

Rediscovery of hierarchy: The new EU climate policies

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Conference, EU Environmental Policy and Governance: the Challenge of Climate Change and

beyond

European University Institute, Florence, 20-21 June 2008

Version: 8.1. 2009

1. Introduction

Among the key modes of governance, hierarchy, network (negotiation and deliberation) and market, hierarchy has received relatively little interest among political scientists in recent years (Meuleman, 2008; Schuppert, 2008). Many scholars studied the potential of other modes to deliver equivalent or even better results for providing public goods: “Governance without government” was not only an issue for the analysis of international relations, but also for domestic policies. Only recently the merits of hierarchy in the context of a smart hybrid design of governance modes have been reemphasized (see for instance: Olsen, 2005a; Jänicke, 2007a; 2007b; Töller, 2007; Hey, Jacob and Volkery, 2008).

This paper explores a recent case: Climate has – after decades of life as low politics, been identified as a strategic EU policy since late 2006. After an encouraging mandate by heads of state in 2007 the European Commission proposed a package of measures in early 2008, which is characterized by a remarkable degree of centralisation and top-down types of regulation, namely emission trading, an EU regulation to reduce CO₂-emissions from cars and the renewables directive. This package both considerably reduced the discretion for member states or private actors. This runs surprisingly counter to trends and policy commitments towards new modes of governance (Héritier, 2002, 2003; Knill and Lenschow, 2004; 2007; Pallemarts et al., 2006; Jordan, Wurzel and Zito, 2007), which have been identified as key elements of the new environmental policy of the EU.

I tend to share conventional wisdom, that hierarchy is an extremely demanding mode of governance in terms of authority, legitimation, information requirements and actors concertation. However it has not become obsolete by secular trends of functional differentiation, political institutional fragmentation or polyarchy. It may be revitalized under a favourable constellation of factors. My point is, that mainly a new epistemic consensus on the global threats by anthropogenic climate change coincided with a set of strategic economic and institutional interests, creating a window of opportunity for the renewed use of hierarchy in

EU environment policies. Those factors helped forming a new strategic alliance between heads of state and environmental ministers in favour of using top-down approaches for Europe's climate leadership.

The rediscovery of hierarchy in climate policies also may be interpreted as the carrier of a political issue from the periphery of expert circles to the strategic core of policy making.

From this analysis some criticism on the preferred governance choice for other environmental policies may be derived: The choice of soft modes of governance, leaving wide discretion to member states or business, does not necessarily reflect "better regulation", but simply political weakness. New modes of environmental governance are not necessarily more functional, but rather an indicator for the political downturn of EU environmental policies in recent years (Böcher and Töller, 2007; Hey, 2004).

2. Hierarchy: a reemerging issue in the governance literature

The concept of governance emerged from the disillusionment with and even impossibility of hierarchy (SRU 2004b, p. 522; Mayntz, 2005; Schuppert, 2008). In a polycentric, multilevel, cross sector setting, with strong dependency on private sector cooperation, mutual resource interdependency is so strong, that steering by a central agency from the top has been considered as difficult or even impossible. In international relations it was evident, that there is little alternative to "governance without government" (Rosenau and Czempiel, 1992), as long as a world government is out of political reach. Whereas older concepts of planning and steering still assume a central agent, who tries to steer developments, the concept of governance looks into the structures of interaction. Elementary structures of interaction are hierarchy, negotiation systems and market type of competitive systems (Börzel, 2008). Some authors differentiate between networks (as informal communities) and negotiation systems (Benz, 2006) Hierarchy is a form of subordination,

which reduces or even minimizes the freedom of action and discretion of the subordinated actors. Deviant behaviour is sanctioned. Networks or competitive systems maintain actor's freedom and rely on other mechanisms of social integration (bargaining, arguing, social inclusion/exclusion in the case of networks – performance in the case of competitive systems).

Non-hierarchical forms of governance by policy networks or self-regulation received considerable academic interest as substitute, alternative or complement to traditional top-down regulation. There are a lot of claims, that they are frequently more functional than hierarchy (Héritier and Lehmkuhl, 2008)

However the track record of the new modes of governance is all but encouraging. They are less widely used than the policy programmes of the Commission suggest. Empirical research on EU environmental policies highlighted also the many shortcomings of so called “new modes of governance” either relying on informative incentives for self-regulation (by member states or industries), negotiated voluntary agreements or open-method of coordination type of instruments (Héritier, 2002; Holzinger, Knill and Schäfer, 2003; Knill, C. and Lenschow, A., 2004; Jordan, Wurzel and Zito, 2007). Recent research on negotiated agreements shows, that the shadow of the hierarchy is required as a credible threat of the government stick as the essential success condition for their functioning (Börzel, 2008; Héritier and Eckert, 2008; Töller, 2008). So paradoxically hierarchy is also in the scene for policy approaches conventionally considered as alternatives to hierarchy. The design of effective combinations of governance modes rather than their discussion as alternatives hence is the focus of recent literature on “metagovernance” (Meuleman, 2008).

More fundamentally however the state, with its key potential to apply hierarchy, has come back on the agenda. LEVY-FAUR (2005) has identified regulatory capitalism as a key consequence of globalization: While statehood has changed from producing public goods to regulating markets for their own sake or for mitigating their externalities, the mere raise of

regulatory agencies and legislative activity is the opposite of the neoliberal withering away of the state. In “rediscovering bureaucracy” OLSEN (2005b) has emphasized the merits of the traditional Weberian state, with its rule based authority. Networks and Markets alone would not deliver the institutional stability modern market societies depend upon. In his recent work JÄNICKE (2005; 2006; 2008) repeatedly emphasized the key role of the national state, as driver of ecological modernisation. Radical environmental innovation as a process largely depends on the capacity of the state, to impose standards and incentives. Cooperative and informative approaches may be able to complement and facilitate, but not to substitute the capacity of the state to set the right price signals or to impose standards, which only can be met by technological innovation. In the environment field he also observes and explains the counterintuitive trend, that globalization is rather a driver than a barrier for the national states environment policy involvement.

In contradiction to many typologies of environmental policy instruments, it is far from evident, that market oriented instruments setting new price signals, such as environmental taxes or emissions trading, require less authority than prohibitions and pollution control standards (Böcher and Töller, 2007). While substance phase outs often follow rather than drive the substitution process (Jacob, 1999), pollution control standards often can be met at considerably lower cost than originally anticipated. Frequently the affected industries are creative in lowering the costs for meeting a standard (Oosterhuis, 2006; SRU 2008, p. 86). On the other side economic instruments and emission trading create more transparency on expected cost and they always have a redistributive dimension, which is perceived stronger by actors than the efficiency dimension (Vatn et al., 2002). According to LOWI’s (1972) analysis, that policies determine politics, redistributive policies belong to the most conflict intensive ones and hence most demanding on government authority (Hey, 2002; Dose, 2006). This redistributive dimension and the need for strong institutional capacity to manage redistributive conflicts explains largely, why the uptake of economic instruments has been –

despite the claimed efficiency advantages – relatively slow in the EU (Weale, 2005) and many member states. Economic instruments require a stronger state, hence a higher level of legitimation and authority, to let the “prices tell the ecological truth”. The “benevolent dictator” is the hidden governance concept of much economic policy advice (Hansjürgens and Wätzold, 2005) and its absence may explain the failure of the policy advice given by environmental economists (Ewringmann, 2005). So at least one type of the new environmental policy instruments needs more authority, more hierarchy, more autonomy from vested interests than most other environmental policy instruments.

Hierarchy is here mainly used in order to characterize the governance mode of the steering instrument. If the steering mode leaves member states little room for discretion, it has strong elements of hierarchy. Naturally this form of hierarchy is legitimated by the Community Method of Law Making, which is a multi-level negotiation system. As a secondary element, hierarchy is here used as a feature of centralization of power within the European Commission.

Also from a policy perspective the re-emergence of hierarchy is interesting. Since the beginning of this decade the European Commission strongly has advocated “new forms of governance” , with a clear preference of voluntary, less prescriptive and more general frameworks both for national regulation and as regards business. The making and implementation of the 6th EAP, with its thematic strategies and framework directives basically leaving the responsibility for environmental quality standards, emission control and instrument choice to member states, is an indicator for this renationalization of environmental policy over recent years (Pallemmaerts et al., 2006; Hohmeyer, 2008). So the new Climate Policy of the Commission obviously is an exception from the overall trend in EU environmental policy from regulation towards so-called “sectoral governance” (Héritier and Lehmkuhl, 2008).

3. The Transition towards a centralized system of EU climate policies

EU Climate Policies over the last 20 years followed a cyclical trial and error process, with attempts of centralising rule making and long phases of national control and softer forms of intergovernmental or multistakeholder coordination.

An early attempt of a top-down approach, imposing a relatively centralised regime was the Commission proposal on an energy/CO₂-tax in 1992. This proposal largely failed. The Commission had widely underestimated the national reservations, based upon distributive and sovereignty arguments and the institutional barriers of the limited EU competence in taxation issues. (Hey, 1992; 1998; 2002; Haigh, 1996; Jachtenfuchs, 1996).

Since the late 1990s therefore the Commission relied on softer modes of coordination, namely voluntary agreements. The most important multistakeholder networking exercise officially started in 2000 was the ECCP (European Climate Change Programme), the most important voluntary agreement was the agreement with ACEA on limiting CO₂-Emissions from cars from 1998 (Michaelis and Zerle, 2006).

At the same time the European Commission also launched the idea of an other market based climate mitigation project: the introduction of an Emissions Trading System (ETS) for large scale installations (Rudolph, 2005; Buchner, Catenacci and Sgobbi, 2007). The idea met equal resistance by stakeholder and the economic advocacy coalitions in many member states, however less institutional barriers, as a regulation on ETS could be based upon the environmental competence of the EU, allowing for majority voting in codecision with the European Parliament.

One of the basic political success conditions of the new system was its decentralized approach for setting a cap on national CO₂-emissions and for distributing cost-free emission

rights to the economic operators. (Directive 2003/87/EC; Egenhofer, 2007; Steuwer, 2007, p.109). Only the rules for establishing the trading system were harmonized at EU level. So the solution of the distributional conflicts associated with capping (macro plan) and redistribution among the power and energy sector (micro plan) were left to member states, whereas the more technical overall system design was European. This can be interpreted as a method to institutionally separate problem solving (establishing the system) and distributional aspects (Scharpf, 1999). Hence the politically more sensitive aspect of the ETS was put under a “competitive” governance mode (Buchner, Catenacci and Sgobbi, 2007), allowing member states to find different national arrangements with their respective industries.

The degree of EU harmonisation was weak, despite of the attempts of the European

Parliament to strengthen harmonization (Skjaereth and Wettstad, 2008, p. 186).

Basically however Directive 2003/87/EC on the introduction of ETS established a system of making the national GHG-reduction commitments legally binding – but giving member states wide discretion on how to devise the reduction commitments to the different sectors. In this sense ETS I was an ideal type of solution of “safeguarding autonomy” while ensuring “compatibility with community requirements” (Scharpf, 1999). This basic arrangement between EU design responsibility and national responsibility on the level and distribution of allocations was a key condition for its surprisingly rapid adoption within less than two years of reading in Council and Parliament. However it was also the cause for the failure of the first pilot phase between 2005 and 2007 to deliver an efficient and effective instrument. Political robustness and economic efficiency did not come together.

There is widespread consensus in the evaluation literature, that the first phase of ETS failed to be an efficient and effective market instrument (SRU 2004a; 2004b; 2006; Grubb and Neuhoff, 2006; Egenhofer, 2007; CEC 2008; Convery, Ellerman and de Perthuis, 2008; Hentrich, Matschoss and Michaelis, 2006; Matschoss, 2008). In many respects it was even the opposite.

The decentralized allocation approach was a major cause for a competitive race to the bottom. Member States had largely overallocated emission rights beyond actual emissions, basically in order to maintain the competitiveness of their national industries, subject to ETS (CEC , 2006c; Grubb and Neuhoff, 2006; SRU 2006; Skjaerseth and Wettestad, 2008). An interesting episode in the “race to the bottom” between member states is, that UK as one of the first countries sending its draft allocation plan for approval to the Commission, later adjusted its national cap upwards in the view of the overgenerous allocation plans of other member states (Steuwer, 2007, p. 95; Wurzel, 2008). The overallocation was also due to the lack of precise information about CO₂-emissions for the respective baseline information. When in April 2006 the official Commission report based upon the verified 2005 emission data was made public, carbon prices collapsed by two third (see figure 4 in: Convery, Ellerman and de Perthuis, 2008).

Figure 4 - An effective but volatile carbon price signal.



1. High volatility: price shock in April-May 2006 (compliance data release).
2. First period allowance price converges towards zero: surplus of allowances and no banking between periods.
3. Higher prices for second period allowances due to expected scarcity with stricter NAPII decisions and European Council commitments.

Source: Mission Climat of Caisse des Dépôts, 2007.

However there is also evidence, that due to the negotiated special national rules for the distribution of free allocation rights, uncertainty and strategic behaviour the trade volume was less than under an undistorted free market regime and hence carbon prices before April 2006 were overproportionately high (SRU 2006; Hentrich and Matschoss, 2006). Negotiated special rules, in the case of Germany 58 tailor made rule combinations, aimed to satisfy the individual industry needs with emissions rights and hence to reduce the need for trading. Similar trade distorting special rules were also reported from other member states (EEA, 2007; Skjaereth and Wettstad, 2008).

The “ironies of a triumphant instrument” (Voß, 2007) are, that an instrument originally designed by economic theory as an efficient market based instrument has been perverted into a bureaucratic system, with special rules for new entrants, early actions, for lignite, coal or gas power stations, on installation phase-outs, transfers to new installations or ex post

adjustments. Those special bureaucratic rules basically reflected the successful lobbying of the industries, mainly based upon a misleading argument on the risks for the competitiveness of the ETS-sectors under a more market oriented allocation regime (SRU 2006). All this was a consequence of the basic design decision of the directive, to decentralize responsibility on allocation and hence to allow for negotiated arrangements between member states and the respective industries.

The most fundamental irony of the instrument was, that free allocation brought very high windfall profits to the energy sector, worth several billion Euro, while only contributing relatively little to CO₂-reduction (Sijm, Neuhoff and Chen, 2006; Convery, Ellerman and de Perthuis, 2008; Matthes, 2008). So the claimed efficiency of the market based instrument did not materialize in the first round. The experience with ETS hence is a clear cut example of a “race to the bottom” in the field of environment policies, whose existence often has been denied (Holzinger and Knill, 2004; Majone, 2006; Jänicke, 2008).

For the second allocation period (2008 – 2012) the Commission tried to correct some of the most evident design failures of ETS I (Matschoss, 2008). This can be interpreted also as a first step towards a more centralized governance approach on ETS. The Commission was targeting at two problematic elements of ETS I. First, correcting those special rules for new entrants, which ensured long term emission rights beyond the 2nd trading period and second correcting national overallocation (CEC , 2006b, 2006c) .

In a series of communications the European Commission tried to operationalize the qualitative criteria of the Annex III in order to derive a calculation method, which would justify the rejection of national overallocation (CEC , 2005, 2006c; Johnson et al., 2008). Eventually the Commission calculated a quantitative acceptable upper limit of the overall emission allowances for each member state. The methodological choices of the Commission to translate the qualitative criteria into figures certainly implies political choices disguised as methodological choices. Nevertheless this new role of standard setting by the Commission

was accepted by most member states. The Commission forced member states to reduce their overall caps by 10% or 200 Million tons of CO₂ compared to the original allocation plans (European Commission, Press Release 4 June 2007;CEC , 2006b). In governance terms the Commission assumed a power on setting emission limits to member states, which originally was not foreseen by the authors of the directive. It was an important step towards the Europeanization of emission trading. After initial protest, Germany and many other member states accepted the considerable loss of freedom for decentralized arrangements with industry and revised their plans according to the mandate of the European Commission. Even though some member states complaints against the Commission decision are still pending before the European Court of Justice in general this first move towards a more hierarchical approach of emission trading found acceptance by most member states.

In January 2008 the European Commission proposed a package of measures, which aimed at reducing CO₂-Emissions by at least 20% over 1990 levels with a view to reduce emissions by 30% if other countries would join into an international agreement. The package consisted of proposals for (Olivier et al., 2008):

- a revised ETS III for the period 2012 – 2020 and beyond,
- national GHG-reduction targets for the non-trading sector
- A renewables directive containing differentiated overall targets for renewables and a EU uniform target for renewables in the transport sector (mainly biofuels)
- A legal framework for Carbon Capture and Storage.

Already in December 2007 the Commission has made a proposal for limiting CO₂-emissions for cars, replacing the voluntary agreement with ACEA from 1998. Furthermore an energy efficiency plan, aiming for a 20% increase in energy efficiency and a respective set of implementing measures had been proposed in early 2006 (CEC , 2006a) – leading in total to the so-called triple 20% target (EE, REN, CC).

The most radical elements of centralisation were the reform of the EU ETS, the regulation on limiting CO₂-emissions from cars and the obligatory renewables share of 10% for the transport sector (mainly to be delivered by biofuels). Hierarchy in all those cases is here an element of the steering instrument: the EU cap, which is enforced by a price mechanism of the auctioned or free emission rights, the weight based CO₂-limits for cars and the biofuel policy, sanctioned by the enforcement mechanisms of the treaty.

After some controversial internal reflection the Commission has opted for the strongest form of centralisation: a single European cap for the Emission Trading sector and full auctioning to be achieved by 2020. This very centralized approach would deprive member states from any possibility for decentralized negotiated agreements with their respective power sectors and set a sun-set date for respective agreements with some industries at “carbon leakage risk”. With 45% of overall CO₂-emissions under a uniform EU regime, meaning up to 60% for some member states, member states in the future will have limited scope to implement national CO₂-reduction targets (Olivier et al., 2008). Member states only maintain limited control over instruments to meet targets for the non-trading sectors. Even in those cases key instruments, such as any efficiency and CO₂-related product standards, are Europeanized.

The proposal of the Commission must be interpreted as a far reaching deviation from past prevailing patterns of environmental policy making. The uniform cap or limit value was rather an exception (Héritier et al., 1994; Knill, 2003; Knill and Lenschow, 2004). Due to the socio-economic and ecosystem diversity of member states and the respective different national interests, most environmental legislation left considerable discretion to member states to adjust overall frameworks to national conditions. As was shown above, this was also the first design choice on Emission Trading and other instruments on Climate Change.

In December 2008 after only 11 months of negotiations Council and Parliament found an early agreement in a fast track procedure, which – despite of some considerable

concessions, kept core elements of the Commission proposal intact. This applies especially to the triple 20%-targets, the full actioning for the power sector for most EU member states, the renewables and biofuel targets as well as the regulation on limiting CO₂-emissions from cars.

As regards the reform of ETS Council and European Parliament established three different regime designs: one for the power sector in most member states, a transitional regime for the power sector of the “Visegrad” states and a third for industry. The latter two fall back, at least for a transitional period, to the old regime of free allocation. The Commission also lost control over the adjustment to a 30%-reduction target in the case of a successful international agreement. The automatism was substituted by a political decision-making mechanism by Council and Parliament. As regards CO₂-limits for cars considerable concessions both as regards objectives and schedule had to be made (Hey, 2009).

In total the package hence must be interpreted as a major step towards positive integration (Scharpf, 1999; Majone, 2006) in the field of energy and climate policy, with many elements of centralised control over key design parameters and an extensive use of hierarchy within the steering instrument. All this strongly will limit both policy options for member states, reduce the scope for cooperative climate governance at national levels and also create a strong price signal for business.

4. Factors explaining the transition

The following chapter analyses the factors, which may help to understand the above described governance u-turn. It rejects the explanatory power of functionalist, deliberative, or rational choice (both from an intergovernmental and a supranational perspective) explanations. Each of them individually will not be sufficient to explain the change and the formation of a winning coalition for climate mitigation. The argument below is, that it is rather the favourable constellation of factors, given at a certain moment, which may best

explain the u-turn: an epistemic consensus on the risk of climate change and reformulated economic and institutional actors interests. Such a favourable constellation has also been a precondition for other major moves towards European Integration (Schäfer, 2005). In the words of a temporal sorting model one may argue: The u-turn happened, because policy entrepreneurs used a window of opportunity to bring the problem, the solution and the decision-making streams together and by this to form a powerful new coalition (Kingdon, 1984; Zahariadis, 1999): both at national and EU levels the reinterpretation of strategic interest led to a coalition of prime ministers/the President of the Commission with their environment ministers.

The change of strategic actors interest can be explained by a new constellation of favourable factors, such as:

- Public issue attention by extreme weather events and disasters and respective broadened popular support for effective mitigation,
- A new epistemic consensus, emphasizing ecological urgency and economic opportunities of far reaching climate mitigation in the context of increasing energy prices and new evidence;
- National Trend-Setters with a key interest in a European Level Playing field supporting ambitious national commitments;
- Institutional interests for stronger European integration which converged with a strong European Climate agenda.
- Economic “Helper” Interests, such as nuclear interests

This constellation opened a typical “window of opportunity” in the course of the years 2006 to 2008. None of those factors individually would be sufficient to explain such far reaching change. But they mutually reinforced each other.

This type of configuration analysis has advantages over functionalist (Héritier, 2003; Knill, C. and Lenschow, A., 2004; Dose, 2008; Héritier and Lehmkuhl, 2008), rational choice

or deliberative approaches. Functional analysis contributes little to the explanation of policy and design choices. BOECHER and TOELLER (2007) go as far as to consider functionalist explanations of design choices as “naïve”, as they assume a commonly shared welfare orientation by all relevant actors and neglect the dynamics of the policy process, actors constellations, institutional settings and situational factors. In this sense the functional point belongs to the explanandum: What has happened, that in the case of climate change, actors which adopted a more functional perspective, could win?

Much analysis of EU policy making identifies negotiation and deliberation as key decision-making modes of the EU (Neyer, 2004, 2006; Jachtenfuchs, 2008). Argumentation makes reference to some commonly held frames. Short term self-interest can only be defended within such widely accepted frames, which again may reshape policy (Risse, 2004; Daviter, 2007). So reframing may also have an impact on the opportunity structure for policy approaches. It helps to modulate belief systems and modifies advocacy coalitions (Sabatier, 1999). While not denying the pivotal role of ideas in policy shaping, namely at EU level, it would be equally naïve to adopt a purely idealist approach. Good ideas, problem identifications or solutions tend to circulate for considerable time, without being adopted by policy makers as their key frame. Again the emergence and decline of frames, tend to be as much part of the explanandum as they are able to explain policy change.

Multilevel governance analysis of EU policies identifies both member states and the supranational actors, such as the European Commission, as key drivers for policy change. As regards environmental policy, “regulatory competition” (Héritier et al., 1994; Holzinger and Knill, 2004) has been identified as a key driver for EU environment policy innovations. The problem both with an intergovernmental and a supranational approach is, that it analyses actors constellations along institutional borders. However there is neither a clear national interest, nor a Commission or European Parliament interest. Such aggregated interests are results of discussions and negotiations between different advocacy coalitions both within

member states and within the EU Institutions, whose power and influence is shaped and reshaped beyond the institutional borders (Sabatier, 1999). Analysts of federal systems since long have identified vertical sectoralized coalitions as a success-condition for sectoralized multilevel decision-making (Mayntz and Scharpf, 1995; Hey, 1998; Hey, Jacob and Volkery, 2007). At EU level the formation of a “green triangle” between Commission, European Parliament and national environmental ministries may strongly explain the impressive track-record of environmental policy making in the EU (Hey, 2004; Hey, Volkery and Zerle, 2005). The emergence of the climate agenda and associated strategic interests has helped the environment coalition to form – at least for a while – a new coalition between environment ministers and heads of states. Addressing climate change is instrumental for a broad set of strategic agendas, which is also attractive to heads of state. The resulting new advocacy coalition may best explain the revival of hierarchy in addressing climate change. But this constellation may be vulnerable.

4.1 Public issue attention

Since 2004 a series of extreme weather events, causing major death tolls, strongly attracted popular attention in many industrial countries. Among them most prominently were the Hurricane Catherine and the extremely hot summer in 2004 and a subsequent very mild winter in 2005. Those events were widely interpreted in mass media as early warning signals on what can be expected by climate change. Next to those events Al Gore’s “Unpleasant truth” and other cinema films furthermore helped to popularize the debate on Climate Change. Press coverage on climate issues increased sharply over those years, thus contributing to increased public awareness. In Germany the annual number of press articles climbed by a factor 10 from 10,4 – 26, 7 million during the 1980ties and 1990tie to 136,2 million references to climate change (Die Zeit, 19.6.2008). Consequently a Eurobarometer Survey (2008) showed, that Europeans started to perceive climate change as the second most

important and as a very serious problem in the world next to poverty (European Parliament and European Commission, 2008). High level political activism on climate change hence found a fertile ground in public opinion.

4.2 The new epistemic consensus

A key role played the “new” frames on the interlinkage between climate change, competitiveness and security after 2005. None of the frames is really new, all the frames have a history of 20 – 30 in some scientific communities ((Jäger and O’Riordan, 1996; Jänicke, 2009), but only reached the highest levels of policy makers as late as 2005ff.

Since 2005 new and highly authoritative scientific evidence was publicly launched starting with high level conferences in 2005, such as the Exeter Conference, the launches of the Stern Report in 2006 and the 4th IPCC Assessment Report in 2007. Those reports offered alarming insight into the dimension of man made global social, political, economic and environment crisis possibly induced by climate change. Basically scientists reaffirmed the degree of scientific certainty on the depth of anthropogenic climate change and suggested even deeper mid term cuts of GHG-emissions. As however much evidence has shown, new scientific evidence as stand alone may not be sufficient, to reach the political agenda. Too frequently scientific problem discourse and political discourse remain dislinked from each other (Kingdon, 1984; Jäger and O’Riordan, 1996; Zahariadis, 1999).

In this context the reframing of the environment discourse on climate change into an economic debate on the cost of inaction and the economic benefit from early mitigation was paramount. The STERN report (2006) brought about little fundamentally new science. Simply by lowering the discount rate to a level close to zero, the present value of future climate damage became so extraordinary, that the cost even of the most ambitious mitigation strategies seemed to be comparatively negligible (on the discount rate debate, see: SRU 2002,

p.250; 2008, para. 94f). Climate science gave strong signals, that the widely accepted threshold of a 2 degree temperature increase can no more be safely achieved and can only be met, with much more radical mitigation policies, the political summary of the 4th IPPC-Assessment (IPCC 2007) and the Stern-Report tried to publicly convey the optimistic message, that corrective action is affordable and not too late (with a much more critical assessment: Scientific Council on Climate Issues, 2007; SRU 2008).

In this sense science was reinterpreted in order to deliver the right balance between urgency and optimism on the capacity for successful mitigation. Even more, one can observe a new, highly effective, science based communication strategy, mainly driven by UK, Germany and the European Commission. It is evident, that this strategy also was supposed to prepare the ground for the Bali (2007)- and Copenhagen-Conferences (2009) of the Parties of the UNFCCC, hence for the follow-up regime of the Kyoto-ProtocolII. But is also excited popular expectations on a European leadership role. In this sense political leaders eventually became hostage of their own effective communications strategy.

Equally important was the emergence of another, closely linked strategic frame: the reinterpretation of the relationship between competitiveness and strong environmental policy. The EU competitiveness agenda for some time was conceived as a “better regulation” agenda to impose less cost, less restrictions and less administrative burdens to private investors (CEC , 2001; Radaelli, 2007). Environmental Regulation and Competitiveness were perceived in a trade-off perspective (Pallemaerts et al., 2006). Already in this perspective has been challenged by a High level group on Growth, Competitiveness and Employment (CEC , 2004). Since then considerable evidence was mobilized to show the economic benefits from strong environmental policies (Bongardt and Torres, 2008). In opposite to traditional conventional wisdom, environmental innovations even enthusiastically have been characterized as a “Megatrend” (Jänicke, 2008). The model of “trend setter” and the idea of a first mover advantage of those countries and regions, who develop first the know-how to

solve global problems, has even reached highest political levels (see: Speech of the German Chancellor Merkel, 2006 in:

http://www.bmu.de/files/pdfs/allgemein/application/pdf/20jahre_bmu_doku.pdf). Also the President of the European Commission remarkably had changed his rethoric compared to his early remarks in 2005 on the priority of economic over environment policies. This turn in the debate can be only understood at the background of dramatic energy price increases since 2002, which offered opportunities for the convergence of two policy agendas, which for long have been considered as contradictory (SRU 2005). During the German Presidency in 2007 the ideas of an ecological industrial policy have been widely endorsed by an Environment Council Meeting (German Presidency Conclusions:

http://www.bmu.de/files/pdfs/allgemein/application/pdf/conclusions_end.pdf) In its communication on the mid-term review of industrial policy, the Commission said: “*The main thrust is to turn potential challenges into opportunities for EU industry, in order to lead the transition towards a low carbon and resource efficient economy.*” (CEC 2007, p. 9).

Lately also a third frame emerged in the debate: the link between climate change and a wider definition of security (Liberatore, 2008).

In the course of 2006/2007 the two frames on the urgency and the economics of Climate Mitigation and of the positive relationship between environmental regulation and competitiveness became accepted at highest political levels and certainly prepared the ground for the Energy and Climate Package from January 2008 (European Council, 2007, 2008). When however analysing, why they became hegemonial a pure idealist interpretation, that good ideas may change the course of events certainly would be equally naive as a functionalist approach. As indicated above, the new frame was as much driven by strategic interest as the strategic interest was reshaped by the new frame.

4.2 The trendsetters and pioneers

Already since the beginning of the millennium several EU member states are committed to a long-term Climate Policy with ambitions which require deep structural change. France, Germany, the Netherlands, Sweden and UK had since long unilaterally and in joint initiatives formulated national mid term GHG or CO₂-reduction targets of 50% and more for 2050 (EEAC 2004). Some of them, namely the big EU countries, UK, Germany and France held EU presidencies in the years 2005, 2007 and 2008 and all reinforced the international climate agenda.

An early mover of the Climate Agenda is UK. First at all UK can build upon a relatively successful trajectory, being one of the few countries within the EU which meet their GHG-reduction commitments. This is structurally mainly due to the decline of coal production as a consequence of the national energy market liberalization (Harrison and Radov, 2007; Skjaerseth and Wettstad, 2008, p.88; Wurzel, 2008). But the British Government also endorsed in 2003 an energy strategy, which contained a commitment to reduce greenhouse gases by 60% by 2050 from current levels (Secretary of State for Trade and Industry, 2003). The Prime Minister organized a series of high level conferences (e.g. the Exeter Conferences in February 2005 <http://www.stabilisation2005.com/programme.html>), launched the Stern Report (2006) and put climate change high on the agenda of the British G

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<http://www.g8.gov.uk/servlet/Front?pagename=OpenMarket/Xcelerate/ShowPage&c=Page&cid=1094235520309>) and EU presidencies in 2005. Last not least UK, together with Denmark and the Netherlands also was one of the first movers and supporters of CO₂ Emissions Trading within the EU (Skjaerseth and Wettstad, 2008, p.87).

Germany can be considered as an early mover on the climate change agenda, but initially strongly resisting to emission trading (Rudolph, 2005; Matthes and Schafhausen, 2007; Skjaerseth and Wettstad, 2008, p. 91 and 163f; Wurzel, 2008). Germany's energy and climate policy is characterized by its leadership on climate policy, partly based upon the

“windfall profits” of reunification since 1990, partly based upon a unique success story on renewables promotion especially since 1998 (Hirschl, 2008). On the other side its very strong dependency on coal for power generation restricts climate leadership in practice. The latter has been a strong factor for national scepticism against emission trading. This scepticism is reflected in the way, Germany transformed an instrument, originally conceived as a market instrument, into a detailed tailor-made rule system, rather resembling the national command and control trajectory (SRU 2006).

It hence came as a surprise for many observers, that when the red-green coalition fell in 2005, the new coalition between Social- and Christdemocrats opted for continuity in national climate change policy. The 40% GHG-reduction target by 2020, decided by the previous coalition has not only been confirmed, but in 2007 underlined by an integrated programme of measures. In the view of the convergence of climate and industrial policy arguments the government decided to take over the high profile of the British Presidencies during the German Presidency in the first half of 2007.

An other internal factor which led to a change of policy approach in Germany was the public scandalization of the windfall profits for the energy sector, caused by the free allocation of emission rights. The power sector priced in the calculatory cost of the CO₂-certificates, even though it has got it for free (Sijm, Neuhoff and Chen, 2006; SRU 2006). Hence the more technical discussion on allocation rights was transformed into the political scandalization of windfall profits, which led towards a turn of the government position in favour of auctioning by the end of 2006. This was the basis also for the support of a major reform of EU emission trading by a big national player: namely Germany.

Also France as a leading nuclear energy producer, mainly benefitting from emission trading, but also rediscovering a “green policy” agenda, strongly supports the rapid adoption of the Climate Package of the Commission (<http://www.euractiv.fr/presidence-francaise-ue/article/gaz-effet-serre-borloo-organise-reduction-presidence-francaise-ue-climat-000933>).

Other early movers on of supporters of emission-trading are Denmark, the Netherlands and Sweden (Ellerman, Buchner and Carraro, 2007).

It would be unfair not to mention the opposition against the Commission Proposals, mainly led by Poland and later followed by the Visegrad States. As in late 2008 the financial crisis got their grips into the real economy also Italy and very lately also Germany formulated strong reservations against the package. With the argument of a carbon leakage risk mainly affecting world market oriented industries and the special coal dependency of Poland they especially were attacking the full auctioning of emission rights and defending the old system of decentralized free allocation. The 7 Eastern European Countries wanted also lower targets for the non-trading sectors. (<http://www.euractiv.com/en/climate-change/eu-environment-ministers-odds-climate-plans/article-173102>). Those demands however were only partly successful und did not undermine the integrity of the system as a whole.

4.3 A supranational perspective: a new argument for European Integration and a Common Energy Policy

The climate agenda is also linked to a broader institutional agenda to deepen European integration. Some of those aspects are: (Sauter and Grashof, 2007; (Oberthür and Roche Kelly, 2008).

- *The institutional deadlock:* Since the negative referenda on the EU constitution one of the big – also strongly symbolic projects of European Integration was in a crisis. The EU hence was in search of a compelling big project which could have a similar strategic dimension, as the completion of the Internal Market or the Monetary Union. A vision for a common energy policy with a view of global leadership on Climate Mitigation was one attractive option.
- *Limited competences of the EU in Energy policies:* The strategic role of energy policy for economic development, security of energy supply and climate mitigation is evident.

Traditionally the competences of the EU in energy policy are very partial. The EU competences were relatively strong on energy market liberalization and environmental issues, but very limited as regards the portfolio of national energy supply. Also energy taxation is strongly under national control. The integrated energy and climate agenda hence offers a unique opportunity to strengthen the EU role in the Energy sector.

- *A strengthened role of the Commission as global player:* It was evident from the experience with the Kyoto protocol, that there is a link between the credibility as international negotiator and internal performance. ETS is the most important, most visible single policy instrument showing to the outside world, the degree of determination to address climate change. Furthermore the instrument had potential for global diffusion and linking to other flexible mechanisms – hence also creating additional arenas for climate policy.

4.4 The Nuclear Agenda

Nuclear interests offer themselves as helper interests (Prittwitz, 1990) in the climate debate, as nuclear energy can be presented as a low carbon energy. Both within many member states and the European Commission are powerful coalition played the climate argument in the view of a renewed nuclear agenda. The revival of the nuclear debate also takes place at the background of improved competitiveness of nuclear energy in a high price energy world (Sinn, 2008). In Germany the 2000-nuclear phase out decision was heavily contested by one of the governing parties and by the energy sector, which use the climate fears also for the revision of the phase-out decision. The British Government had opened the debate about constructing new nuclear plants. Some Scandinavian Countries (Sweden and Finland) revised their previous nuclear scepticism, whereas France nuclear based electricity sector benefits from a strong climate policy (Koopman, 2008). Also the European Commission, namely DG TREN has traditionally advocated the wider use of nuclear energy as a key solution to many

problems(CEC, 2006d). Officially the Commission had to be relatively discrete on the energy mix as a matter of national sovereignty, but it was nevertheless clearly advocating the expected virtues of nuclear energy.

4.5 The new alliance

As a consequence of the above described constellation of “new frames” and “strategic agendas” the Climate agenda was upgraded from a sectoral policy to a strategic policy under direct control of heads of government and the President of the European Commission. Climate was not only on the agenda of consecutive European Councils, but heads of government played also a proactive role to advance national climate policy agendas. So in the case of climate change one of the key success conditions for environmental policy integration, the “mainstreaming” of the policy agenda was realized in practice (Jacob and Volkery, 2006). The new quality of this involvement can be best understood, if compared to the traditional late intervention of heads of government in favour of industrial interests against a too strong environmental policy approach (Hey, Jacob and Volkery, 2007; 2008).

By this supportive involvement the virtues of the Community method could be strengthened by a new powerful alliance partner. The Community method of environmental law making has favoured a “green triangle” of the environmental policy makers from the Commission, Member States and European Parliament, which shared – despite of many national divergences – an interest for finding a consensus for a high level of environmental protection (Hey, 2004). Together with pro environmental majorities in Council and Parliament the consensus and success-oriented incentives established by the Community method contributed to a very dynamic and successful phase of EU environmental policy making in the period between 1997 – 2003. This supportive political constellation faded away thereafter, mainly due to the re-emergence of a short sighted industrial policy agenda and the veto-power of industry linked advocacy coalitions.

The new pro climate alliance therefore marks a double change of opportunity structure for environmental policies: first the virtues of the Community method are re-employed and second the climate agenda finds political backing by heads of government and the President of the Commission, hence sidelining the traditional veto powers of the national and EU departments, defending industry interests. The result is “better regulation” in the original sense of the word, as more effective and more efficient regulation and in this context as a real step forward towards a fully Europeanized policy.

5 Conclusion: Favourable constellations matter

Climate change has left the typical arenas of environmental policy making and became a strategic, high profile issue for the President of the Commission and heads of government during several EU summits. The centralization of Climate Policy cannot be understood without this support and the respective authority of the heads of the governments of the EU. As could be argued above, this new coalition between heads of state and environment ministers must be seen in the context of many converging “streams”. Problems, solutions, events and decision-makers attention were brought together by a broadening coalition. The change of strategic actors interest can be explained by a new constellation of favourable factors, such as:

- Public issue attention by extreme weather events and disasters and respective broadened popular support for effective mitigation,
- A new epistemic consensus, emphasizing ecological urgency and economic opportunities of far reaching climate mitigation in the context of increasing energy prices and new evidence;
- National Trend-Setters with a key interest in a European Level Playing field supporting ambitious national commitments;

- Institutional interests for stronger European integration which converged with a strong European Climate agenda.
- Economic “Helper” Interests, such as nuclear interests

This constellation opened a typical “window of opportunity” in the course of the years 2006 and 2007. None of those factors individually would be sufficient to explain such far reaching change. But they mutually reinforced each other.

The rediscovery of hierarchy in climate policy reflects the fact that “sectoral governance”, relying on network type of governance and self-regulation failed in the context of climate policy. But functional failure alone does not explain the choice of a more effective instrument. The correction of functional failure rather is a reflection of an upward policy cycle in favour of an environmental issue. It leads to “better regulation” in the original sense of the word, as more effective, efficient, better enforceable European legislation. The use of hierarchy is integral part of such a smart and innovation oriented environmental policy design and should not be denounced as outdated command and control, too prescriptive or too bureaucratic. This lesson should also be drawn for other important environmental policies, where soft modes of governance prevailed in recent years.

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