007) argues, the two perspectives are linked; 'lobbyists are framers, so studies of lobbying must incorporate studies of framing, including its limits' (p 486), and 'tracing how issues come to be framed [...] allow us to explain government response much better than a focus on individual lobbying tactics' (ibid). Broscheid and Coen (2007) also demonstrate a similar approach in combining what they call 'micro-level' and 'macro-level' studies of influence.

Concerning the *range of actors*, we take a broad definition of those policy interests that try to shape the policy outcome, expanding the scope from 'lobbying' to 'advocacy' (Sabatier, 1988; Baumgartner, 2007). This broader look acknowledges that not only interest groups from businesses or NGOs, but also official actors, including Brussels bureaucrats and politicians and national representatives have specialised and differential interests and frames that they advocate in the policy-making process: 'Advocates advocate; officials decide [but], those who are decision-makers in one instance are almost always advocates in another setting' (Baumgartner and Mahoney, 2002, p 23). Furthermore, European parliamentarians, Commission officials and national government representatives may work as allies of interest groups who share the same goals (Jordan et al., 2004). According to the advocacy coalition framework

(Sabatier and Jenkins-Smith, 1999), actors involved in a policy subsystem (such as energy policy) aggregate into advocacy coalitions that share beliefs and objectives and engage in some form of coordination over time. These coalitions operate competitively in the policy arena, and in the short term, the positions and interests of the dominant coalition will prevail. Mahoney (2007) argues that coalition forming depends on issue characteristics such as the level of societal impact and political salience of the issue. However, our paper does not set out to examine why the alliances form or why they choose to lobby in certain ways (Gullberg, 2008). Instead, we are interested in how alliance-building and information provision by different advocates play in to the policy formation process. In this, not only industries but also the role of NGOs is important, both as being a strong influence on EU policy broadly and as a group of actors with an historically ambivalent relationship to 'new environmental policy instruments' (Bomberg, 2007), yet over time having become more and more positive towards market-based approaches such as for instance trading systems (Nilsson, 2005). In the case of RES policy, it is an important empirical question if - and to what effect environmental groups have aligned with advocates for or against the suggested GO instrument.

Concerning venues of policy making, we examine influence through two lenses, one departing from a European-centred governance perspective and one departing from a national state perspective. These also constitute the two major pathways or levels for interest groups to influence EU policy making (Wettestad, 2008). This first perspective lends a strong role in particular to the European Commission as a 'supra-national' institution (Hooghe and Marks, 2001). Following this perspective, 'europeanization' is an important force in policy development, with the EU aspiring to very far reaching coordination of its policies, both across sectors and at multiple levels (Jordan and Schout, 2006), and exerting considerable pressure on member states to oblige through harmonising and aligning their policy frameworks. The presentation of the GO trading instrument is of course a signal of this in general terms. But more importantly, in light of the rise and fall of the instrument, the perspective would suggest that the source of these countering dynamics could be found within the European Commission itself, for instance as a reflection of competing and contradictory policy agendas between different DGs, or broader political agendas changing over time, and the relative influence of different interest groups in Brussels.

A second perspective can be deduced from a national state-oriented perspective which views EU as primarily an 'inter-governmentalist' system (Moravcsik, 1998). This perspective focuses on the member state interests and preferences as determinants of European politics, based on for instance pre-existing national policy traditions and institutions as well as what industrial interests have a strong role in shaping the national positions (Knill and Lenschow, 2005). Domestic political support may from this perspective still be the key determinant for how national governments consider EU policy instruments, and a misfit between the European-driven policy agenda and national institutional forms may heavily restrict the europeanization process (Jordan et al., 2004). This seems particularly important to investigate in the case of GO trading as

concerns have been raised about the compatibility between GO trading and national support mechanisms. The role and positioning of member state and their interests occur in different venues, including in the Commission's preparation of the proposal, but the major venue is of course the European Council formations and its various working groups.

Concerning framing processes, a study of longer term changes in the 'ideational basis' of policy has proven to be an important complement to interest-based approaches for understanding policy change (Sabatier and Jenkins-Smith, 1999; True et al., 1999). Frames can be used to define this ideational basis. Frames have been defined as the '...ways of selecting, organizing, interpreting, and making sense of a complex reality to provide guideposts for knowing, analysing, persuading and acting' (Rein and Schön, 1993). The concept belongs in the ideational tradition of political sciences. Adjacent concepts such as paradigms (Hall, 1993), belief systems (Sabatier, 1988), value systems (Dunn, 1994), and discourses (Hajer, 1995; Dryzek, 1997) all put the emphasis a bit differently but they all embrace the notion that policy change requires an evolution of perceptions and interpretations of reality that give meaning to political preferences and arguments. Sabatier and Jenkins-Smith (1999) argued that short-term changes in policy are typically coupled to changes in relative powers of advocates, whereas the main long-term source of policy change is changes in belief systems<sup>1</sup>.

In empirical terms, the framing approach prompted us to trace the debates about GO trading and EU RES policy and their framing effects back to the 1990s, being observant of dominant and stable frames that may 'lock' policy developments into certain patterns. That frames tend to be relatively stable over time is considered an important cause of the status quo or incremental nature of policy making (Schön and Rein, 1994). However, policy framing does sometimes change. Although this process is not well understood, it appears to occur as a result of ideational influences across different policy areas, what is sometimes referred to as frame bridging, alignment or integration (Benford and Snow, 2000; Nilsson, 2005). Also external factors and sudden events may contribute to reframing processes, including those events that serve to focus attention (such as the Russia-Ukraine gas conflict) and feedback about performance (such as progress reports on (lack of) achievement of greenhouse gas reductions as well as targets for RES-E and biofuels).

The influence of framing often takes the form of a normative pressure. Overarching frames, be it climate protection, competition policy or foreign policy, may normatively shape the agenda in a given sector. Bernstein (2002) demonstrated the normative influence of policy frames built into the global climate regime and its influence (but ultimately compatibility problems) with national climate policy. Tews et al (2003) studied how policy instruments diffuse across countries and suggest that diffusion is greatly enhanced when issues are framed in a global policy agenda. In their study of the EU, Knill and Lenschow (2005) argued that the Commission exerts a considerable and institutionalized normative pressure to deploy internal-market compatible policy instruments, which has a decisive influence on the policy outcome at national levels. At the same time, framing influences on policy may also be of a more horizontal and

uncoordinated nature, as indicated by, for instance, the spread of the system of feed-in tariffs to promote RES across European member states (Busch and Jörgens, 2005).

Before we dive into the empirical study, a note of caution on our approach is warranted. Arriving at plausible explanations in this web of actors, venues and frames relies on our ability to detect major trends and patterns in a highly complex reality which is currently unfolding. This compromises our ability to perform a more formalised or quantitative analysis. Rather we depend on qualitative interpretations of official policy documents, interest group publications, and partisan testimony from respondents within and around the policy arena. Results should therefore be seen as tentative rather than conclusive; and a basis for further inquiry and challenging by future research. We have conducted 15 interviews with Commission staff, country delegates, interest groups and parliamentarians. We have built upon secondary research data in publications such as Energy Policy and have analysed staff working papers, position papers and council meeting minutes over time to infer how different member state and interest group concerns are put forward and addressed.

# 3 The introduction of GO trading in European RES policy

The strive to harmonise RES policy in Europe was pointed at already in the 1997 White Paper which stated that: '... the Commission is examining closely the different schemes proposed or introduced by the member states in order to propose a Directive which will provide a harmonised framework...' (p. 15) and that 'Such an approach is an important element towards the creation of a true single market for electricity' (p. 15). In a subsequent staff working paper, the Commission put forward demands for harmonisation based on 'trade and competition-based schemes rather than the FIT system favoured by eg Germany' (CEC, 1999, p. 17).

Directive 2001/77/EC on the promotion of electricity produced from RES was adopted after several years of negotiations involving debates on harmonisation of national support systems, country targets, and the definition of RES (Rowlands, 2005). It set an overall indicative target of 22% electricity from RES by 2010, and included individual targets for each member state. (The 12 countries that joined the EU after 2001 have also assumed national targets, which reduced the overall target to 21%.). GOs were introduced in the 2001 directive as Tradable Renewable Electricity Certificates (TRECs), but the time was not ripe for harmonisation of national support systems and no agreement could be reached at that point (Lauber, 2007). In the 2001 directive, GOs primarily served the purpose of disclosure, i.e. to ensure the energy source, and time and place of the electricity production from RES. It was noted that 'This Directive does not require Member States to recognise the purchase of a guarantee of origin from other Member States or the corresponding purchase of electricity as a contribution to the fulfilment of a national quota obligation' and 'Schemes of the guarantee of origin do not by themselves imply a right to benefit from national support mechanisms established in different Member States'. (CEC, 2001, L283/34) The implementation of GOs in the following years was uncoordinated and in the absence of standards, which led to different specifications for GOs in different member states (CEC, 2008c).

The second internal electricity market package (CEC, 2003) did not make explicit mention of GOs but required that Member States ensure that electricity suppliers specify their supply mix with the electricity bills and in promotional materials. The introduction of this 'electricity disclosure' for the purpose of consumer information, in combination with emerging voluntary markets for green electricity added a new element to the debate on harmonised frameworks. Could the same RES MWh produced earn a voluntary green label, a GO, be used for disclosure, and awarded a FIT or TREC all at the same time and what risks of double counting were implied (Bodlund et al., 2006)?

After the 2001 directive, some countries introduced TRECs, and the debate on the pros and cons of TRECs vs feed-in tariffs (FIT) continued in the years to come (Haas et al., 2004). Principally, the difference between the two instruments can be said to be that the FIT sets the price but not the volume, whereas the TREC sets the volume but not the price. Proponents of TREC emphasised the economic efficiency of the system – the ability to deliver the least expensive green electricity and induce a competitive pressure on the industry. Proponents of FIT emphasised the ability of the system to deliver large volumes of RES (pointing to Denmark, Germany and Spain) but also that support levels can be adapted to the specific support needs of different technologies and contribute to building up new industry as well as induce investor confidence as a result of the fully-predictable revenue stream from the fixed price (Fouquet and Johansson, 2008). The Commission's analysts also shifted on this, having been clearly in favour of TRECs earlier (see above) it argued in 2005 (CEC, 2005), as well as in 2008 (CEC, 2008a), that well-adapted FIT regimes were generally the most efficient and effective support schemes. However, this finding continued to be contested by liberal proponents, and it did not stop the Commission from moving ahead with the GO trading instrument in the proposed new RES directive. Modelling exercises demonstrated the macro-economic benefits from efficiency increases from GO trading (CEC, 2008c), and so the debate kept raging on.

The new RES directive presented as a Commission proposal in January 2008 set a binding target of a 20% proportion of RES in the overall community energy consumption by 2020 and a 10% minimum target for the proportion of renewable energy in the petrol and diesel consumption by 2020. The 10% was to be achieved by all member states while the target on the overall energy consumption was broken down to individual targets for each member state. The individual targets range from 10% (Malta) to 49% (Sweden). They were established on the basis of the member state's proportion of RES in 2005. To this proportion an equal increase in percentage points, weighed by the country's GDP, was added. The proportion of RES in the overall community energy consumption amounted to 8.5% in 2005, thus calling for an average increase of 11.5 percentage points by 2020 (CEC, 2007). According to the Commission's

proposal, member states would now be obliged to issue harmonised GOs in the production of both electricity and heating and cooling<sup>2</sup> from RES. Trading in GOs were to be a central mechanism in the proposal to ensure that the RES targets can be reached in a cost-efficient manner across the EU. The idea was that renewable energy production would be expanded where it is cheapest and hence it would ensure a cost-efficient attainment of RES targets across the member states. Those countries that have scarce renewable resources would, instead of being forced to develop highly expensive solutions on their territory, be allowed to buy GOs from another country's production and count them towards their targets.

The proposal involved a number of prerequisites and qualifications in comparison with a 'free' market of GO trading. For example, the proposal stated that only those countries that have achieved interim targets towards their national target in 2020 would be allowed to trade their GOs. Furthermore, the proposal allowed member states to opt out of the trade in GOs. Legal experts however suggested that it was uncertain whether these limitations would comply with internal market rules, in that the limitation of trade must be proportionate to the object aimed at, and justified in that the same objective cannot be achieved by another means that is less hindering of trade (Johnston et al., 2008). As will be shown these constraints and qualifications came as a result of intensive efforts on behalf of member states and interest groups that worried about how the system would function with existing FIT systems, what the overarching legal situation would be like once the GO 'product' had been created, and how one would continue to support emerging technologies that were yet not competitive on their own terms (Toke, 2008). In the next section we look deeper into the advocacy efforts of interest groups and member states and how they impacted on the fate of GO trading.

# 4 Advocacy and influence surrounding the Commission's proposal

Advocacy and influence can take many different pathways and mechanisms and merit close scrutiny. In the following section we examine the processes before and after the Commission's proposal for a new RES directive in January 2008, with a focus on different interest groups' and member states' positioning, advocacy and patterns of influence vis-àvis the GO proposal in their interactions with the different venues of European policy-making machinery. We shall start with the central development of the proposal in the Commission up to January 23, 2008, and after that we discuss the ensuing processes in the Council and Parliament leading up to the their respective positions at the end of 2008. Finally, we examine the role of industrial and other interest groups and their advocacy across these venues. We hope to shed light on three specific questions: why did the Commission present a 'hesitant' trading proposal, what positions and interests cut the most ice in shaping the outcome of the process over time, and what were the main channels of influence?

#### 4.1 The Commission's RES proposal preparation

After the Spring Council's decision in spring 2007, the Directorate General (DG) for Energy and Transport (TREN), and its 'unit of regulatory policy & promotion of renewable energy' led the development of the RES Directive proposal. Although the Commission is formally united behind all policy proposals, disagreements between DGs are not uncommon (just like disagreements between different ministries in national governments). These differences in perspectives and interests within the Commission are routinely mediated through processes of interservice consultation, which for the RES Directive proposal began towards the end of 2007. As already discussed, a major discussion item in many policy areas, not least energy policy, relates to the promotion and development of the internal market versus the safeguard of national interests, industries or public goods such as the environment. This was a pronounced point of contention also in deliberations concerning RES policy and the GO instrument.

Disagreements between TREN and other DGs surfaced among other things on the relative merits of certificate trading and the national FIT systems. DG Competition (COMP) argued in favour of GO trading and has been principally against national support schemes. This is linked to their primary policy concern being efficiency in the internal market: 'We fear that the renewable proposal becomes terribly inefficient, when you give preferential access and so on you do not create an incentive to make the business more efficient'. (interview, commission official). The DG for the Environment (ENV) primary concern is with effective and efficient environmental protection. The DG for Enterprise and Industry (ENT) has in focus the competitiveness of European industries and hence worry about how imposed cost structures from environmental and energy policy instruments affect in particular energy-intensive industries. Interestingly, our respondents assert that ENV were more liberal-market oriented than TREN on the GO issue, and this was also validated in our respondent interviews in TREN: '...predictability and therefore investment stability is not possible in certificate systems. In the end we are talking about national citizens' willingness to pay for renewable technologies, and whether they have a different willingness to pay for a domestic windmill or one in Scotland. I think this is important, and it relates to social cohesion policy and how FITs are really important parts of the local economy. From an economic perspective sure there are losses in efficiency, but from a political science perspective you need to consider this'. (interview, Commission official) As a result, in the end, this view point of the TREN official was in relatively stark contrast to COMP and ENT; a disagreement that was not very strongly pronounced but still observable throughout our interviews.

However, TREN's agenda appears to have been more liberal at the outset. Earlier unofficial drafts of the proposal contained discussions surrounding a more potent and obligatory GO trading scheme than what ended up in the final proposal in January 2008. For instance the version of 23 December 2007 stated that countries that had not met their interim targets would still not be allowed to impose restrictions on GO trade (Toke, 2008). This suggests that TREN was more internal-market oriented and

favourable to GO trading. Toke (2008) states that in September 2007; '...anti-feed-in hardliners' within the senior ranks of the Commission bureaucracy, including Jos Delbeke (chief architect of ETS), Catherine Day, Christopher Jones, and Peter Vis, had convinced TREN Commissioner Piebalgs to introduce GO trading (p. 3).

By December 2007 several drafts had leaked during inter-service consultations. It became apparent to Brussels entrepreneurs that the cause of all the leakages was that the different DGs had difficulties agreeing (interview, industry spokesperson). The final weeks of proposal preparation up until January 23, when the proposal was formally published, saw an unprecedented lobby effort. TREN and the other DGs were visited by virtually all member states who took a variety of positions on the GO issue. Space constraints preclude a full account, but the clearest pattern is that positions were closely linked to the national support systems that had been put in place nationally. On the pro-GO side were those countries that had implemented TREC schemes nationally, would depend on GO trade because of scarce renewable resources or otherwise benefit from such trade, including Denmark, Belgium, Italy, Luxembourg, the UK, and Sweden; as well as interest groups such as RECS International (an association of market players trading in renewable energy certificates) and Eurelectric (the power-producers' lobby organization) (interview, delegation member). On the anti-GO side we found those countries that had FIT systems nationally. This involved in particular Germany and Spain, backed by Slovenia and Latvia, who went out to say that the system threatened the FIT system, as well as the renewable energy and environmental lobby organizations (see further below).

The member states and interest groups most critical to GO trading exercised a strong influence on TREN's proposal towards the end of 2007 and in January 2008. To accommodate in particular Germany and Spain, the Commission's proposal introduced an opt-out clause that would allow member states to not participate in the proposed GO trading scheme on certain justifications. The time pressure to get the proposal adopted before the new EP elections in 2009 played into this decision to put in the opt-out clause, as this would hopefully reduce the level of controversy in subsequent deliberations in the Council and Parliament. As Toke (2008) put it, 'a protracted war of attrition with the renewable lobby backed by the two EU states with the biggest renewable developments programmes would not help achieve this target [date]'. All in all, the Commission's early push for GO trading and harmonisation had been substantially destabilised and boiled down in the lobby process, and the resulting compromise proposal raised many questions about how the GO trading would actually work. As we will see, this uncertainty contributed to a further questioning of the system in the Council and parliamentary deliberations during 2008. To these processes we will now turn.

#### 4.2 The Parliamentary reading and Council deliberations

After the Commission presented the proposal in January 2008, parallel processes proceeded in the Council and the Parliament (EP). The time table was set to come to a parliamentary conclusion by the end of 2008 and a Council decision in early 2009<sup>3</sup>. In the EP, the proposal was

handled by the Committee on Industry, Research and Energy (ITRE), and the rapporteur was Green party parliamentarian Claude Turmes. Our informants stated that in the end, apart from the rapporteur and shadow rapporteur of the parliamentary readings, there are about 8-10 MPs that have 'real influence', and these are of course courted intensively by interest groups and member states in the same way as the Commission in the earlier stage.

The parliamentary reading in ITRE moved relatively quickly towards a negative opinion on the GO proposal. Our informants in February 2008 predicted that the GO proposal might not survive the EP. Indeed, the first Memorandum by the rapporteur released in May 2008 stated that: 'The triple function given in Article 8 to the GOs - disclosure, support accounting/trade and target accounting generates legal difficulties and undermines national support schemes' and 'the concept favoured by the large power producers (e.g. Eurelectric) and the traders of electricity (EFET) to bring legal certainty by creating an EU wide renewables certificate market is not the way forward'. Such a scheme would not only undermine the existing national support schemes, but also potentially generate €30 billion in windfall profits for traders and generators by moving from the technology specific average price support schemes to a marginal market where the most expensive marginal renewable certificate would set the price. (Turmes, 2008, p. 2) A major point of criticism voiced by Turmes was the 'triple function' of GOs – for information on environmental attributes and disclosure, and at the same time target counting and trade. Finally, in September 2008, the Committee reached an agreement across political parties that the parliament would reject the Commission's proposal on GO trading. Instead, GO would be used purely for verifying compliance with targets. (ENDS, 2008b)

Although member state interests have been known to play in substantially in parliamentary positions, the main and official channel for Member State governments to influence is the European Council. At the level of the Council it must first be noted that unlike earlier phases of energy policy deliberations, the climate and energy package was discussed not only by sectoral ministers but also in parallel at the very highest political level in the so-called European Summits, starting in Hampton Court summit during the UK presidency in 2005. This political salience provided a strong momentum for the detailed deliberations concerning RES policy which took place under the Council formation of the working group 'Energy, Transport and Telecommunications' after the proposal was launched in January 2008. In the ensuing months, the negotiating working group of the Council, 'the energy group' met twice a week. The group was coordinated by the presidency, i.e. Slovenia and France during 2008, and consisted of all 27 countries plus TREN officials who reacted to and provided input to the discussions. The group had the task to resolve political issues in preparation for the Council meetings.<sup>4</sup> Although opinions of member states on the GO issue were far from aligned as the Council began its processing (see above), a positive tone towards GO was maintained. The press release of the Council in February 2008 concluded that 'the importance of trade in guarantees of origin has been underlined as a flexible instrument which should enable and not hinder Member States to reach their targets..' (Council of the European Union, 2008a, p. 11).

During the spring 2008, it however became evident that GO was an increasingly contentious issue in the Council. High on the political agenda was now global competitiveness issues and the concerns with respect to competitiveness of energy intensive industries were taken increasingly seriously at the Council level. The March 2008 Summit conclusion spelled out: 'A key challenge will be to ensure that this transition to a safe and sustainable low-carbon economy is handled in a way that is consistent with EU sustainable development, competitiveness, security of supply, food security, sound and sustainable public finance and economic and social cohesion'. and 'The European Council recognizes that in a global context of competitive markets, the risk of carbon leakage is a concern in certain sectors such as energy intensive industries particularly exposed to international competition that needs to be analysed and addressed urgently [..] if international negotiations fail, appropriate measures can be taken' (Council of the European Union, 2008e, pp 11-12). The competitiveness concerns were more pronounced in the debate surrounding ETS but were not insignificant when it came to the promotion of RES, in particular as regards potential indirect effects via the policy impact on electricity prices and enhanced competition for raw materials such as forest products. Industries like pulp and paper voiced concerns about power companies' wind-fall profits under GO trading (for those that had plenty of cheap renewable power) and higher pulp-wood prices (McKinsey and Pöyry, 2007). Problems with wind-fall profits not only from ETS but also from GO trading had indeed been acknowledged by the Commission (CEC, 2008c). The growing concern for industrial competitiveness played out in favour of national support schemes and against GO trading, as national support schemes were seen as important drivers for industrial innovation and competitiveness.

In May-June 2008, member state governments remained split on the issue of GOs. However, things had started to shift more determinedly against GO trading. The progress report of the working party displayed concerns not only by those that did not want GO trading but also on behalf of member states that anticipated buying GOs to achieve their targets, who had concerns about the flexibility of the system and whether there would be enough GOs on the market (Council of the European Union, 2008d). Ultimately, the national positions in the Council meeting minutes reveal that also several GO friendly countries were turning more negative or becoming uncertain about the merits of the system, with Finland, for instance advocating opt-in (a required decision to join the trading) instead of opt-out (a required decision to leave the trading). Also Belgium rejected the GO trade, and argued that one needs to separate the disclosure instrument from the flexibility instrument.

The overall picture of positions at the time suggest that the opposition had been rising, with many governments viewing the proposal as too uncertain and concerned that as a matter of subsidiarity, national support schemes must be fully respected and intact (Council of the European Union, 2008b). GO proponents like the UK agreed the Commission's proposal was problematic and worked towards an alternative flexible mechanism together with e.g. Poland and Germany. On July 10<sup>th</sup>, the Council, now under the French presidency proposed new wording on guarantees of origin (GO). According to this proposal, GOs will only be

used to verify countries' progress towards meeting their targets, and will not be tradable; 'Member States shall recognise guarantees of origin issued by other Member States in accordance with this Directive, exclusively as proof of the elements referred to in paragraph 2' [i.e. demonstrate that the electricity is indeed from renewable sources – authors' comment] (Council of the European Union, 2008c, p. 13).

The Council process had thus aligned with and reached a similar outcome as the parliamentary process. The Council and parliament processing of the proposal was a clear signal that the GO instrument and its internal market orientation were not favoured by the most influential politicians and member states. As a result, the trading component was not only boiled down in the fashion of the Commission's compromise proposal in January 2008, but rejected by both the Council and Parliament in favour of an alternative mechanism suggested by the UK. Interest groups that had been actively engaging against GO trading had won an important victory. We will now turn to examine the patterns of interest group advocacy and influence on this policy development.

#### 4.3 The role of interest groups and alliances

The development of the RES directive was during 2007 and 2008 a target for frenetic lobbying from various interest groups. This was a contrast to previous rounds of European energy and climate policy in the early 2000s, such as the 2001 directive and the first ETS directive (CEC, 2003b). Although the 2001 directive was indeed surrounded by a lot of advocacy, the level of intensity was much lower. Many of our stakeholder informants testify having been very ill-prepared - 'we slept in class' as one interviewee wryly put it. For instance, to many stakeholders the ETS directive in 2003 came as a surprise, and the consequences it would have were not well understood. Industries could consider themselves lucky in the first round of ETS due to a very generous (and free) allocation of quotas, but in hindsight they could clearly see that indirect effects (via the electricity price) was punishing them and transferring wealth to power producers (Wettestad, 2008). The concern was pronounced in the case of ETS but was also clear in the RES policy debate. Not until several years into the 2000s did most industrial actors (energy users) catch up on the RES policy debate and formed positions (interview, industrial lobbyist).

According to our interviewees, by 2007, the capacity to analyse climate and energy policies among both industrial and environmental stakeholders was much greater than before – organisations were better prepared and informed, and able to interpret and form positions on the complex packages of draft proposals, positions, and communications floating out from the Commission. Still, stakeholders that wanted to advocate their position in the most important arenas were faced with a daunting task. As one respondent put it; 'to play chess on seven boards at the same time', they needed to lobby the Commission, the Parliament, the National associations, the national government representatives, and EcoSoc. They also needed to work with the Brussels press (eg European Voice and the Ends Report), and various international policy arenas such as the IEA, OECD, G8, IPCC, all important bodies in framing the debate (interview, industrial lobbyist).

Managing the lobbying efforts on the climate and energy package in general, and ETS and RES in particular, became a daunting task also on the recipient end, i.e. for the Commission officials and Parliamentarians. One ENV official told us, 'One gets surprised when Birdlife International calls to request a meeting about GOs'. Another one pointed to a wellcoordinated lobby; 'The lobby has been quite united we notice. I have never seen so many letters, all the way up to Baroso, Dimas, and Verheugen, which unfortunately all get referred to us so we spend all nights answering letters...always with the same contents' (interview, Commission official). In this process, it appears that the Commission showed considerable political skill in mediating and finding a viable route forward which was acceptable to most parties. At the presentation of the Commission proposal in January 2008, many - indeed most interest groups that we interviewed considered themselves to have been successful in influencing the development of the proposal, although there were some exceptions.

Our examination of the consultation processes leading up to the proposal fits the description of the EU as an 'elite-pluralist' system in which access to policy making is restricted to a few policy players. There is a relatively well-defined set of organizations (see below) that is consistently present in the discussions around RES policy in the EU. Our informants testified that consultations are always addressing these same actors and if you are not part of them you are out of the loop. However, although the participation was limited to 'the usual suspects', the complex implications of the RES proposal created a complex pattern of advocacy in which positions and opinions were distributed in new and atypical ways.

In favour of GO trading we find first the major power producers and their associations. The major lobby of power producers is Eurelectric, whose members are the national energy associations. Their advocacy took primarily an ideological stance based on the internal market logic and European perspective (see Eurelectric, 2006). However, it should be noted that Eurelectric may not just be arguing on the basis of ideas, as GO trading could generate windfall profits for their members as the price of the GO will follow the costlier renewable technologies on the margin (CEC, 2008c) They were therefore initially critical to the continued existence of FIT and favourable to a harmonised system based on trading (Eurelectric, 2006), mirroring for instance the long standing position of for instance E.ON and RWE in Germany and Vattenfall in Sweden. However, although such power giants cut plenty of ice in Eurelectric, the organization actually represents diverging interests in terms of power technologies and nationalities and therefore had difficulties to form positions on RES policy. Therefore, their voice on GO tended to not be particularly strong, although it was aligned with the internal market framing as well as the positions of the powerful DG Competition. Therefore, at the final stages of Commission preparations, Eurelectric put forward a rather nuanced position on GOs, and rather than arguing forcefully about harmonisation of instruments their position was that it should be an open choice between FIT systems and GO trading (Toke, 2008).

Also mildly favourable to GO trading, but with an even broader constituency behind it, was Business Europe. Due to the broad membership, some members were for and others against GO trading, and even the national associations were divided on this, but as our respondent stated: 'We have to square the circle somehow. Here in Brussels we are more pro-GO, because we think the subsidy costs are too high, and trading would be more efficient'. The association however moved their position during 2007 just like the Commission did. 'Particularly we were first in favour of GOs and wanted to push that, but then [...] some members slowed this process down'. Thus, the broader business organizations who started out with a positive position towards GOs on rather principled grounds, did not maintain a strong position because their member organizations had diverging interests. Certain country organizations were in favour and others were against, and the dividing line was very close to the dividing line in member state government positions. More strongly in favour of GO trading, and of considerable importance in the equation, were those businesses concerned with the trade itself, in particular RECS International (Renewable Energy Certificate Systems), i.e., the association of traders in certificates, and the Association of Issuing Bodies (AIB), that represents the interests of certificate system administrators, and which tends to liaise with RECS and also with Eurelectric. Their tone was stronger. In June 2008 they published a 'legal opinion' by DLA Piper (2008) against the Council's suggested restrictions in GO trading: 'The proposals would create restrictions that are likely to be arbitrary, disproportionate and therefore illegal', according to the legal advisers. An alternative plan presented by parliamentary rapporteur Claude Turmes was also criticised for being 'peppered with extensive and unnecessary restrictions' and 'clearly illegal' (ENDS, 2008a).

What about the energy intensive industry, such as pulp & paper, chemicals or steel? Their lobbying has traditionally been oriented primarily at member state governments. At EU level, they have often left it to Business Europe to approach the Commission (interview, industry lobbyist). This has been less than optimal given the diverging interests going into Business Europe, so things take a long time and the voting procedure can lead to blockings. Furthermore, national lobbying became more complicated by the fact that the decisions now are taken at the highest political level - ultimately they need to convince the Prime Minister/President to bear in mind their concerns when going to Brussels. Therefore, this time around energy-intensive industry changed tactics and indeed appears to have been better prepared than in previous rounds of policy development. In Brussels, an alliance of energy intensive industries was formed in 2003, and they were successfully raising the issue of competitiveness and windfall profits. Their primary focus was however on the ETS scheme which they consider a more critical aspect for the future of European industry than RES polices. The pulp and paper industry is the notable exception, as they are intimately linked to both the supply and competing demand of bioenergy. CEPI, their European Association, argued strongly against GO trading as they saw rapidly increasing costs for their biomass input due to competing demand for bioenergy (interview, industry lobbyist).

The High-Level Group on Energy, Environment and Competitiveness led by Industry Commissioner Verheugen from 2006 to 2007 may exemplify the relative success of European energy-intensive industries. Its creation and outcome were reflections of the top-level concern in the Commission and Council for the goal conflicts between industrial competitiveness and environmental stewardship. This was an interesting arena that according to our informants started out as a political battle field with a lot of conflict, but then evolved into a more learning-oriented platform and an 'elite test bed' for new policy. The high-level group demonstrated the renewed concern for the energy-intensive industry and the core political question about the future of industry in Europe which was also mirrored in the Council deliberations in 2008 (see above). This was particularly salient when it came to the ETS agenda, but as we will see in the next section, competitiveness concerns did not match the internal market policy agenda, and although the Group argued in favour of internal market functionalities and harmonised instruments generally, it never once mentioned the issue of GOs or certificates trading in its five reports.

Another important strategy was the joint-fact finding approach initiated by the pulp and paper industries association (CEPI). Together with McKinsey, a consultancy, they performed an impact study within which Commission officials were working jointly with industry<sup>5</sup> (McKinsey and Pöyry, 2007). This was an unorthodox way but apparently also successful as the joint work with Commission people seemed to have contributed to building trust and learning. The lobby got their message across, and on top of it became perceived as a constructive and reliable discussion partner; 'Some lobbies are much more aggressive than others [...] whereas pulp and paper we very much like with their balanced and constructive approach' (interview, Commission official).

Most vehemently against the use of GO trading we find organizations promoting the interests of the new renewable energy industries (eg wind and solar), and their umbrella organization the European Renewable Energy Council (EREC) and European Renewable Electricity Federation (EREF) - an organisation for independent power producers that exclusively produce renewable electricity. These groups were according to a Commission official we interviewed 'very good at getting their point across'. EREC lobbied against GOs, since they represent equipment producers and manufacturers that would benefit from binding targets, and they represent small producers that may have difficulties dealing with the liberalised market. Large companies such as those that typically dominate Eurelectric positioning can compensate and invest so that they can handle the administrative demands and transaction costs involved in TREC schemes, but smaller ones do not have sufficient resources. EREC and EREF advocated in favour of FIT systems which they claimed to be less costly and to generate more investment in renewable energy than certificate trading (Fouquet and Johansson, 2008). Our respondent from the RES lobby expressed disappointment with what they saw as inconsistent behaviour of the Commission regarding GOs. 'In the Commission assessment of different policy schemes they found that the FIT scheme is the best alternative. Shortly after that assessment they claimed that they cannot pick a winner, and finally they included the transfer of GOs in their proposal' (interview, industry lobbyist).

Alongside the industries advocating against GO trading were the most important environmental NGOs in Brussels, including the European Environment Bureau (EEB), IUCN, Climate Action Network, Greenpeace, WWF, and Friends of the Earth. As testified by both interest groups and the Commission officials, these have generally become very influential in Brussels. The green groups were not uniformly against GO trading – for instance, large Swedish NGOs were in 2007 positive to the instrument. In fact, sometimes even subunits within NGOs would have diverging interests. For instance, a forestry conservation unit would be against biofuel targets whereas a climate unit would be in favour (interview, industry lobbyist). Like for the business groups, such divergence in interests lead groups to seek out alliances externally. Our Commission respondents noted that the lobbies against GO trading were increasingly working through ad hoc forms of alliance-forming between industrial actors, national governments and NGOs. This had over the last few years grown to become increasingly important strategies in particular for certain industry branches such as the pulp and paper industry, who cooperated with NGOs on adjusting the biomass targets or enhancing the sustainability criteria (CEPI and WWF, 2006). But generally, NGOs and the renewable energy industry associations pushed for keeping the targets in and to stop the GO trading. They got their way with the limitations of the GO system.

### 5 Policy framing of GO trading

As the previous section has shown, much of the controversy before and after the RES-directive proposal of January 2008 referred to technical and legal matters concerning the compatibility of GOs with national support schemes (DLA Piper, 2008; Johnston et al., 2008). Underlying this there are political concerns about competitiveness, innovation and market functionality, a debate that can be traced back and more fully understood in the context of different policy frames playing into European energy policy and influencing the RES policy development over the last decade. These frames have guided how problems have been understood and objectives and instruments have been set. Below we discuss how three key EU-wide policy frames have contributed to the framing of the GO trading proposal and the surrounding debates: the internal market frame, the supply security frame, and the innovation frame.

#### 5.1 The internal market frame

One overarching and influential frame within energy policy in Europe, and indeed constituting a dominant paradigm for European public policy overall, concerns the creation of the internal market. This backbone of the European Treaty is of course rooted in a much broader wave of liberalisation that occurred across sectors in the 1980s and 1990s. It reached the electricity sector as most other sectors, and advanced in certain European countries first. In 1989, the UK reformed its electricity market, followed by Norway in 1991. The Internal Electricity Market (IEM) Directive came in 1996 to achieve electricity sector liberalisation across the EU (CEC, 1996; European Parliament and Council of the European Union, 1996). This liberalisation of the electricity sector redefined the view on the energy sector in general and the role for power companies in particu-

lar. They now had to operate under (in theory) competitive markets and could therefore no longer easily pass through costs and maintain the 'social obligation' they had in past regulated markets, for example, by making substantial investments in RES technology R&D or providing electricity at regulated price levels. In reality, the uneven opening of the market and oligopolistic characteristics of the industry structure has caused important competition distortions (Kemfert, 2007). The Commission has however continually – and successfully, pressured on towards further liberalisation through the 1<sup>st</sup> (1996), 2<sup>nd</sup> (2003) and 3<sup>rd</sup> (2008) electricity market packages, albeit facing strong resistance from incumbents and powerful member states such as Spain, France and Germany (Eikeland, 2008).

The 2<sup>nd</sup> market package in 2003 introduced the instrument of electricity disclosure which requires the introduction of a tracking system for electricity (European Parliament and Council of the European Union. 2003). Such disclosure had however been on the agenda long before that. Power companies and environmental NGOs early on identified the potential in a voluntary green power market, i.e., by adding environmental attributes and thus value to the anonymous commodity of electricity. One of the first NGO-operated green labels for electricity in the world was launched by the Swedish Association for Nature Conservation in 1996 when the Swedish market opened up to retail competition. Simultaneously, power companies started marketing electricity specified according to its origin. In 2001, Vattenfall, the Swedish government-owned power company, issued the first Environmental Product Declaration for electricity, capturing a growing market interest for information on the environmental attributes of electricity. This was immediately feeding into various GO developments in different member states. GOs were the preferred way to certify that the electricity sold was indeed renewable. Energy companies from a few countries, including the Netherlands, Denmark and Norway realised early on that a system of standardised certificates would be needed for harmonisation and started up the voluntary Renewable Electricity Certificates System in 1999. 140 million certificates (140 TWh) were issued in 2007 for the purpose of electricity disclosure. Greenprices, a marketing website for green power was launched in 2000 as an initiative of Ecofys, a European consultant firm in the field of renewable energy. The struggle between various stakeholders continued over control of this green market and what should constitute 'green' or 'renewable', with heated debates in particular concerning the issue of hydropower. The importance of keeping checks and balances of environmental attributes was underlined by the debate on sustainability criteria and associated certificates for biofuels (CEC, 2003a).

The internal market frame dominated much of the energy policy agenda in the 1990s and 2000s, and it inevitably spurred the debate also on RES support policy options. The framing implication was to develop policy instruments that were compatible with market functionalities and that promoted European cooperation and exchange. This was the context in which the original GO solutions were introduced, as EU-harmonised 'certificates of origin' subject to trade and competition in a 1999 Commission working document (CEC, 1999). Inspired by contemporary ideas

on market-based policy instruments, which had been tested in the US for the regulation of sulphur emissions, interest grew in different kinds of trading mechanisms under a quota obligation, and in particular what is now known as tradable renewable energy certificates (TRECs) (NARUC, 1994; Rader and Norgaard, 1996). The promotion of such solutions by the Commission exerted a normative pressure on national support schemes, and in particular challenged approaches such as regulating rates and forcing electricity suppliers to purchase RES power from independent power producers (FIT). The quota obligation system aims to support new electricity production from RES by increasing demand for it. This is done by establishing a quota obligation, the required proportion of electricity from RES, which is imposed on consumption, often through supply or distribution companies. To simplify the verification of compliance, and to provide flexibility in achieving compliance, quota-obligation systems often use TRECs that represent a particular amount of electricity produced from RES. TREC trading has since been implemented in some EU member states (such as Sweden, the UK, Italy and Belgium) and there is also international TREC trade since 2002.

The popularity of the trading mechanism was not unique to RES policy makers, but also in other energy policy domains, in particular in the ETS for climate change which was put in place in Europe in 2003 (CEC, 2003b) and the White Certificate schemes in the Energy Services Directive (CEC, 2006a) to further develop the market approach in energy efficiency improvement.<sup>6</sup> The mid 2000s indeed saw a proliferation of proposals for different types of certificates (Bertoldi et al., 2005). In addition, Italy, France and the UK introduced quota systems to promote renewable fuels in transportation. The UK quota obligation scheme, the Renewable Transportation Fuel Obligation (RTFO), including trade in certificates, was introduced in April 2008. Also in 2008 an association was formed to promote a proposal for introducing Biofuel GO trading at the EU level.<sup>7</sup> Critical voices to trading instruments were initially dominating in environmental bureaucracies both in the DG ENV and in national governments, but this has gradually changed over the last decade (Nilsson, 2005; Wettestad, 2008). Still, many observers within the energy policy arena remained sceptical towards the proliferation of marketcompatible policy, and in the RES policy area the effects of concerns voiced under supply security, innovation and competitiveness frames played into the overall reluctance. We will now turn to examine the influence of these adjacent frames.

### 5.2 The supply security frame

While the internal market frame has had a strong grip on policy making over an extended time period, more recently, another pillar of energy policy has grown in strength, framing energy issues in the light of growing supply security concerns. This has largely been triggered by the dependence on Russia for energy as well as increasing oil prices. During the 2000s, EU policy-makers observed how Russia with ever-increasing confidence went in a non-market direction, with more centralised power structures and enhanced state control on energy supply (interview, national delegation representative). In particular the Russian-Ukraine gas dispute in 2005, culminating with a temporary shutting down of gas

supply to the Ukraine on the 1<sup>st</sup> of January 2006, was a wake-up call, prompting enormous media and political attention, and triggering fears that Russia will use energy supply as foreign-political leverage also in contacts with EU member states. This concern put the energy issue right at the top of the policy agenda, which created a momentum and political will for a strong RES policy which ultimately contributed to the 20/20/20 Council decision in March 2007. The events in 2005-2006 caused the Commission to change somewhat the direction of the green paper published in March 2006, putting stronger emphasis on the supply security as an equally important pillar in European energy policy (CEC, 2006b).

In the mid-2000s, the EU also seeked a stronger integration of energy issues into the European neighbourhood policy (ENP), which the EU set up in 2004 to improve its ties with countries in North Africa, the Middle East and the former Soviet republics. An energy community treaty was developed, with Balkan states and other eastern non-members (but potential candidates) who now are being asked adopt EU energy regulations to be able to integrate into the European system of RES policy. 2008 saw the launch of a new initiative, the Neighbourhood Investment Facility (NIF), equipped with a €700 million budget until 2013 aimed at increasing investments in partner countries in the energy, transport and environment sectors.

These events are indicative of a growing strength of the supply security frame. An internal-market frame would rather have worked towards deepening the integration within the EU. Also coupled to this shift towards the supply security frame was also the growing interest on behalf of member states to retain national control over energy policy versus ceding more powers to the EU. As such it fed into the challenging of and opposition to a European harmonisation overall and the GO trading instrument in particular. Not only would the GO trading mean giving up some national sovereignty on energy policy, it would also lead to a less stable investment conditions on renewable energy technologies.

#### **5.3** The innovation frame

The concerns about investment in new renewable technologies were not only critical to the supply security frame but also at the core of a third frame, concerned primarily with the innovation and long-term competitiveness of the European economy. The innovation frame has ever since the Lisbon agenda was established constituted a very important influence on European policy perspectives (CEC, 2002). The Lisbon agenda sets out to make Europe 'the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion'. The agenda builds on an innovation framing of public policy, which asserts that Europe in order to stay competitive needs new companies in the new markets such as renewable energy and green technology. The frame is thus concerned with the long-term potential for innovation contributing to European competitiveness overall, and not so much traditional sectors. In this frame, market formation and scaling up require differentiated, technology specific support measures, and different price dynamics

(Jacobsson and Lauber, 2006). In particular, early-stage energy technologies need not just R&D but also differentiated price support (Midttun and Gautesen, 2007). The frame has become an important policy frame in the energy sector, and at the national level it has quite long historical roots. Such RES policies started in the 1970s in some countries, well before liberalisation was on the agenda. Around 2000, several countries had already promoted RES through investment and production subsidies for many years. Denmark was a forerunner with successful programs for supporting wind power. Sweden had promoted energy crop plantations earlier on (Nilsson et al., 2004). Germany came somewhat later but gave the RES support a stronger institutional setting through the Feed-In-Law in 1991. The FIT system obliges utilities to purchase all eligible electricity generated from RES that is delivered to the grid at a set price, the FIT. As generation costs differ across renewable energy technologies, the FIT set by the government is usually different by technology and provided for a specified period of time. At the time of introduction and indeed throughout the 1990s it was controversial and strongly contested by German energy companies (Jacobsson and Lauber, 2006). Still, the system proliferated in Europe and by 2003, 18 of the current EU countries had adopted FIT systems, although this was in principle opposed by the Commission in the late 1990s and early 2000s, as it argued for TREC mechanisms to support renewable energy on the basis of the internal market (CEC, 1999). Eventually, the pressure from the Commission's internal market policy did lead to certain abandonment of FIT, in eg Poland, Denmark and Italy. Countries such as the Netherlands, Denmark, the UK and Sweden were then turning to quota based systems with TRECs, although the Danish scheme never came to fruition partly due to lobbying against it by the RES industry (Busch and Jörgens, 2005).

Although the innovation frame has been very prominent in the European policy agenda overall, it was not strongly present in the Commission's climate and energy package. Innovation support measures had been packaged separately, in for instance the Environmental Technologies Action Plan (ETAP) and the January 2008 package was much more concerned with providing 'sticks' rather than 'carrots', by way of imposing economic costs on actors to change behaviours. Industry stakeholders were worried about how the innovation rhetoric of the Lisbon strategy could be realized to support European industries in managing the transition to a more climate-friendly structure. The national systems of FIT were advocated as a mechanism for innovation support and to promote the growth of new and greener industries (Jacobsson and Lauber, 2006). The failure to create comparable innovation policy instruments at the European level may have contributed to the resistance to give up the national support, despite the inefficiencies involved in having differential FIT systems across Europe. The growing importance of the innovation frame also led to growing concerns among EU politicians that the United States, who is traditionally going more for 'carrots' on matters of industrial policy, would 'steal' the leadership from the EU in future climate efforts through their RD&D investments into renewable energy innovation that are unparalleled in Europe (interview, Commission official). This growing uneasiness may well have played into the political reluctance towards GO trading in the Council and Parliament in 2008. At this point in time, the framing power of competitiveness concerns and security of supply were growing stronger and came to overrun the internal market frame. Simply put, in 2008, the time was not right further market-orienting of climate and energy policy. Comparing RES policy with climate policy, a DG ENV official asserted that 'if we had had in 2003 the competitiveness debate that we have today, I do not think the ETS would have survived' (interview, Commission official).

#### 6 Discussion

Geopolitical and global economic developments induced an unparalleled momentum in European RES policy between 2005 and 2008. Energy moved up to a head-of-state level under the UK presidency at the Council meeting at Hampton Court in October 2005. Triggered by supply-security (Russia), energy prices, and climate change concerns, the European Heads of State expressed their interest in revitalising Europe's energy policy and renewable energy promotion went to the top layer of the European policy agenda. The Commission was asked to deliver a proposal for a harmonised European instrument, and naturally framed this design with an internal market logic, which contributed to the advancement of GO trading proposal in the RES policy directive. The internal market frame have an overarching status in the EU and has exerted considerable normative pressure on policy making in the past, for instance pushing through deregulation in the electricity and gas distribution against powerful national interests such as Germany and France, and moving ahead on reform policies that many countries would likely have been happy to avoid. The framing impact of the internal market is evident in the preference for policy instruments based on trading, which includes GOs, but also the development of ETS, and the proposal for 'white certificates' where companies can earn tradable credits from energy efficiency improvements. In particular two aspects of the internal market frame, which had developed in parallel over the last decade, drove development of the proposed GO trading; first, the interest in trading mechanisms as a way to enhance efficiency in the market and second, the interest in product disclosure to inform consumers.

Across many policy areas, the prominence of the internal market frame in European institutions is in a relatively open conflict with member states' desire to maintain national competency. Indeed, the GO trading debate is not a new one; it has roots in different market-based initiatives in the 1990s, and was advocated - and resisted - also in the 2001 directive preparations. In the 2008 proposal, the Commission tried to push it again. The proposal was then confronted with heavy opposition from proponents of existing national support systems, in which experiences and knowhow had accumulated over the years. The variety of national support schemes that had grown since the 1970s were based on different frames; namely the security of supply frame and the innovation frame with its ambition to nurture and develop nascent new industries. Because they were based on different frames, the objectives and designs of national FIT systems did not harmonise well with the objectives and designs of internal electricity market instruments. The European reluctance towards GO trading can be understood as yet another clash between the internal market agenda and domestic institutions. Still, despite the national resistance, and despite policy analysis from the Commission (CEC, 2008a) arguing for FITs as being more effective, the internal market continued to exert a strong framing effect in the preparation of the Commisson's proposal in 2007.

The political importance of the climate and energy package (of which GO trading was a small, but important, part), and the high stakes for stakeholders involved, provided a powerful incentive for intense lobbying. At the same time, the complexity of the package and its implications boosted the informational demand (Broscheid and Coen, 2007), providing a strong incentive for the Commission to engage with advocacy groups (as well as other information providers) and provided access for lobbies. In addition, the division within the Commission created an incentive for lobbies to mobilise. Indeed, our informants in the Commission and across stakeholder organizations testified that they had never experienced such lobbying activity for any policy issue in Brussels before. However, as we unpacked the advocacy activities, the analysis revealed a very complicated advocacy landscape in RES policy, with partly unexpected alliances and coalition formations. Through alliances, many of the groups engaged in renewable energy and environmental advocacy successfully advocated their concerns although they had far less resources than major producer organizations such as Eurelectric and Business Europe.

In the case of RES policy, advocacy coalitions are really not fully stable over time. The reason for this is that coalitions are formed based on secondary aspects such as specific positions on policy instruments and are not held together by policy core beliefs. This makes them rather unstable and uncertain alliances, across 'traditional' boundaries, and even leading to diverging positions within organizations. These alliances may sometimes form and reform across previous enemy lines as a result of specialised niche interests, but also as a result of, as one respondent put it - 'personal chemistry and contact', as organizations in the field get to know each other over time. This is in stark contrast to your mainstream advocacy situation some years back, where you could see an 'industrial block' leaning on arguments about free markets arguing against an 'environmental block' that preferred heavy state intervention. Now we see a divide between power producers and energy intensive industries, but also within sectors – be they power producers and environmentalists. Large-scale power producers having different interests from smaller ones, and while environmental groups in Brussels tended to side against GOs, green groups across Europe were far from united on this (interview, Commission official). Ultimately, the renewable energy industry and associated alliances were exceedingly influential and here counter to Bomberg's (2007) case, the influence of green groups in the end was strong. Already to reach to the 2007 target decision must be said to be a victory, and in 2007 intensive lobbying managed to disarm the pitfalls they perceived in relation to the GO trading to achieve the targets.

Over the longer term, this tendency of niche interests getting a strong voice in advocacy can be indicative of a decreased possibility for the larger organizations to maintain their positions in energy and other industrial policy. The main industrial actors constitute a range of interests vis-à-vis the RES proposal, and as their members tend to have diverging

interests, it was difficult for the broader organizations to form positions, something that was testified by both Eurelectric and Business Europe respondents. The sharper arguments were made by the smaller niche organization, which also formed alliances with green organizations. Generally, this appeared to contribute to the lack of any real pro-GO interest group lobby (apart from RECS International and AIB), although more principled arguments in favour of the internal market mechanism was being upheld by certain organizations such as Eurelectric.

Our qualitative interpretation of the RES policy case is consistent with the more quantitative analysis by Baumgartner and Mahoney (2002), showing how the resources of whole alliances are decisive for successful lobbying. This was accentuated by the ability to ally with Commission officials and member states, which appears to have been important for success. Indeed, as Baumgartner (2007) asserted, European parliamentarians and national government representatives coordinated activities with interest groups who shared the same goals. Being public policy decision makers in one setting, they were very clearly advocates in another. Member states, like other interests, operated not only in the Council, but in different arenas as well, and were highly active long before the Council formally got to work on the proposal, and outside the normal council discussions. Member states visited with the Commission, many times, and at all possible levels and DGs. As the majority of member states have FIT support systems this is a very strong explanation for the boil down of the GO system already in the Commission's proposal. In the Council preparations, member states sought to improve the bargaining position by sounding out common interest and forming coalitions and alliances before meetings, as well as developing a strategy for the negotiations. How member state interests played out in the parliamentary process, and in particular if and to what extent parliamentarians adopted a national position, is a difficult question (and a sensitive one). Our study did not examine this systematically, but our industrial interest group respondents suggest that this is bluntly the case for most parliamentarians, whereas our respondents among parliamentarians (predictably) state this is not an issue although they agreed that some parliamentarians act more in the national interest than others.

#### 7 Conclusions

This paper has analysed European RES policy making with a particular focus on the rise and fall of GO trading as the proposed main European-level policy instrument to help achieve the RES policy targets. Having researched the development 'in real time', our explorations can only be tentative and used as a basis for further discussions, and further research will certainly be able to complement the work and hopefully offer more authoritative results. Nonetheless, our analysis provides a number of interesting findings concerning the influential factors and drivers behind the rise and fall of GO trading.

The growing internal market agenda and the associated interest in quotabased trading mechanisms in different policy areas coloured the Commission's wish to develop GO trading. However, GO trading was highly contested due to its complexity, its legal uncertainties and implications on and possibly undermining of national support schemes. The idea of GO trading awakened the long-standing but yet unresolved policy debates about the harmonisation of support schemes and the relative merits of FIT versus quota obligations with tradable green certificates. As a result, member states and interest groups mobilised their resources. The sheer complexity of the climate and energy package in general, as well as of course the wide-ranging impacts on key economic sectors in Europe, contributed to an unprecedented surge in advocacy efforts in 2007 and 2008.

Provisions were made in the final stages of the proposal preparation and the Commission eventually presented a constrained compromise solution to accommodate concerns and lobbying pressures by powerful alliances, including member states such as Germany and Spain who had institutionalised FIT systems, environmental NGOs and RES industries – often connected to those member states. However, these provisions were not enough to allow the proposal to survive the ensuing parliamentary readings and council deliberations.

The abandonment of the GO trading proposal can be largely attributed to a) rapidly growing general political concerns for supply security and competitiveness, and b) lack of strong lobby in favour of GO, and c) the accumulated experience with RES support schemes. Potentially prolobbyists such as large business organizations and countries that employ quota-based support schemes were divided on the issue and could not form an unequivocal position. Furthermore, their incentive was significantly weaker than the RES industry. For many of the latter this was a matter of survival, whereas the business organizations and Eurelectric were more concerned with other parts of the package, such as ETS and the national RES targets. The opponents, while smaller in nominal terms, teamed up to strengthen their voice. In short; the GO trading proposal met very pointed and specific opposition from its opponents and much more diffuse and tempered support from its proponents.

In the end, the abandonment of GO trading is countering the overarching internal market paradigm of the EU and can be interpreted as a failure for the europeanisation process. The underlying political battle line between advocates of the European internal market and guardians of national interests, which is far from unique to energy policy, moved in favour of the latter in the case of RES policy. The debate is of course still on-going as to whether policies that nurture development, learning effects and market diffusion of RES technologies in a protected environment are better for European innovation and industrial development than harmonised market-based policy instruments intended to ensure efficient market-based resource allocation. However, advocates of the latter appear to have a lot more to prove these days.

#### **Notes**

- <sup>1</sup> Sabatier and Jenkins-Smith unpack actors' belief systems into different levels. The *policy core* includes fundamental policy positions and judgments about seriousness of issues, priority groups of concern, as well as preferences on strategies. Fundamental disagreements in a policy subsystem often emerge as a result of conflicting policy cores, and coalitions are often organized around common policy cores. The policy core is stable but can, under certain circumstances (usually external triggers) be modified through conceptual learning processes. *Secondary aspects* include sets of instrumental positions and preferences; such as budgetary allocations, and designs and levels of particular instruments and institutions. Actors within a coalition might disagree on secondary aspects, but are also prepared to negotiate on them.
- <sup>2</sup> For heating and cooling the obligatory issuing is limited to plants with a capacity of at least 5 MWth.
- <sup>3</sup> The relatively rushed time table was developed in view of the need to have a policy in place before the 2009 Conference of the Parties of the UNFCCC in Copenhagen, and in view of the change of Commission and parliamentary elections in 2009.
- <sup>4</sup> Between these two levels, also the Chief Ambassador groups, COREPER 1 and 2, check on progress before the Council meetings.
- <sup>5</sup> The report pointed to shortcomings in previous analyses, in particular relating to the EEA report 2006 on biomass availability (EEA, 2006).
- <sup>6</sup> In Art 4, 5: 5. After having reviewed and reported on the first three years of application of this Directive, the Commission shall examine whether it is appropriate to come forward with a proposal for a directive to further develop the market approach in energy efficiency improvement by means of white certificates.
- <sup>7</sup> See www.biofuelgo.org

#### References

- Baumgartner, F. (2007). 'EU Lobbying: a view from the US'. *Journal of European Public Policy* **14**(3): 482-488.
- Baumgartner, F. (2008). 'EU Lobbying: a view from the US'. *Journal of European Public Policy* **14**(3): 482-488.
- Baumgartner, F. R. and C. Mahoney (2002). Gaining Government Allies Groups, Officials, and Alliance Behavior. Prepared for delivery at the annual meeting of the Midwest Political Science Association, Chicago, Illinois, April 25–28, 2002.
- Benford, R. and D. Snow (2000). 'Framing processes and social movements: an overview and assessment'. *Annual Review of Sociology* **26**: 11-39.
- Bernstein, S. (2002). 'International institutions and the framing of domestic policies: the Kyoto Protocol and Canada's response to climate change'. *Policy Sciences* **35**: 203-236.
- Bertoldi, P., S. Rezessy, O. Langniss and M. Voogt (2005). White, green & brown certificates: how to make the most of them? Proceedings of the 2005 Summer study of the European Council for Energy Efficient Economy, Stockholm, European Council for Energy Efficient Economy.
- Bodlund, B., L. J. Nilsson, C. Hedenström and N. Andersson (2006). Electricity certificates as multipurpose tools. Paris, CIGRE.
- Bomberg, E. (2007). 'Policy learning in an enlarged European Union: environmental NGOs and new policy instruments'. *Journal of European Public Policy* **14**(3): 248-268.
- Broscheid, A. and D. Coen (2007). 'Lobbying activity and fora creation in the EU: empirically exploring the nature of the public good'. *Journal of European Public Policy* **14**(3): 346-365.
- Busch, P.-o. and H. Jörgens (2005). 'The international sources of policy convergence: explaining the spread of environmental policy innovations'. *Journal of European Public Policy* **12**(5): 860-884.
- CEC (1996). Directive 96/92/EC of the European Parliament and of the Council of Dec. 19, 1996, concerning common rules for the internal market in electricity. Brussels, European Commission.
- CEC (1997). Energy for the future: Renewable sources of energy, White paper for a community strategy and action plan. COM(97)599 Brussels, European Commission.
- CEC (1999). Electricity from renewable energy sources and the internal electricity market. Commission Working Document. SEC (99) 470 final. Brussels, European Commission.
- CEC (2001). Directive 2001/77/EC of 27 September 2001 on the promotion of electricity produced from renewable energy sources in the internal electricity market. Brussels, European Commission.

- CEC (2002). Communication from the Commission to the Spring European Council in Barcelona The Lisbon Strategy Making change happen. COM(2002)14. Brussels, European Commission.
- CEC (2003a). Directive 2003/30/EC on the promotion and use of biofuels or other renewable fuels for transport. Brussels, European Commission.
- CEC (2003b). Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community. Brussels, European Commission.
- CEC (2005). *COM*(2005)627 he support of electricity from renewable energy sources. Brussels, European Commission.
- CEC (2006a). Directive 2006/32/EC of 5 April 2006 on energy end-use efficiency and energy services. Brussels, European Commission.
- CEC (2006b). Green Paper: A European Strategy for Sustainable, Competitive and Secure Energy. Brussels, European Commission.
- CEC (2007). *Biofuels Progress Report. COM*(2006) 845. Brussels, European Commission.
- CEC (2008a). *COM*(2008)19 The support of electricity from renewable energy sources. Brussels, European Commission.
- CEC (2008b). Commission Staff Working Document: The support of electricity from renewable energy sources. Brussels, European Commission.
- CEC (2008c). Impact Assessment: document accompanying the package of implementation measures for the EU's objectives on climate change and renewable energy for 2020. Brussels, European Commission.
- CEC (2008d). Proposal for a directive on the promotion of the use of energy from renewable sources. Brussels, European Commission.
- CEPI and WWF (2006). EMPFEHLUNGEN VON WWF UND CEPI ZU EINER WIRKSAMEN UMSETZUNG DER EUROPÄISCHEN POLITIK FÜR ERNEUERBARE ENERGIEQUELLEN. Brussels, CEPI and WWF.
- Coen, D. (2005). 'Business–Regulatory Relations: Learning to Play Regulatory Games in European Utility Markets'. *Governance* **18**(3): 375-398.
- Council of the European Union (2008a). 6722/08 PRESS RELEASE 2854th Council meeting Transport, Telecommunications and Energy Brussels, 28 February 2008.
- Council of the European Union (2008b). Annexed contributions from DE/LV/HU/PL/FI/SE to the policy debate on the
- Climate and Energy Legislative Package at the Council (Environment) on 5 June 2008.

- Council of the European Union (2008c). Meeting document 2008/0016 DS 431/3/08 REV3 (draft presidency revisions). Brussels, European Council.
- Council of the European Union (2008d). Preparation of the Council (environment) meeting on 5 June 2008 and of the Council (energy) meeting on 6 June 2008. Brussels, European Council.
- Council of the European Union (2008e). Presidency conclusions, 7652/08. Brussels, European Council.
- DLA Piper (2008). Legal Opinion for RECS International on the Crossborder Trade and Redemption of Renewable Energy under the Existing and Proposed EU Legal Framework. Brussels, RECS.
- Dryzek, J. S. (1997). *The politics of the earth*. Oxford, Oxford University Press.
- Dunn, W. N. (1994). *Public policy analysis an introduction*. Englewood Cliffs, NJ, Prentice-Hall.
- EEA (2006). How much bioenergy can Europe produce without harming the environment? Copenhagen, European Environment Agency.
- Eikeland, P.-O. (2008). EU energy market liberalisation policy new political dynamics in the Brussels game? Working Paper. Oslo, Fritjof Nansen Institute.
- ENDS (2008a). ENDS Europe DAILY 2572 (26/06/2008).
- ENDS (2008b). ENDS Europe DAILY 2611, 10 Sept 2008.
- Eurelectric (2006). Comments on the Commission Communications on Support for Electricity from Renewable Energy (COM 2005(627)) and the Biomass Action Plan (COM 2005(628)). Brussels, EURELECTRIC.
- European Parliament and Council of the European Union (1996). *Directive 96/92/EC concerning common rules for the internal market in electricity*. Brussels, European Commission.
- European Parliament and Council of the European Union (2003). *Directive 2003/55/EC concerning common rules for the internal market in electricity and repealing Directive 96/92/EC*. Brussels, European Commission.
- Fouquet, D. and T. B. Johansson (2008). 'European renewable energy policy at crossroads focus on electricity support'. *Energy Policy*: doi:10.1016/j.enpol.2008.06.023.
- Gullberg, A. T. (2008). 'Lobbying friends and foes in climate policy: The case of business and environmental interest groups in the European Union'. *Energy Policy* (available online).
- Haas, R., W. Eichhammer, C. Hubera, O. Langnissc, A. Lorenzoni, R. Madlenere, P. Menanteau, P.-E. Morthorst, A. Martinsh, A. Oniszki, J. Schleichb, A. Smithj, Z. Vass and A. Verbruggen (2004). 'How to promote renewable energy systems successfully and effectively'. *Energy Policy* 32: 833-839.

- Hajer, M. (1995). The politics of environmental discourse: ecological modernization and the policy process. Oxford, Oxford University Press.
- Hall, P. (1993). 'Policy Paradigms, Social Learning, and the State: The Case of Economic Policymaking in Britain'. *Comparative Politics* **25**: 275-296.
- Hooghe, L. and G. Marks. (2001). *Multilevel Governance and European Integration*. Lanham, MD: Rowman and Littlefield.
- Jacobsson, S. and V. Lauber (2006). 'The politics and policy of energy system transformation—explaining the German diffusion of renewable energy technology'. *Energy Policy* **34**(256-276).
- Jansen, J. C. and M. A. Uyterlinde (2004). 'A fragmented market on the way to harmonisation? EU policy-making on renewable energy promotion'. *Energy for Sustainable Development* **VII**(1): 93-107.
- Johnston, A., K. Neuhoff, D. Fouquet, M. Ragwitz and G. Resch (2008). 'The proposed New EU renewables directive: interpretation, problems and prospects'. *European Energy and Environmental Law Review* **June 2008**: 126-145.
- Jordan, A., D. Liefferink and J. Fairbrass (2004). The Europeanization of National Environmental Policy: A Comparative Analysis. *Europe, Globalisation and Sustainable Development*. J. Barry, B. Baxter and R. Dunphy. London, Routledge.
- Jordan, A. and A. Schout (2006). *The Coordination of the European Union*. Oxford, Oxford University Press.
- Kemfert, C. (2007). 'The European electricity and climate policy complement or substitute?' *Environment and Planning C: Government and Policy* **25**: 115-130.
- Knill, C. and A. Lenschow (2005). 'Compliance, communication and competition: patterns of EU environmental policy making and their impact on policy convergence'. *European Environment* **15**: 114-128.
- Lauber, V. (2007). The politics of European Union support schemes for electricity from renewable energy sources. *Green power markets:* support schemes, case studies and perspectives. L. Mez. Brentwood, CA, Multi-science publishing: 9-30.
- Mahoney, C. (2007). 'Networking vs. allying: the decision of interest groups to join coalitions in the US and the EU'. *Journal of European Public Policy* **14**(14): 3.
- McKinsey and Pöyry (2007). Bio-energy and the European Pulp and Paper Industry An Impact Assessment. Brussels, CEPI.
- Midttun, A. and K. Gautesen (2007). 'Feed in or certificates, competition or complementarity? Combining a static efficiency and a dynamic innovation perspective on the greening of the energy industry'. *Energy Policy* **35**: 1419-1422.
- Moravcsik, A. and K. Nikolaidis (1998). 'Explaining the Treaty of Amsterdam: Interests, Influences, Institutions'. Journal of Common Market Studies **37**: 59-85

- NARUC (1994). Affected with the Public Interest, electric utility restructuring in an era of competition. Washington, DC, Nat Ass of Regulatory Utility Commissioners.
- Nilsson, L. J., B. Johansson, K. Åstrand, K. Ericsson, P. Svenningsson, P. Börjesson and L. Neij (2004). 'Seeing the wood for the trees: 25 years of renewable energy policy in Sweden'. *Energy for Sustainable Development* VIII(1): 36-50.
- Nilsson, M. (2005). 'Learning, Frames and Environmental Policy Integration: the case of Swedish energy policy'. *Environment and Planning C: Government and Policy* **23**: 207-226.
- Rader, N. A. and R. B. Norgaard (1996). 'Efficiency and sustainability in restructured electricity markets: the renewables portfolio standard'. *The Electricity Journal* **9**(6): 37-49.
- Rein, M. and D. Schön (1993). Reframing policy discourse. *The argumentative turn in policy analysis and planning*. F. Fischer and J. Forester. London, Duke University Press: 145-166.
- Rowlands, I. H. (2005). 'The European directive on renewable electricity: conflicts and compromises'. *Energy Policy* **33**(8): 965-974.
- Sabatier, P. (1988). 'An Advocacy Coalition Framework of Policy Change and the Role of Policy-Oriented Learning Therein'. *Policy Sciences* **21**: 129-168.
- Sabatier, P. and H. Jenkins-Smith (1999). The Advocacy Coalition Framework: an Assessment. *Theories of the Policy Process*. P. Sabatier. Boulder, Westview Press: 117-166.
- Schön, D. and M. Rein (1994). Frame Reflection: Towards the Resolution of Intractable Policy Controversies. New York, Basic Books.
- Tews, K., P.-O. Busch and H. Jörgens (2003). 'The diffusion of new environmental policy instruments'. *European Journal of Political Research* **42**: 569-600.
- Toke, D. (2008). 'The EU Renewables Directive What is the fuss about trading?' *Energy Policy* available online.
- Toke, D. and V. Lauber (2007). 'Anglo-Saxon and German approaches to neoliberalism and environmental policy: The case of financing renewable energy'. *Geoforum* **38**(3): 677-687.
- True, J., B. Jones and F. Baumgartner (1999). Punctuated-Equilibrium Theory: Explaining Stability and Change in American Policymaking. *Theories of the Policy Process*. P. Sabatier. Boulder, Westview Press: 117-166.
- Turmes, C. (2008). *Stepping into the renewable energy century*. unpublished memorandum, May 2008.
- Wettestad, J. (2008). EU energy-intensive industries and emissions trading: losers becoming winners? Working Paper. Oslo, Fritjof Nansen Institute.

The Fridtjof Nansen Institute is a non-profit, independent research institute focusing on international environmental, energy, and resource management. The institute has a multi-disciplinary approach, with main emphasis on political science, economics, and international law. It collaborates extensively with other research institutions in Norway and abroad.



## FRIDTJOF NANSENS INSTITUTT FRIDTJOF NANSEN INSTITUTE

Fridtjof Nansens vei 17, P.O. Box 326, NO-1326 Lysaker, Norway Phone: (47) 67 11 19 00 - Fax: (47) 67 11 19 10 - E-mail: post@fni.no Website: www.fni.no