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Implementing EU Emissions Trading: Institutional Misfit?

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Abstract

This article discusses the first round of implementation of the EU emissions trading scheme (ETS) in the form of the drawing up of National Allocation Plans (NAPs). Three key EU greenhouse gas emitters are focused upon: Germany, Spain and the UK. As these countries have a varying pre-existing climate policy mix and hence a seemingly varying institutional fit with the instrument of emissions trading, can such differences shed light upon differing NAP implementation and performance among these three countries? To some extent, but a main finding is that the real issue is much more one of 'varying degrees of misfit' than one of fit versus misfit. For instance, German industry's favouring of voluntary agreements, the UK's differently designed domestic ETS, and the lack of pre-existing Spanish climate policy undoubtedly complicated the processes in these countries and reduced the time and ability to consult with other Member States. This may indicate the need for a slowdown of the tempo in EU ETS policy-making in order to improve institutional fit and trans-national communication and learning.

Key Words

climate policy, EU, emissions trading, UK, Germany, Spain

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1. Introduction

The EU emissions trading directive entered into force in October 2003 (as European Council Directive 2003/87/EC), after a quick decision-making process (Wettestad, 2004, 2005; Lefevre, 2005). Followed by an even speedier production of a directive clarifying the links between the EU emissions trading system (ETS) and the Kyoto flexible mechanisms (i.e. European Council Directive 2004/101/EC), we have now been through the first and important round of ETS implementation in the form of the drawing up of national allocation plans (NAPs) for the period 2005–7. These plans set a national ceiling/‘cap’ on emissions and distribute this among installations covered by the directive.¹ An impression that comes out of tentative NAP process assessments and overviews produced so far is that there is a (marked) gap between the hopes and ambitions of the EU Commission for the process and the actual national implementation outcomes, but that there are also differences between the countries in terms of implementation performance (e.g. Enviro, 2004; Zetterberg et al., 2004; Ecofys, 2004; CEPS, 2005; Mullins, 2005; IEEP/Green Alliance, 2005).

In this article we examine the extent to which a closer scrutiny of some selected and important EU greenhouse gas emitters, namely *Germany, Spain and the UK*, confirms the impression of differing implementation scores.² Particularly in light of the differing previous experiences with emissions trading as an instrument within the EU, and differing pre-existing other climate policy instruments, we will discuss *the extent to which implementation theory highlighting ‘institutional fit’ can shed light upon the degree of differing scores found* (Knill and Lenschow, 2000; Boerzel, 2000).

Implementation theory focusing on institutional fit emphasises the critical role of the pre-existing institutional context in which new policy instruments are introduced. Institutional change rarely takes place in a smooth and unproblematic way, as existing institutions matter. According to Knill and Lenschow (2000:30), ‘effective implementation is basically dependent on the degree of institutional fit between existing institutional arrangements and the institutional implications emerging from European policies. Implementation is likely to be ineffective if the institutional implications of EU policies contradict strongly entrenched patterns of already existing institutions’. They distinguish between institutional ‘depth’ and ‘breadth’, i.e. how existing institutions have structured the preferences of actors (depth) and the institutional changes required, and the institutional impact on the distribution of power and resources between different actors (breadth). These distinctions bring in a more bottom-up perspective than what is generally the case in institutional fit theory.

The ‘institutional patterns’ most relevant with regard to implementation of the EU ETS are pre-existing national climate policy instruments. We will discuss implementation of the EU ETS in relation to these national institutions. The three countries we have selected for closer scrutiny score very differently in terms of previous experience with emissions trading and climate policy regulatory background. As further elab-

orated in Section four, Spain had very little pre-existing climate policy. Moreover, Spain had little experience with more flexible policy instruments such as emissions trading in environmental policy in general (OECD, 2004). Nevertheless, this would mean not many complications in relation to ‘strongly entrenched patterns of already existing institutions’. If, as a starting point, we adopt an ‘all other things equal’ assumption, this could underpin an expectation of Spain coming out as a relatively uncomplicated implementer.

Along with Spain, Germany shares little general experience with emissions trading and has, in fact, been very much of a trading sceptic (Jordan et al. 2003: 127–28). Moreover, Germany has clearly had a pre-existing and well-established climate policy, much based on voluntary agreements with industry (Ibid.: 130). Hence, in an institutional fit perspective and other things equal, this could underpin a rough expectation of Germany coming out as a rather complicated and not very effective implementer.

The UK differs from Spain and Germany in having both an overall positive attitude to trading as well as some domestic experience with the instrument in the field of climate policy (ibid.: 189). However, the domestic trading scheme has been quite different in design from the EU scheme and the UK climate policy portfolio has also included other instruments such as negotiated agreements (the climate change levy) (Sorrell, 2003 A). Hence, in terms of institutional fit and other things being equal, we would generally place the UK in a better position than Germany, but not in an uncomplicated situation.

The article is then structured in the following manner: in Section 2, the main EU NAP policy goals and guidelines are initially summarised. We then single out three overriding goals and criteria for measuring implementation performance up against: ‘ambitiousness’, ‘timeliness’ and ‘consistency’. In Section 3, implementation in the three selected countries is then discussed and scored. A main finding is that there are indeed differences between the countries in relation to the criteria singled out, but not entirely in line with our general expectations based on institutional fit. A closer analysis of institutional patterns in the three countries in Section 4 reveals a more nuanced institutional picture than at first glance. However, in terms of shedding light on implementation scores, this perspective is certainly helpful. In Section 5 we proceed to briefly examine an important contextual causal driver, namely the countries’ progress towards meeting the EU Burden Sharing Agreement (BSA) and Kyoto targets. As the implementation scores were more similar than expected, we briefly discuss some important factors at the EU and domestic levels which have worked towards convergence in Section 6. Section 7 sums up main findings and formulates some lessons and implications for the further development of the EU ETS. Given the overall complicated institutional venture of introducing EU emissions trading, and the slow development of the global post-2012 negotiations, it is perhaps ‘time for a time-out’ in EU ETS decision-making and implementation.

2. EU NAP Policy Goals and the Three Main Performance Criteria

2.1 The ETS Directive and the Commission's NAP Guidelines

It may be argued that the real starting point for the first EU NAP process was June 29 2003 when political agreement was obtained on the ETS Directive. This Directive contained many important NAP design principles and signals, particularly Annex III which contained 11 points and criteria for the development of NAPs.³

Inevitably, these criteria were quite generally formulated. Hence, the need arose for a somewhat more specific guidance document. Consequently the Commission published a Communication in the beginning of January 2004 aimed at clarifying the criteria (EU, 2004). The Commission also established an assessment procedure where submitted NAPs were to be scrutinized by the Commission and, if found to be not in line with the ETS Directive or the Treaty, the right to reject parts or the whole of the NAP plans was established. In our view, within these numerous implementation criteria, three of the most important and overriding goals were that implementation was to be (1) timely, (2) ambitious, and (3) consistent (i.e. harmonized across the EU in order to avoid market distortions). Let us then briefly elaborate these three goals and measurement criteria which we focus upon in this article.

2.1.1 Timeliness

Timeliness was not only important in order to get the market going and delivering emission reductions, but was also politically important in order to demonstrate the realism in the EU's declared ambitions of leadership in global climate diplomacy (Wettestad, 2005). However, several observers have noted that the timetable was tight and challenging (e.g. Pew Center, 2005: 9). The formal deadlines for the preparation of NAPs were March 31 2004 for the old EU-15, and May 1 2004 for the new EU-10 (timeliness sub-criterion 1). Moreover, the installation level allocation was to be determined at least three months before the beginning of the first period, i.e. before October 2004 (timeliness sub-criterion 2).⁴

2.1.2 Ambitiousness

Although, on the one hand, the Commission emphasized that this was a pilot phase, there were, on the other, prescriptions for a certain ambitiousness in the setting of total emission caps also in the first period of the ETS. The criterion of ambitiousness is clearly the most important from an environmental point of view. Without a certain ambitiousness the overall objective of the emissions trading scheme – to promote reductions of greenhouse gas emissions – will simply not be met. However, to measure the ambitiousness of the implementation in the NAP context is certainly not a straightforward task as there are a number of possible criteria, and there is a need to juggle with information both about past developments and prospects ahead.

Since the point of departure for this article is the apparent gap between the hopes and ambitions of the EU Commission for the process and the actual national implementation outcomes, we have chosen to focus on the EU's own criteria for ambitiousness. The ETS directive and the Commission's guidelines prescribe several criteria for the overriding goal of ambitiousness, most important that the allocation is to be consistent with a path to the Kyoto target and the total quantity of allowances to be allocated should not be more than would be necessary taking into account both actual and projected emissions. Of these two, we will use *the relationship between the total cap and actual and projected emissions* as the central indicator of whether the NAPs should be considered ambitious as this is also an indication of the actual emission reductions that will result from the implementation of the EU ETS.⁵ The importance of this was reflected in statements from leading Commission officials. For instance, in February 2004 the head of DG ENV, Catherine Day, stated that 'there must be an underlying scarcity in the market' and 'the scarcity will exist at two levels: overall for the installations covered by the Directive, and individually, installation by installation' (Point Carbon, 2004 A).

With regard to the path to the Kyoto target we think it makes much more sense to bring this in as a central contextual factor and hence independent variable since an allocation consistent with a path towards the Kyoto target is not necessarily an allocation that ensures emission reductions. This factor is further discussed in Section 5.

2.1.3 Consistency

One overriding goal for the Commission seems to have been relatively harmonized NAPs. As pointed out by ENDS Daily (2004 A), the Commission was concerned 'to make sure competition is not distorted by industrial sectors in one country receiving significantly more or fewer allowances than competitors in others'. Two allocation elements are especially important in that regard: one is the amount of allowances; the second is that the scope of the scheme is consistent with the prescriptions and guidelines of the Commission, i.e. which installations are included.

While the first element is covered by our first criterion 'ambitiousness', we will use the second as a critical test for the ambitions of harmonized allocation processes.⁶ The most important implementation criterion concerning scope was laid out in Annex I of the Directive which lists the installations and activities to be included in the ETS and accordingly in the allocation process. The most important listings are combustion installations over 20 MW, installations for production and processing of ferrous minerals, and some specified mineral industries. Annex 1 of the Directive was followed up by an obligation in the guidelines to include a list of installations covered by the ETS in the NAPs. Hence, we will hence seek to examine *whether the list of installations and definitions used by the Member States were consistent with the scope as laid out by the Commission.*

3. NAP Implementation in the Three Countries: Differences, but not Very Marked?

We will discuss the issue of timeliness first, as this discussion provides us with some important chronological information to keep in mind. It is also important to note that our score of the countries' performance is relative to the Commission's goals for the process, not in relation to each other.

3.1 Timely Implementation?

As indicated above, the main deadline was March 31, 2004. Five countries complied with this deadline: Austria, Denmark, Finland, Ireland and Germany. The German achievement was commented upon by Environment Daily as follows: 'The biggest surprise in the group meeting the deadline is probably Germany, since the country's Red-Green coalition government only resolved heated arguments over the plan late on Monday evening' (ENDS Daily, 2004 B). This NAP was only a 'macro-NAP', not carrying out a detailed, installation-level allocation. The macro-NAP was conditionally accepted by the Commission in July. The full, installation-level NAP was, in fact, not published until January 2005, i.e. three months after the deadline. All in all, a high score on criterion 1 (i.e. the end of March deadline) and a lower score on criterion 2 (i.e. the October deadline) point towards a rough medium timeliness.

The case of the UK is surely interesting. As will be further elaborated below, the UK was initially a frontrunner in the NAP process. When it published its draft NAP on January 19, 2004, it was the first country to do so. However, it missed the March 31 deadline by roughly a month (delivering it at the beginning of May). More information on the installation-level allocation was then provided by the UK in July, and the NAP was then approved by the Commission the same month. But the picture of steady progress was disturbed again when the UK revised its NAP in October, including an upward adjustment of its overall cap on emissions. This was not accepted by the Commission, and this negotiation process has continued long into 2005. All in all, although the UK almost made the first deadline and certainly made the second, the revisions and related controversies do not lead us to give this more than a medium score.

Spain was far from meeting the deadline and had not even produced a draft plan by the end of March 2004. A draft plan was beginning to take form in June and, after consultations, the NAP was notified to the Commission in August. The final and formal NAP was submitted in early September, over five months after the deadline. The Spanish installation by installation allocation was also delayed and not published until November 2004 (ENDS Daily, 2004 C). This was, however, altered as late as January 2005, and all in all Spain must be given a low score on timeliness.

3.2 Ambitious Caps?

Let us now look at the three selected countries in turn. As Germany was one of the few making the March deadline this country must be counted

among the process leaders. In the NAP handed in to the Commission in March, the yearly emissions cap for the 1849 installations included was set at 503 million tons of CO₂ (MTCO₂). According to consultants, Ecofys, this was pretty much in line with expected business as usual (BAU) developments, although no such explicit BAU scenario was included in the NAP (Ecofys 2004:10).⁷ Compared with the level of emissions prevailing at the time (i.e. 505 MTCO₂), the submitted cap represented a 0.4% reduction, but was still above the target in the existing voluntary agreements (further discussed in Section 4.2.) (Matthes and Schafhausen, forthcoming 2006). Then, in November, 350 installations were removed from the NAP, and the cap was adjusted down to 495 MTCO₂ (Point Carbon, 2004 D).

In March 2005, German government officials publicly admitted that the overall 0.4 per cent reductions goal for the sectors included was 'very moderate' (Point Carbon, 2005 A: 5). Hence, on the one hand, the ambition in terms of reductions was modest, and the cap was in fact higher than the commitments in the existing voluntary agreements. On the other hand, as pointed out by Grubb et al. (2005), seen in the light of the total EU picture, Germany was one of the very few countries not to have allocated more than they currently emitted. In sum, this points towards a medium/low score.

As indicated, the UK was the first to launch a national cap in the EU process, and the total cap in the January 2004 draft NAP for the period was set at the level of 714.5 MTCO₂ for the around 1500 installations included; i.e. a yearly allocation of around 238 MTCO₂. This 'forerunner cap' was widely considered as relatively ambitious (ENDS Daily, 2004 B). The total cap set in the NAP submitted to the Commission in May 2004 was however somewhat less ambitious. Based on updated emission growth projections the cap was increased to 736 MTCO₂. The development of increasing the cap continued in October, when the cap was suggested revised again, i.e. up to 756 MTCO₂. Again the official reason was updated energy and emissions projections.

Was this really so significant? The issue had two aspects: on the one hand, the extra MTCO₂ added was not that significant in the light of the sheer size of the EU ETS; on the other, the October increase meant that the UK also intended to join the large group of EU countries allocating more than they currently emitted (Grubb et al., 2005). Given the UK's generally important position in this game and initial clear leadership position, the October move undoubtedly had important negative symbolic effects. On 12 April 2005 the EU Commission then decided to reject the UK's request for the increase up to 756 MTCO₂. This indicates that the final UK cap will be the 736 MTCO₂ initially accepted by the Commission in July 2004, i.e. a yearly cap of around 245 MTCO₂. The UK has then allocated slightly below BAU and actual emissions and is given a medium/low score.

Turning finally to Spain, as indicated above the Spanish NAP was delayed and Spain was for a time looked upon as one of the clear NAP process laggards. When the NAP was finally delivered in September, the cap was set at 160 MTCO₂ per year for the 1066 installations included, or

a total of about 480 MT CO₂ for the first ETS period.⁸ This represented a 2.5% reduction in the trading sector emissions in the period 2005–7 compared with the 2002 level. Power generators would contribute most with a 5% reduction, and a cap from this sector at 6 MTCO₂ annually below projected emissions. Also, as pointed out by Ecofys (2004:11), this NAP allocated less than the BAU baseline, and Spain is accordingly given a medium score.⁹

3.3 ‘Consistent’ Implementation?

Several NAP commentaries generally indicate that guidelines and policy signals have been interpreted differently in the Member States. For instance the Centre for European Policy Studies (CEPS) report on ‘Business consequences of the EU emission trading scheme’ (CEPS, 2005) states that ‘different member states interpret concepts of the EU ETS Directive differently’. A closer scrutiny of the three focused countries indicates that this has been so also in terms of scope, especially with regard to the definition of combustion installation.

First, Germany has applied a broad consistent definition of combustion installation. The question of scope has nevertheless been legally challenging. In fact, *after* having fixed the overall cap (i.e. ambitiousness) by law, several installations were identified that had not yet been included in the NAP (Ecofys, 2004). This initial breach of the criteria of consistent application seems more due to insufficient preparatory work than a real difference in interpretation of the scope between German authorities and the Commission, and the installations were finally added to the list of installations.

With regard to the UK, this is the only country to have used the opt-out provision in the directive. This is, however, within the degree of flexibility allowed by the Commission, but still means that some British installations included in the scope of the directive, will not participate in the EU ETS till 1 January 2007. Furthermore the UK’s list of installations included in the NAP was incomplete in that it did not include installations situated within the territory of Gibraltar. Important for our purpose is that the British allocation plan seems to have used a medium definition of combustion installation, meaning that many appliances were omitted from the definition of a combustion installation for the purpose of the EU ETS (Ecofys, 2004). ‘The use of a slightly narrower definition could cause competition issues and may be considered inconsistent with the NAP criteria on competition’ Ecofys (2004) noted, and this should hence be considered as a slight deviation from the consistency criteria.

Finally, Spain did not include all combustion installations with a rated input of over 20 MW in its NAP, clearly not living up to the ambitions of a harmonized implementation. The installations not included were cogeneration plants integrated in other industrial activities and not connected to the central grid.

Summing up the criterion of consistency, Germany is basically complying, pointing, in fact, towards a high score. The narrower definition of combustion plants chosen by the UK places the country in a middle posi-

tion, pointing towards a medium/low score. Due to the non-inclusion of all activities listed in Annex 1 of the Directive, Spain is the country deviating mostly from the ambitions of a consistent implementation of the three, and hence receives a low score.

3.4 Summing Up

Emphasizing again the tentative and explorative character of this discussion, but still maintaining that a general explicit score is better than no such score at all, the countries' implementation performance can then be summed up in the following table:

	Timeliness	Ambitiousness	Consistency	Rough Overall Score
Germany	MEDIUM (complier with first deadline, but not second)	MEDIUM/LOW (aiming for very slight reduction, and cap in line with projections)	HIGH (basically complying)	Medium/High
The UK	MEDIUM/LOW (almost complier, but several adjustments)	MEDIUM (aiming for slight reduction and cap below projections)	MEDIUM/LOW (slight deviations)	Medium/Low
Spain	LOW (missing both deadlines)	MEDIUM (aiming for reductions and cap below projections)	LOW (deviations)	Low/Medium

This provides us with an interesting point of departure for the explanatory section, as only the UK score seems to be roughly in line with our institutional fit expectations. What does this then mean?

4. Does Institutional Fit Matter?

4.1 The UK: Helpful Institutional Learning but also Misfits

As indicated, the initial domestic UK trading scheme which started in March 2002 had a quite different design compared to the EU ETS. The system covered all six main greenhouse gases (EU: only CO₂) and several enterprises not covered by the EU ETS. The scheme was voluntary (EU: mandatory) and the Government provided funding support of 43 million pounds per year over a five-year period to encourage participation (EU: nonesuch).¹⁰ It is important to note that the target groups were instrumental in the designing of the scheme implying that the UK domestic scheme was more in accordance with their preferences than the EU ETS. Hence some of the patterns created by the scheme were clearly in conflict with the EU ETS. Moreover, due to differences in scope and coverage, the two schemes engaged and distributed regulatory burdens among emitters differently.

On the other hand the domestic UK emissions trading scheme also created facilitating institutions for the implementation of the EU ETS, most important the creation of a registry. Both the National Audit Office (NAO) and the *ENDS Report* agreed that the creation of the allowance registry was an important ‘but often over-looked’ institutional success (NAO, 2004; ENDS Report 2004 C). Moreover, a clear majority of participants emphasised how their participation in the system had improved their collection of data on energy use and measurement of emissions (NAO, 2004: 27).

In total, the UK domestic system clearly created a certain institutional learning base with regard to the operation of emissions trading, both within the government and industry. Not least this included basic data collection, the establishment and operation of allowance registries, knowledge on the pros and cons of allocation methods, and, of course, a certain trading experience for industry. However, the system differed from the emerging design of the EU ETS on several important dimensions. These divergent patterns created potential implementation challenges.

Moreover, as explored by Sorrell (2003, A and B), the interaction between the emerging EU ETS and the UK also includes more complex interactions with the whole portfolio of UK climate policy instruments. For instance, the Climate Change Agreements raised potential problems both of ‘double regulation’ (i.e. that target groups would be affected by two instruments with very similar objectives), ‘ownership’ and ‘double counting’ (i.e. that the two instruments gave ownership of the same physical emissions to two separate parties), and ‘differential treatment’ (i.e. that the obligations imposed upon one group by one instrument were not equivalent to those imposed upon another group by the other instrument). In light of these potential tricky interactions, it is not surprising that during the course of the negotiations on the EU ETS the UK tried to improve the fit between domestic climate policies and the emerging EU system.

On balance, despite several misfits between the emerging EU ETS design and the UK system, it is probable that the UK trading experiences facilitated UK NAP implementation in terms of timeliness. This was also confirmed in our interviews with UK NAP decision-makers in February 2005 (UK interviews, 2005). It was probably also a mildly positive factor for ambitiousness, as the previous work provided some of the necessary data and modelling tools (but this did not hinder several adjustments of projections in the NAP period). As also pointed out by our UK interviewees, the more specific UK NAP allocation process did not have much in common with previous processes. So, in order to explain the ambitiousness part more fully, and to understand the consistency score, other factors need to be brought into the picture.

4.2 Germany: a Misfit Handled Professionally

As indicated, on the surface Germany is a clear case of institutional misfit in terms of emissions trading. In the negotiations leading up to the Kyoto Protocol, Germany was one of the leading sceptics within the EU to flexible mechanisms. Also in the EU ETS negotiations Germany had several

critical objections. Together with the UK, Germany argued for a voluntary EU system, and this 'campaign' continued until the end of 2002 (Interviews Berlin Sept 2005). Moreover, in June 2002, Chancellor Schroeder stated that the ETS would disadvantage EU industry (Reuters, 2002).

The most intensive German lobbying vis-à-vis the EU had to do with a proposal for allowing companies to form collective 'pools'.¹¹ The pooling proposal very much reflected the fact that a main instrument in German climate policy has been voluntary agreements (VAs) with industry.¹² The targets in the agreements referred entirely to associations, not individual companies or sites. Agreements on CO₂ reductions were adopted in 1995, 1996, 2000 and 2002. As pointed out in a report by Fraunhofer-ISI (2002), the pre-2000 agreements were unilateral commitments by industry, adding up to an overall target to cut CO₂ emissions by up to 20% by 2005 compared to 1987 levels.

Since 2000, negotiated agreements on a sectoral basis were established. The agreements covered the companies associated in the Bundesverband Deutscher Industrie (BDI), which is the head organization of the German manufacturing industry, electricity producers, as well as coal, gas and oil suppliers. About 80% of final energy consumption in industry, and almost 100% of electricity supply (industrial and utilities, private and public producers) were covered by the agreements. The targets in the agreements referred entirely to associations, not individual companies or sites. These covered 18 associations/sectors, including chemicals, non-ferrous metal industry, steel, oil refining, gas and water utilities, and electricity suppliers. The overall 2012 target was a 35% greenhouse gas (GHG) cut (ibid.: 13).

The substance of the commitments was, however, diffuse and the reporting of emissions under the agreements were voluntary (Interviews Berlin September 2005). Within government the German Ministry of Economy was responsible for the agreements (ibid.) The dominant role of these agreements in German climate policy represented a potential misfit in relation to the emerging EU ETS. With the voluntary agreements the balance of power between industry and government was in favour of industry since it controlled the reporting of data, these data were primarily at the aggregate, sectoral level, the targets were open for interpretation, and no sanctioning mechanism was involved.¹³ This is in contrast to the EU ETS, which is a mandatory system, including an elaborate data collection and monitoring system reaching down to the individual corporation level, and with a clear and explicit sanctioning and non-compliance mechanism. It is hence likely that the majority of German industry was generally quite happy with the regulatory regime based on the VAs and embraced emissions trading only very reluctantly and hesitantly (Interviews Berlin Sept 2005). This situation has seemingly not changed radically (ibid.). For instance, in September 2005 it was reported that more than two-thirds of German installations still have a negative attitude to emissions trading (Point Carbon, 2005 C). Moreover, it must be kept in mind that the VAs are still in operation and mean a continuing unresolved policy mix (Interviews, Berlin Sept 2005).

A closer look also reveals that the picture of Germany and emissions trading is not at all only bleak. As noted by Wurzel et al. (2003: 116), the pros and cons of ET have been debated by German economists since the 1970s. In 2000, the German government established a formal institutional structure for the development of German emissions trading in the form of a special working group (i.e. the AGE group), involving stakeholders from politics, economic, administration, the Federal States, NGOs and science. This group had regular meetings over the years and this 'permanent hearing process' meant that the NAP process was far from starting from scratch at the beginning of 2003. Moreover, some German Lander established regional pilot schemes, and hence there were several interesting developments at the local level (Matthes and Schafhausen, forthcoming 2006).

In addition, when we look more closely at the negotiations on the German NAP cap taking place between mid-2003 and March 2004, the voluntary agreements came to represent one of four main focal points in the complicated and contentious process of deciding upon the total emissions cap (Matthes and Schafhausen, *op. cit.*; Interviews Berlin September 2005; Mullins, 2005: 188).¹⁴ Hence, in this specific process, the VAs functioned constructively. More generally, the above-mentioned skew in balance of power between industry and government represented by the VAs may have been a driver within the environmental agencies for an effective implementation of the EU ETS since this instrument would ensure the regulators more power vis-à-vis the regulated.

Hence, even if the main underlying trend in German politics is still one of institutional misfit and industrial resentment, this misfit has clearly been handled professionally and effectively. There are also significant societal forces positive to emissions trading and institutional structures dealing with the issue have been in place for quite some time. Still, in order to more fully understand the 'medium/high' German NAP score, we also need to take into consideration other factors.

4.3 Spain: a 'Clean Slate' Does Not Mean Good Fit

A closer look at established national policy instruments in Spain supports the picture of a country with considerably less experience with environmental policy instruments than the two other countries studied in this article. Spain does not have an overarching climate change strategy. Domestic policies to mitigate climate change are mainly focused on the introduction of combined-cycle gas turbine plants to cover additional energy demand, a reduction of energy intensity, and an increase in renewable energy policies (IEA, 2005). However, according to the International Energy Agency (2005) some of these policies are less developed in terms of implementation. In an environmental performance review of Spain from 2004 OECD pinpointed that climate change has not been among the emphasized environmental issues in Spain; water quality has traditionally been prioritised. Hence, Spain seems to have given the negotiations of the ETS directive from 2001 to 2003 a low priority (Interviews, May 2005).

Lack of institutional learning with regard to economic instruments in the field of environment could then be a possible explanation for why Spain

lagged behind in the allocation process. Several of our interviewees suggested in fact that the lack of experience with environmental regulation in general and emissions trading in particular contribute to explaining the initial opposition by the industry (Interviews, May 2005). In addition, Spain was in a similar, if not worse, situation as Germany with regard to data on emissions and cost-effective measures (IEA, 2005).

In summary, the lack of institutional learning may have made Spain little prepared for greenhouse gas emissions trading, although it also meant that was no *specific* institutional misfit. This can be a factor in shedding light on the low scores regarding timeliness and consistency. But there are nuances. Recall that Spain is actually the country in this study with the most ambitious cap relative to projected and actual emissions. Although this can be understood in light of Spain's institutional backdrop, for example that it did not come on top of the burdens of other climate policy instruments, we still think it is necessary to include other factors which may shed more light on its implementation performance.

5. A Central Contextual Factor: Progress Towards Meeting EU BSA and Kyoto Targets

There are, of course, numerous differences between the countries that could be drawn into this discussion, ranging from general economic performance in the recent years to the more general EU environmental policy implementation record of these three countries. Here, we will focus on how the three countries are performing with regard to fulfilling their respective EU BSA and Kyoto targets.

The UK target of 12.5% reduction of GHG emissions by 2008–2012 is one of the most ambitious targets within the EU Burden Sharing Agreement (BSA). Nevertheless, emission trends until 2002 and projections for 2010 on the basis of existing domestic policies and measures indicate that the UK was on track to meet its BSA target (EEA 2004). Hence the medium ambitiousness on the part of the UK may partly be explained by the fact that international commitments do not create a need for the UK to implement the EU ETS more ambitiously, at least initially.¹⁵ The same is probably also true with regard to Germany. The German BSA target is a 21% reduction by 2008–2012, the second most ambitious within the EU (together with Denmark). According to the EEA (2004), emission trends until 2002 and projections for 2010 on the basis of existing domestic policies and measures indicated that Germany was close to being on track to meet its BSA target. Like the UK, international commitments have not been a driver for a particular ambitious initial implementation of the EU ETS in the country.

The situation for Spain was different. Under the burden sharing agreement Spain is like the other southern Member States allowed to increase its greenhouse gas emissions. The Spanish target allows for a 15% increase in emissions in 2008–2012 compared to 1990 level. But already in 2000 the Spanish emissions had risen far more than the target (29% above 1990 level), and in 2004 the emissions were almost 45% above the 1990-level (Point Carbon 2005 A; ENDS Daily 2002, March 5). Hence,

the distance to the Kyoto target helped to shed some light on what was, after all, a relatively ambitious EU ETS implementation by Spain. In fact the implementation of the EU ETS is only a small step towards compliance with the target of 15% increase, and Spain is hence planning to rely heavily on credits from the project mechanism, especially CDM, in order to meet its commitment (Spain, 2004).

6. Forces Working More Generally Towards Convergence and Similarity

As noted above, good progress in relation to international targets could contribute to explain the UK and German moderate ambitiousness scores. Nevertheless, there are clearly other forces in the EU NAP process which more uniformly have worked towards convergence and similarity and may hence help us understand why differences among our selected countries are less marked than anticipated. We will briefly sum up some important factors at the domestic and EU levels, starting with the latter.

6.1 Time Pressure and Related ‘Race to the Bottom’

High policy-making speed and time pressure originated in Brussels. The tight schedule must also be seen in the light of the fact that although there were somewhat differing previous experiences with emissions trading this instrument was quite novel for all. A closer look at these three countries confirms that the tight schedule had unfortunate domestic effects. Both in the UK and Germany lack of capacity and time to consult with other Member States have been pointed out (Interviews, February 2005; Interviews, September 2005). The case of Spain is, of course, somewhat extreme, as the lack of almost any action in the early NAP phase led to a high-pressure situation when the new government took over and the implementation process finally started.

Hence, lack of time led countries to focus on domestic politics and the circumstances did not allow for learning from other Member States. This probably also made the whole process more similar to a prisoner’s dilemma game, with little communication between the ‘players’ and hence leading to extra cautious moves and ultimately a sub-optimal outcome, at least with regard to the EU’s hopes or an overall ambitious outcome. The logic of the process has also been characterized as a ‘race to the bottom’, with Member States over-allocating permits because of concerns over competitiveness (Green Alliance/IEEP, 2005: 18).

But why was there such a hurry? EU’s overall ambitions of global leadership regarding ETS meant that it was important to get the emissions trading started on time (Wettstad, 2005). This can contribute to explain why the Commission set tight deadlines and stressed timeliness. The leadership ambitions and the need to demonstrate their realism also can contribute in explaining that the rather low ambitiousness on part of many Member States was accepted. It was more important in a political context to start emissions trading – because by establishing the EU ETS the EU may in fact have rescued the flexible mechanisms of the Kyoto Protocol.

6.2 Unclear Policy Signals and Guidance

Another driver for convergence was the unclear policy signals and guidance from the EU concerning the concretes of the national implementation. This contributed to a hesitance and cautiousness in the countries' NAP processes. An initial problem seems to have been the delay in the publishing of the Commission's NAP guidelines. Hence, in December 2003, Point Carbon reported that allocation processes were slowing down, as all were waiting for the allocation guidelines from the EU Commission. Some of our German interviewees stated that the guidelines came too late to be of any value in the national process. It has been pointed out that the guidance with regard to the treatment of new entrants and the definition of combustion installation in particular was far from clear (Point Carbon, 2004 C; CEPS, 2005: 22; Interviews, 2005). This explains why the countries chose different definitions of combustion installation and accordingly implemented the EU ETS differently. The lack of consistency in several Member States indicates that the explanation for the Spanish low score may primarily be found at the EU level rather than at the domestic level. This is confirmed by our Spanish interviews.

As pointed out by CEPS (2005), it should also be kept in mind that the Member States also preferred guidance not being too clear and restrictive: 'During the negotiations of the EU ETS, there were attempts, for example, by the European Parliament to make Annex III more detailed, but they failed due to member states' reluctance to cede 'too much' influence...to the European Commission on allocation' (p.12, our italics). So CEPS concludes that 'the high degree of decentralization was partly... the price to pay to get support from EU member states' (ibid.). But judging from our interview data, a clear preference for clearer guidelines for the next phase seems to have developed all over.

6.3 Domestic Factors: Strong Industrial Lobbying in all Countries?

We are in no position to claim that the lobbying pressure from industry has been exactly the same in the three countries. However, we have enough scattered evidence to claim that such lobbying has been a strong moderating factor in all three countries. This should, of course, come as no surprise, as consultation and stakeholder involvement was one of the mandatory goals for the process established by the Commission.

Reports from the UK indicate that industry lobbying was taking place in the run up to delivery of the NAP with the aim to maximize individual allocations, change the projections and increase the overall cap (ENDS Report, 2004 A: 5; ENDS Report, 2004 B: 47). 'The modelling process (i.e. energy projections) - in previous years a dry, academic exercise - has taken on enormous economic and political significance, and *industry sectors have been challenging every detail of the DTI's assumptions*' (ENDS Report, 2004 D: 41, our italics). Furthermore, many interpreted the final, attempted increase in the UK cap which took place in October 2004 as a clear example of successful industrial lobbying. According to the Friends of the Earth, 'thanks to industry lobbying Blair has decided to back the DTI and go against the wishes of DEFRA' (FoE, 2004). The

notion that industry pressure has generally been very successful has also been put forward by others. For instance, when James Cameron, CEO of 'Climate Change Capital' addressed a UK Parliamentary Committee, he stated 'Claims on competitiveness around the UK's allocation plan – led by the CBI – have been very badly managed, ...very misleading, counter-productive and irresponsible, *but they have worked*' (ENDS, 2005: 30, our italics).

In Germany, the decision to implement the allocation plan through a legislative procedure secured the German parliament an important role in the process and also created a possibility for lobbying at various stages of the process (Interviews, Berlin 2005). As noted earlier, the existing voluntary agreements were preferred by industry and there was a strong anti-ETS sentiment. This position was partly shared by the Ministry of Economy (Deutsche Welle, 2004; Interviews, Berlin 2005). The process was accordingly characterized by controversy, reaching a climax in February 2004 with industry abandoning meetings with Government. The situation was described as 'generally unpleasant' (Point Carbon, 2004 B). The industry actors were however not able to develop a united position, as the interests of the energy intensive industries and the energy producers were too far apart. This probably weakened industry's influence somewhat. Despite this, general industry satisfaction was reported in March 2004: 'The president of the BDI expressed his satisfaction that new burdens on industry had been prevented' while WWF Germany stated that 'the red-green coalition had 'castrated' the EU ETS by giving in to industry' (Euractiv, 2004).

Concerning Spain, the large distance between the Spanish Kyoto target and the actual emissions in fact gave Spanish industry good conditions for opposition against implementation of the emissions trading scheme in the early phase. The arguments were based on perceptions that the Spanish target was unfair – not facilitating Spain's entitled persuasion of economic development – and that emissions trading would simply damage the Spanish economy (CEOE 2004, Interviews, 2005). Spain's largest power company and the fourth largest emitter in the European emissions trading market, Endesa complained that meeting the Kyoto target would put them at a disadvantage to competitors in countries not bound by the protocol (Reuters 2005 A; WWF 2005).

The opposition among industry actors was clearly shared by parts of the conservative government in office until April 2004, and some were even questioning the Kyoto Protocol (Interviews, Madrid May 2005). Even if some working groups were set up with the aim of collecting data under this government, both industry and ENGOs agree that in reality not much happened under the conservative government regarding implementation of the EU ETS (Spain 2004; Interviews, May 2005). The consequence of this domestic push against implementation was that Spain had not even started to draft an allocation plan by the end of March 2004; the EU's deadline for submitting the NAPs.

With the new Socialist government in April 2004, the Spanish implementation process started to follow a completely different track. Spanish industry was split over the new government's more positive approach to

emissions trading and during the allocation process a conflict between the two largest power companies in Spain, Endesa and Iberdrola, probably weakened the industry lobbying campaign, not least because the conflict made it impossible for the Spanish electricity companies' union (UNESA) to participate in the process. Industry lobbying became generally less important as a driving factor after April 2004.

7. Winding Up: Need for a Time-out to Improve Institutional Fit?

We have – in a tentative and exploratory manner – assessed the first round of ETS implementation in the form of the production of National Allocation Plans in three of the largest GHG emitters in the EU, namely the UK, Germany, and Spain. On the basis of an 'institutional fit' implementation perspective, all other factors being equal, we anticipated Spain to come out as a relatively uncomplicated implementer, as this nation had very little pre-existing (and complicating) climate policy. The German allocation process was expected to be more challenging due to institutional misfit with established climate policies and measures, particularly the voluntary agreements. Although the UK had both an overall positive attitude to trading and some previous trading experience, the domestic trading scheme has been quite different in design from the EU scheme. Hence, we tentatively placed the UK in a sort of middle position; better than Germany, but not in an uncomplicated position.

On the basis of policy signals and guidelines expressed in the 2003 ETS Directive and guidelines from the Commission, we then singled out three important criteria for further scrutiny: timeliness, ambitiousness and consistency. In terms of actual scores (allegedly approximate and clearly debatable!), the UK's overall 'medium' score was the only one to broadly correlate with our tentative institutional fit expectations. Despite the expected misfit, Germany came out with a 'medium/high' score. Spain ended up with an overall 'low/medium' score (the 'medium' part related to comparatively relatively high ambitiousness). Moreover, although there were indeed differences between the countries, there was a certain 'medium' clustering and hence less marked differences than we anticipated.

Seeking to understand the different scores, a closer scrutiny of the institutional fit issue revealed that the perspective was indeed valuable. As was anticipated, there were certain problematic misfits between British climate policy and the EU ETS. However, the foregoing domestic trading system prepared the ground for the EU ETS with regard to data collection and general institutional knowledge-building.

A closer look at Germany revealed that the dominant foregoing role of voluntary agreements with industry and a long-standing scepticism towards flexible mechanisms set the stage for an overall misfit with regard to the introduction of the EU ETS. In contrast to the case of the UK, previous climate policy (i.e. the VAs) had not prepared the ground in terms of relevant data collection at the company level. Nevertheless, the German government was far from unprepared for emissions trading and

among other things a long-standing, inclusive working group ensured the basis for a professional handling of the misfit – and a respectable NAP implementation score.

A closer look at existing Spanish institutional arrangement confirmed our impression of Spanish climate policies and measures not being well developed. But contrary to our (naïve?) expectations, this ‘clean slate’ turned out to be no asset in terms of institutional fit. Spanish climate policy inaction had simply left the country almost totally unprepared for the EU ETS. The change of government in April 2004 was certainly an important institutional change, but the effective work of the government was hampered by the lack of a climate policy institutional foundation. Seen in combination, these cases indeed indicate that *the real issue is much more one of ‘varying degrees of misfit’ than one of fit versus misfit.*

Recognizing that institutional (mis)fit was not the only or perhaps even most important factor for shedding light on differences among the countries in terms of NAP implementation, we then briefly discussed one key ‘contextual’ factor, namely the countries’ general progress towards meeting EU BSA and Kyoto targets. This factor primarily served to further deepen our understanding of the differences between the UK and Germany on the one hand, and Spain on the other. The UK and Germany are both well on track to meet their targets and hence the need for NAP ambitiousness is not that pressing. Spain, on the other hand, is lagging seriously behind in relation to its BSA target and there was hence a stronger push for a NAP with certain ambitiousness.

In order to deepen our understanding of why differences among the countries after all were not so marked, we briefly examined some factors at the EU and domestic levels working towards convergence and similarity. At the EU level, time pressure, a related low capacity for transnational contacts and learning, and delayed and unclear EU guidance documents, contributed to a general hesitancy among the countries to develop ambitious NAPs. Moreover, governmental efforts to increase NAP ambitiousness were met with strong industrial lobbying in all three countries. However, internal splits within industry probably meant that its influence was not as high as it could have been in this allocation round.

All in all, the analysis of these cases lends strong support to the thesis that the introduction of EU emissions trading is a very ambitious and complex venture; a really ‘grand multi-level governance experiment’ indeed.¹⁶ As pointed out by Mullins (2005:198), ‘small government teams typically are struggling to understand all of the issues in the limited time, as well as advise ministers and communicate with industry’. Given the complexity of the effort, it is easy to see in retrospect that the step-by-step approach in terms of gases and sectors chosen by the EU was a wise move although the time schedule was too tight in order to allow for such a stepwise approach to work in terms of institutional learning.

We think this has some general implications for the further rounds of allocation and the very development of the EU ETS. Mainly we support the calls that have been made for a certain slowdown in the tempo of EU decision-making and implementation in this issue area. It is perhaps ‘time

for a time-out'. The EU has already largely proved its global climate policy leadership point in successfully getting its symbolically important ETS in operation. The slow development of the global post-2012 negotiations could be used as a 'window of opportunity' for getting its 'ETS institutional house' in order thereby improving the prospects for a successful system both with regard to ambitiousness and harmonization in the long turn. While a system that is delivering emission reductions is necessary in order to gain environmental legitimacy, a more harmonized and consistent system is also necessary to ensure legitimacy among the target groups which fear that the EU ETS will imply competition on unequal terms throughout Europe.

Notes

¹ As noted by the Pew Center (2005:11), despite their title, 'the NAPs do far more than allocate emissions allowances. Member states need to consider a number of criteria simultaneously'. The Pew Center also notes that the EU NAPs are significantly more complex and far-reaching than the term 'allocation' has generally implied in US trading (Ibid.:9).

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³ The 11 points were (1) Consistency between total quantity of allowances and the Member States' commitments under the Kyoto Protocol; (2) Consistency between quantity of allowances and assessments of emissions development; (3) Consistency between quantity of allowances and potential to reduce emissions; (4) Consistency with other Community legislative and policy instruments; (5) Non-discrimination between companies or sectors; (6) Information on the treatment of new entrants; (7) Information on how early action would be taken into account; (8) Information on how clean technology would be taken into account; (9) How the public would be involved; (10) List of installations and their respective allowances; (11) How competition from outside the EU would be taken into account.

⁴ The October 2004 deadline was stated in article 11 in the 2003 ETS Directive.

⁵ We are aware that this criterion indeed has its weaknesses, specifically the risk that the Business As Usual (BAU) numbers themselves are inflated (Grubb et al., 2005). Further, this approach does not take into account the differences in abatement costs between different countries which could also be included in this discussion. However, even if the relationship between the cap and projected emissions does not tell us anything about the related costs of the emission reductions, it does give a picture of whether the implementation of the EU ETS requires extra efforts at all. As it turns out, the level of ambitiousness is modest all over, and there seems to be a broad distinction between member countries not requiring extra efforts and the few which have allocated below BAU.

⁶ There are provisions in the ET directive that allow for some variation in inclusion of installations between member states. This is the opt-out provision, which states that in the first period (2005–2007) the member states can exclude installations that, due to national measures, will reduce their emissions as much as under the ETS. In addition member states were allowed to include installations below the threshold values in the sectors included in the ETS directive. Use of these provisions will of course not be used as indications of consistency.

⁷ Hence, Ecofys used information from a study on ‘Consequences of the EU ETS for German industry’ from 1999. It should also be mentioned that some actors in the German process have claimed that the German BAU was ambitious in itself as it was based on an ambitious interpretation of the emission reductions to result from the voluntary agreements (Interviews, Berlin September 2005).

⁸ The Spanish cap as described in the Spanish allocation plan added 11.11 MT/year to the cap to cover ‘cogeneration activities serving processes not listed in Annex I to the directive’ (Spain, 2004).

⁹ The difference of sectoral applications for 2006 of 169.83 MT CO₂ and the cap gives a reduction of 5,6%. Ecofys (2004) however operates with a reduction of as much 8% compared to BAU. Whatever number is used, the conclusion is that the Spanish NAP allocates below BAU.

¹⁰ In the British ETS, 31 organisations (‘direct participants’) took on targets to reduce their emissions against 1998–2000 levels, aiming to deliver close to 12 million tonnes of additional CO₂ equivalent emission reductions over the period 2002–2006. The scheme was also open to the 6000 companies with Climate Change Agreements (CCA), the latter setting energy-related targets. Companies meeting their targets would receive an 80% discount from the Climate Change Levy, a tax on the business use of energy. These companies could use the scheme either to buy allowances to meet their targets, or to sell any over-achievement (www.defra.gov.uk/environment/climatechange/trading/).

¹¹ A weaker, compromise version of the proposal was finally adopted in the ETS Directive (Lefevre, 2005: 105).

¹² As noted by Wurzel et al. (2003: 128), Germany (together with the Netherlands) is the country within the EU which has adopted by far the largest number of VAs. Other important German climate policy instruments have been the ecological tax reform and the Renewables Energy Sources Act. See Fraunhofer-ISI (2002).

¹³ According to Matthes and Schafhausen (forthcoming 2006: 38), this means among other things that the German NAP process has been complicated by ‘a poor data situation and very incomplete information’.

¹⁴ The VA focal point was favoured by the environment ministry. The other three focal points were a ‘proportional’ approach, a ‘non-ET stabilisation’ approach and a ‘cost-efficiency’ approach. See Matthes and Schafhausen (op.cit.: 12-13).

¹⁵ Increasing emissions from transport and households may increase the need for NAP ambitiousness further down the line. See for example Reuters (2005 B).

¹⁶ The EU ETS has been characterized as the ‘new grand policy experiment’, cf. Kruger and Pizer (2004).

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