

Creating the UK Emission Trading Scheme: Motives and Symbolic Politics

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ABSTRACT

This paper explores the business-led advocacy of the UK emission trading scheme with special focus on the symbolic benefits of emission trading for the business community. It traces the development of the UK Emissions Trading Group and links the group's preferences for emission trading to socio-economic, operational and legislative contexts. The analysis reveals that, although business originally supported emission trading as an alternative to taxation, more socio-symbolic motives shaped business interest in emission trading after announcement of the Climate Change Levy. This suggests that 'symbolic politics' can drive industry support for economic instruments such as emission trading, even when the economic rationale for doing so is diminished or constrained by existing policy frameworks or wider socio-economic contexts. Copyright © 2008 John Wiley & Sons, Ltd and ERP Environment.

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Introduction

SINCE ITS ORIGINS IN ECONOMIC DEBATES ABOUT THE COMPARATIVE ADVANTAGES OF MARKET-BASED regulatory instruments versus mandated standards (Dales, 1968; Baumol and Oates, 1971), permit trading, and later emission trading, has been widely advocated as an economically flexible and efficient instrument for pollution control (see Tietenberg, 2001, or Kosobud, 2000, for an overview). Emission trading now enjoys a fairly prominent place in the contemporary climate policy repertoire, buoyed in part by its inclusion as a flexible framework mechanism within the Kyoto Protocol (UNFCCC, 1988). However, the large and diffuse literature on this topic consistently shows that it is difficult to forecast how the economic principles behind emission trading will play out within the invisible hand of an emission market, the infrastructure of a trading scheme or the wider socio-economic contexts in which the scheme operates (Hanley *et al.*, 1990; Bohi and Burtraw, 1997; Stavins, 2000, 2003, among many others). Some of this evidence also suggests that the contemporary attractiveness of emission trading as a policy instrument is becoming tarnished by the often controversial, or at least

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variable, outcomes associated with trading emissions. For example, recent research on the flagship EU emission trading scheme is fairly critical of both its environmental and economic performance, particularly with regard to its overgenerous free allocation system (e.g. Grubb and Neuhoff, 2006; Ellerman and Buchner, 2007; Matthes *et al.*, 2005).

The UK Emissions Trading Scheme (UK ETS) examined here was created between 1999 and 2002, in what was a period of widespread optimism and faith in the efficacy of 'new economic policy instruments' (NEPIs) (Smith, 2002; Jordan *et al.*, 2003). The UK ETS was a voluntary, incentivised scheme covering a basket of six greenhouse gases, measured in equivalence to carbon dioxide (CO_{2e}) (DEFRA, 2001b; 2001c). On average, each of the 33 direct participants in the UK scheme made a commitment to reduce their emissions by roughly 12% from their 1998–2000 baselines, creating an aggregate reduction of 12 million tonnes of CO_{2e} from 2002 to 2006 under the emissions cap (DEFRA, 2001c).

The scheme began in 2002 and finished quietly in 2007, at which time eligible participants moved into the EU emission trading scheme. Although the original UK scheme has now come to a close, the general idea of a domestic trading scheme for the UK is by no means dead. As called for in the 2006 Energy Review (DTI, 2006), a new, mandatory UK trading scheme based on a system of Energy Performance Commitments is currently being considered for businesses not covered by the EU ETS (DEFRA, 2006). Additionally, current participants in the UK Climate Change Agreement programme can continue to trade emissions from their emissions targets if they choose to do so (DEFRA, 2006).

It is argued here that, regardless of its neo-classical rationality, UK emission trading represented much more than a market to its participants. Symbolic politics and political manoeuvring ahead of real and threatened legislation drove industry interest in emission trading despite serious compatibility issues with other policies. Ultimately, business interests were able to achieve only a compromised trading scheme, which did not deliver on their economic interests, but which did satisfy a range of symbolic motives in specific legislative and practical contexts. These arguments are based on a series of in-depth interviews carried out from 2003 to 2005 with business representatives and government officials involved in the UK Emissions Trading Group (ETG) and, more generally, in UK emission trading. Interviewees included representatives from 18 of the direct participants in the UK ETS, four senior members of the UK ETG and four government officials involved with the creation and management of the scheme. The interviews focused on three central themes: motives for supporting emission trading, activity in the emission market and the perceived value of the scheme. The data are supported where appropriate with documentary evidence from ETG working papers.

Emission Trading in Practice and Politics

In ideal circumstances, emission trading allows regulated entities to abate emissions at minimum cost through the buying and selling of a limited number of allowances on an emission market (Hahn, 1993; Stavins, 2000; Tietenberg, 2001). The option to use the allowance market to meet abatement targets adds an extra degree of flexibility to abatement decisions, which can increase the cost-effectiveness of emission trading when compared with mandated standards.¹ As with other market-based instruments, the assumed cost effectiveness of an emission market reflects a degree of faith in economic rationality on the part of regulated entities. However, it is misleading to assume that participants in an emission trading scheme will always act in a rational manner, or even that efficiency concerns will dominate the practicalities of participation in an emission trading *programme* as distinct from the more limited arena

¹ However, there is evidence from the US SO₂ case (amongst others) that mandated standards may be preferred over emission trading if industry perceives standards as open to more favourable manipulation through corporatist policy networks (see Stavins, 1998).

of the emission market. For instance, evidence from the US SO₂ trading scheme suggests that emission markets take time to develop and that a host of non-market factors can affect their operation and the behaviour of participants (Ellerman *et al.*, 1997; Bohi and Burtraw, 1997).²

In similar fashion, the choice of emission trading as a policy instrument is not necessarily dominated by efficiency concerns. Hahn (1993) notes that market-based strategies are likely to be adopted in preference to standards only if they 'more closely approximate the set of feasible institutions based on the existing political alignment of environmentalists, business and the public' (Hahn, 1993, p. 350). Much of the previous work in this area stems from political analyses of the development of the US SO₂ trading scheme and the reaction of utilities to participation in the programme. For example, Meidinger (1986) finds that the choice of emission trading by the US EPA under the Clean Air Act was 'not best characterised as an efficiency move' (Meidinger, 1986, p. 155), primarily because the government lacked good quality data for efficiency comparisons between different regulatory instruments. Instead, symbolic competition between regulatory elites, seeking to make their mark on US policy, better explains the EPA's support for emission trading (Meidinger, 1986). Later research by Stavins (1998) found that US utilities actually opposed the adoption of emission trading, because capping programmes offered them greater opportunities for symbolic politics and direct inputs into the policy process through well established networking channels.

Focus on Voluntary Emission trading

Proactive self-regulation through negotiated or voluntary agreements is becoming increasingly common as firms seek to signal conformity to rising green expectations whilst maintaining a degree of control over the regulatory environment (Kolk and Pinske, 2004). Compliance with such agreements is typically portrayed as resulting from a credible background threat of further legislation (Delmas and Terlaak, 2002; Arora and Cason, 1996).³ Through voluntarily surrendering some level of autonomy over an environmentally significant business practice, firms may avoid more unpleasant, and perhaps less malleable, mandated standards in future. However, it is also important to recognize that achieving the diffuse social and economic benefits of voluntary public greening may not require a significant operational commitment, provided that a green impression can still be created at the political level (Forbes and Jermier, 2002).

There is some evidence that such symbolic motives may contribute to business interest in voluntary participation in emission trading. Montero (1999) found strong evidence of 'adverse selection' amongst US utilities opting additional sources into the US SO₂ trading scheme under the so-called 'substitution provision'. In most cases, volunteered sources either had emissions below their allocation levels or marginal costs of abatement below allowance prices. Voluntary inclusion offered firms the opportunity to symbolically self-regulate a greater portion of the emitting activities of the business, whilst incurring little operational or economic risk.

Somewhat similar accusations have been made regarding voluntary participation in the UK emission trading scheme (e.g. ENDS, 2002; NAO, 2004), though the mechanisms and motives for participation are more complicated due to the offer of a financial incentive and the absence of any mandatory arm of the programme. Important groundwork on business motives for participation in the UK ETS has been undertaken by a variety of researchers and organizations (see among others Von Malmborg and Strachan, 2005; Roeser and Jackson, 2003, NAO, 2004; NERA, 2003; Enviros, 2003, 2006; DEFRA,

² See Grubb and Neuhoff, 2006, or Ellerman and Buchner, 2007, for some discussion of similar ideas in relation to the EU ETS.

³ See Goodin (1986) for important early work on the effect of legislative threat on voluntary environmental action in other contexts.

2002). In general, these studies identify three primary motives for participation, including a desire to take up the financial incentive offered for participation in the UK ETS (in some cases as a method of subsidizing investment in efficiency measures, or to offset Climate Change Levy payments), early mover considerations associated with gaining experience in emission trading prior to the introduction of the EU emission trading scheme and a desire to demonstrate environmental initiative to government and the public. It is generally accepted that the motives driving voluntary participation in the UK ETS required very little operational buy-in from participants (see Roeser and Jackson, 2003). The largely symbolic and opportunist nature of participation in the scheme manifested itself in relatively undemanding targets on behalf of most participants (NAO, 2004) and in poor trading volumes, especially in early years of the scheme (see Environment Business, 2003; Enviro, 2006; Smith and Swierbinski, 2007).

Our interviews with members of the UK Emissions Trading Group reveal similarly symbolic motives for the industry-led advocacy of emission trading. However, the motives for policy advocacy differ in important ways from those driving participation in the final scheme. In this paper, we explore the former in more detail, tracing the ways in which their evolution and significance to industry were shaped by political and social contexts as well as more traditionally recognized economic considerations. We pay particular attention to the differences between industry's original intentions for emission trading and what could ultimately be achieved given existing policy and political arrangements, and to the ways in which this disparity shaped the firms' understandings of the value of emission trading.

Policy Background

The creation of the UK ETS can be traced to the election of an 'ecologically modern'⁴ Labour Government in 1997 (see Barry and Paterson, 2004; Gibbs, 2000). In addition to Kyoto requirements, New Labour had promised to cut domestic emissions of CO₂ by 20% below 1990 levels by 2010 as part of its election platform (New Labour, 1997). In 1998, the government asked the influential Advisory Committee on Business and the Environment (ACBE) for an opinion on climate change regulation and best practice climate change policies for UK business. The ACBE response was overwhelmingly in favour of the creation of a domestic, business-to-business trading scheme (ACBE, 1998). As a follow-up to the ACBE consultation, the government later commissioned Lord Marshall (then chairman of British Airways) to create a consultation document on economic instruments and the control of business energy use.

The conclusions in the Marshall report were not exactly favourable to the creation of a UK ETS (Lord Marshall, 1998). Whilst Marshall recognized that international emission trading was 'on its way' due to the inclusion of provisions for emission trading in the Kyoto Protocol, he also indicated that it was doubtful 'whether it will ever be practical for the majority of small and medium size enterprises (SME's) and less intensive users in industrial and commercial sectors to participate in an international [or large scale] emissions trading scheme' (Lord Marshall, 1998, p. 2). In the face of such operational and administrative barriers, the Marshall report suggested the creation of only a 'dry-run' emission trading scheme in order for 'interested parties' to gain experience in trading (Lord Marshall, 1998, p. 2). As a more immediate emissions reductions measure, Marshall instead recommended the adoption of a downstream, or end of pipe, tax on energy use in order to cover a wider range of emissions, particularly those from SMEs (Lord Marshall, 1998). The government took Marshall's recommendations on board, and subsequently announced the introduction of a Climate Change Levy on downstream energy use

⁴Ecological modernization is a discourse that seeks to promote socio-economic development alongside environmental conservation. A key element of this discourse is the idea that economic agents should play a key role alongside government in ecological restructuring (see Mol, 1996).

in the March 1999 budget, to take effect from April 2001 (DEFRA, 2005). In addition to the CCL, the government also negotiated a series of sectoral Climate Change Agreements (CCAs) with business for emissions from processes covered by the IPPC directive.⁵ These agreements allowed for an 80% CCL discount in exchange for relative targets to curb direct emissions.

The announcement of the CCL and the conclusions in the Marshall report provoked a somewhat cool response from some business leaders (Smith, 2002; Hansford *et al.*, 2004; Bailey and Rupp, 2004; HOC, 1999). In July 1999, a UK Emissions Trading Group (UK ETG) was formed by several influential UK businesses. In its official capacity, the UK ETG was a joint effort of the Confederation of British Industry and ACBE to represent the case for emission trading in the UK (UK ETG, 1999).⁶ Unofficially, it was a politically well heeled advocacy coalition (see Sabatier, 1988) with a core of elite business representatives determined to put emission trading back on the policy agenda after Marshall's less than favourable report. Through close collaboration with several key government officials, the business members of the UK ETG created two draft proposals for a UK Emissions Trading Scheme that were submitted to government in September 1999 and March 2000 (UK ETG, 1999, 2000b; DEFRA, 2000).

The government reacted favourably to the draft proposals, producing a consultation document on a domestic UK ETS in November 2000 that not only recognized the primary role of business in negotiating and designing the framework for a scheme through the UK ETG, but also indicated that government was largely willing to accept the desire on the part of industry for a full scale scheme (DEFRA, 2000). The UK ETG continued to work closely with government on the specific parameters and design of the UK ETS until the scheme was formally drafted by DEFRA in October 2001.

Examining motives: a Scheme to See Off the Levy?

Perhaps the most direct pathway to understanding the ETG's early support for emission trading is to examine its core membership in more detail. According to one interviewee, the UK ETG began relatively quietly as a series of meetings between senior personnel from BP, Blue Circle/Lafarge and British Gas:

Essentially, there was a triumvirate I suppose of [names omitted] from British Gas, BP, and Blue Circle. And the three of us, when this was first mooted that we should have an Emissions Trading Group which would try and push to establish a scheme, the method of working and how we would approach it was agreed between the three of us (founding member of the UK ETG).

BP appears to have taken on a particularly important role in the process of creating the UK ETG and encouraging other firms to join. Senior representatives from BP headed both the UK ETG steering committee and the secretariat. Working papers from BP on their experiences with internal emission trading appear to have been influential in setting a direction, especially in the early days of the UK ETG (BP AMOCO, 1999; UK ETG, 1999). Another founding member of the ETG described the influence of BP in its creation:

⁵The Integrated Pollution Prevention and Control (IPPC) is a European Union regulation that requires highly polluting industrial and agricultural activities to have a permit for doing so. The permit requirement is applied to activities such as energy production, metal processing and chemical production. See <http://europa.eu/scadplus/leg/en/lvb/l28045.htm> for more details.

⁶UK ETG working papers such as this form a valuable source of insight into the business motives for creating the UK ETS. See www.uketg.com for more information.

The head of the Secretariat in the early days of the UK ETG was a BP person [name omitted] . . . and administrative support was provided by BP. Initially, the UK ETG was housed in BP. Eventually Lafarge (Blue Circle) gave us offices, but again if you want to do some sort of institutional comparison of subtleties, the Chief Executive of Blue Circle was an ex BP guy who knows [BP senior executive] very well, so a lot of this is about talking to people with a similar view of the world and getting them on board (founding member of the UK ETG).

BP's positive, first-hand experiences with internal emission trading undoubtedly did make them a credible advocate. However, the 'similar view of the world' (see quotation above) that BP were seeking to promote and consolidate through recruiting other ETG members also seems to be strongly related to the announcement of the CCL. In a speech given soon after the release of the Marshall report, Rodney Chase, then chief executive of BP and arguably one of the more influential members of the UK ETG, outlined the position of BP on the subject of energy taxation.

. . . in many instances, there are other economic instruments which offer greater benefits than taxation . . . BP is firmly of the view that emissions trading and voluntary agreements provide the most economic and the most effective route to reduce environmental industrial emissions. In contrast, energy taxes reduce greenhouse gas emissions only indirectly, i.e. by raising energy costs in the hope of reducing consumption (Chase, 1999).

It seems that the triumvirate at the core of the ETG had little trouble recruiting other members with similar views. The early business membership of the ETG was largely composed of energy sector interests (power companies and oil and gas producers) and fuel or energy intensive businesses in the manufacturing or transport sectors (UK ETG, 1999, 2000a, 2000b; see also Table 1). Their common

Amerada Hess	Eastern Group
Blue Circle	Ford Motors
Blue Circle/LaFarge	ICI Petrochemicals
BNFL Magnox	National Power
BOC Gases	Nestle UK
BP AMOCO	OM Group
British Airways	Pilkington PLC
British Alcan	Powergen
British Energy	RJB Mining
British Gas	Scottish Power
British Steel (Corus)	Shell
British Sugar	Star Supply PLC
Cadbury Schweppes	Total Oil Holdings
Calor Gas	TXU Europe
Castle Cement	Vauxhall Motors
DuPont	

Table 1. Business members – UK ETG steering and technical committees (DPs in bold)

interest in avoiding energy taxation provided a convenient rallying point for renewed interest in emission trading:

You ended up with maybe 30 or 40 companies and probably getting on for 70 or 80 people in the basement of the DTI – talking about, ‘what has Marshall left us with and what can we do about it?’. So I think there were two of those meetings maybe even three and that led to the idea of an emissions trading group (member of ETG secretariat).

The interview evidence confirms that there was a very strong anti-taxation agenda driving early interest in UK emission trading. This is not a new finding, nor is it necessarily surprising. On an economic level, energy taxation was considered by many important firms to be a relatively blunt, burdensome instrument with serious cost and competitiveness implications, particularly for those businesses such as BP or British Gas that were unable to negotiate a Climate Change Agreement and an 80% levy discount (CBI, 2002; Hansford *et al.*, 2004). In this context, emission trading would seem to be the obvious alternative to taxation, especially when considered alongside the groundwork laid by earlier discourse between government and industry (ACBE, 1998), the relative success of the US SO₂ scheme and BP’s first hand success with internal emission trading (see BP AMOCO, 1999). Indeed, the close proximity of the creation of the UK ETG to the announcement of the CCL has led some authors to conclude that the high costs of the CCL directly catalysed the creation of the UK ETS (Michaelowa, 2004) or at least that the UK ETS was created largely as a method for placating business resistance to the costs of the levy (Bailey and Rupp, 2004). However, our findings reveal something different, and more complex, behind the creation of the UK ETS, particularly when taken in the context of a trading scheme that ultimately had to be designed *around* the CCL.

Downstream Compromise and Erosion of a Tax-Based Rationale for Pursuing Emission Trading

The ongoing dialogue between the UK ETG and government after publication of the Marshall report suggests that government was still interested in considering some form of domestic emission trading. However, as the discussions continued through late 1999 and into 2000, it also became clear that the creation of a domestic ETS would have to take place around, and complementary to, the already formalized levy structure (Interviews 19, 22, 23). Furthermore, government was unwilling to rescind or adjust the coverage of the levy, even for potential ETS participants.

A number of reasons have been suggested for the inflexibility of government concerning the coverage of the CCL. First, the sectoral Climate Change Agreements were already being created for the purpose of providing an efficiency-based alternative to paying the full CCL charge. A degree of path dependency is evident here, both in terms of political and administrative momentum around the Climate Change Agreements, and, more generally, in terms of policy expertise and traditional roles in policy-making. Policy competencies and oversight capacities for taxation were already well established in the UK, and the establishment of a business tax on downstream energy fitted in well with Labour’s commitments to reducing fuel poverty (Smith, 2002; NAO, 2004). Moreover, the Treasury (which incidentally administered and published the Marshall report) was generally in favour of taxation, and was arguably better placed to influence policy direction and coverage through well established policy networks (Smith, 2002). Finally, and most importantly, the creation of an upstream trading scheme, which covers direct emissions of greenhouse gases (GHGs) at source, could have created serious ‘double regulation’ issues for firms covered by the downstream, or end of pipe, levy if energy producers in the emission trading scheme

passed on the costs of compliance to energy users.⁷ This last issue effectively made upstream emission trading a political and practical impossibility without significant reworking of the levy's coverage.

Exactly when the downstream compromise for the design of the UK ETS formally occurred is unclear. However it is interesting to note that the text of both the ETG draft proposals for emission trading (UK ETG, 1999, 2000b) and the Government response (DEFRA, 2000) indicate that the scheme could (later *would*) be built around CCL mechanisms, and that inclusion of power producers within such a framework would be problematic. Thus it seems fair to conclude that the ETG was at least running with the idea of emission trading in addition to taxation for some time prior to the final creation of the scheme. This finding casts doubt on the assumption that the creation and implementation of the UK ETS was directly spurred by the costs of the levy (e.g. Michaelowa, 2004). Despite its tax-averse *origins* in the early days of the UK ETG, the downstream UK ETS did not offer relief from the levy, except perhaps in indirect fashion through the incentive payments.

Before moving on, we should comment briefly on the effect of the downstream compromise on the experiential value of the UK scheme, especially as a warm-up to EU-level trading. The EU scheme did not begin to take shape until 2000, well after formal work on the creation of the UK scheme had begun (EU, 2000; UK ETG, 2000b). However, some form of international emission trading was generally expected to be in place by 2008 (see for instance ACBE, 1998; Marshall, 1998), as part of the flexible joint implementation mechanisms for Annex 1 (developed) countries in the United Nations Framework Convention on Climate Change (UNFCCC, 1988). It is not surprising, then, that the draft proposals for emission trading submitted by the ETG to government (UK ETG, 1999, 2000b) and the policy documentation itself (DEFRA, 2001c) all list some variant of 'gaining experience in emissions trading' as an important reason for creating a scheme.

Unfortunately, the downstream coverage of the UK ETS proved to be largely incompatible with the upstream mechanisms at the heart of the EU ETS (Sorrell, 2003), primarily because key sectors included in the EU scheme (such as power producers) were necessarily excluded from the downstream UK ETS and vice versa. Whereas some of the more influential and important members of the UK ETG, such as BP, Shell, BG and Blue Circle/La Farge could and did find ways to participate (albeit on a more limited scale) in the final scheme, by and large the downstream compromise shifted the focus of participation away from heavy upstream emitters. Thus, at the same time that the ETG's tax averse motives for advocating UK emission trading were evaporating in the face of the well entrenched levy, the necessity of going downstream with the UK ETS also began to seriously erode the experiential value of participating in the scheme for many ETG members.

Examining Symbolic Motives

The failures of the ETG to achieve a scheme to 'see off the levy' or a practical warm-up to EU trading represent an important turning point in the ETG's advocacy of UK emission trading. Put quite simply, after the announcement and implementation of the CCL, the benefits of voluntarily pursuing, and ultimately participating in, a UK ETS became more difficult to discern. Emission trading had fallen flat as an economically more attractive alternative to taxation, and the final design of the scheme was becoming more and more difficult to justify against a backdrop of emerging international trading schemes. And yet, the ETG continued to advocate a UK ETS. *Something* was apparently still attractive enough about voluntary, downstream emission trading to merit the attention and time of senior executives from

⁷Peterson (2003) notes that this issue of double regulation is a common political barrier to the adoption of upstream emission trading schemes, even though upstream designs are otherwise more attractive than downstream schemes.

important multi-national companies. Our analysis suggests that symbolic challenges and political early mover activity in the face of regulatory threats played a crucial role in the continued interest of business in emission trading post downstream compromise. Each of these motives is explored in more detail in the sections that follow.

Challenges to the Power of Industry in Formulating Climate Policy

In a symbolic sense, the emergence of governmental support for the CCL, in spite of industry's previous advocacy of emission trading, presented a challenge to the role of business in formulating UK climate policy.⁸ Despite the high-level political access enjoyed by the UK ETG, it seems that the Treasury-dominated networks and mechanisms surrounding the creation and implementation of the CCL were less open to industry influence. This appears to have caused some resentment among the members of the ETG, particularly those who had been involved in this process for some time. According to one respondent who was both a founding member of the UK ETG and a key working group chairman, it was a desire to see these previous efforts come to some sort of policy fruition that initially drove business to persevere with the idea of emission trading, despite the difficulties of working around the CCL:

You will see quite a lot of discussion, especially from the NGO and the environmental press sites saying the Climate Change Levy was the trigger that led to emissions trading. But actually, if you are inside it, it was almost the reverse. Companies said 'if we're going to do all this work on it, and in effect we feel that the government was running with something in parallel that we weren't engaged in, then this has really derailed the idea of doing emissions trading. Or has it? How can you have one if you also have a tax? It's not going to be efficient' . . . and all those sorts of arguments. So the whole thing went into a little bit of a hiatus for six weeks or so and then the Emissions Trading Group was formally launched in June of 1999 on the back of those discussions (founding member of ETG).

Another respondent of comparable standing within the ETG expressed similar ideas, describing a desire for 'quid pro quo' on behalf of government officials in recognition of the time and resources industry were pouring into the ETG:

There was never any question of this thing just happily moving on without some clear commitment from government. . . . But if these chief executives who met on our steering committee every six weeks and took sort of two hours to talk about it and were allowing significant staff time to be spent on it – they wanted some quid pro quo from people who they considered their peers which were the likes of Gordon Brown (member of ETG steering committee).

Although such a symbolic challenge to industry's lobbying power probably could not have driven industry's support for emission trading on its own, it does seem to have contributed to the attractiveness of achieving a UK ETS – even one in compromised form. There are interesting parallels here to the symbolic competition amongst EPA bureaucrats that drove the creation of the US SO₂ scheme (see Meidinger, 1986). Moreover, our findings suggest that, when combined with a context of legislative background threat, the importance of such political posturing could be amplified. Ultimately, industry

⁸Whereas some commentators would argue that 'Westminster politics' are not subject to the same plurality of influences as found in other democratic systems (such as those in the US), a strong corporatist element is identified in UK policy-making structures (see for instance Rhodes, 1986, or Richardson and Jordan, 1979, among others).

may have felt compelled to flex its muscles in support of emission trading, in order to bolster its defences against future legislation.

Regulatory Background Threat

One of the most interesting findings from our research is that ETG members tended to characterize the threat of the CCL in more than just financial terms. As the following extract shows, the stringency of the government's 20% domestic carbon emissions reductions target (see DEFRA, 2001a) seems to have signalled to many within the ETG that some form of extra legislation would be necessary in the future. This had important consequences for the way in which industry understood the benefits of emission trading and the costs of the levy:

The levels of taxation to achieve anything like the government's targets would be so stringent that no government would ever dare introduce them . . . it would go beyond political possibility. You have got to look at the people who were driving the UK ETG at that time. It was electricity generators and oil . . . And we knew that even if government did introduce a tax, sometime along the line they would introduce a cap on the energy industry. So therefore, if they were going to do that, we wanted the flexibility to be able to meet the cap with methods of our own choosing. Not with command and control (ETG steering committee member).

What emerges here is a situation in which industry felt compelled to continue advocating emission trading as a response to the levy. However, the motives for doing so were more associated with the potential costs of future legislation than the immediate costs of energy taxation (which could not be avoided). These findings strongly recall those in previous work on voluntary agreements in which 'legislative background threat' proves to be a cornerstone for support and compliance (see Delmas and Terlaak, 2002; Arora and Cason, 1996). A regulatory vacuum of sorts seems to have enveloped the creation of the CCL. Ambitious environmental targets had been announced in the UK's Climate Change Programme (DEFRA, 2001a), but the flagship policy for meeting industry's portion of those targets was not considered robust enough to deliver them in the long term. For some of the ETG members, this regulatory vacuum effect appears to have been amplified by the nature of the CCA programme that accompanied the levy. Many of the core ETG members (including the oil and energy providers) were not considered energy intensive businesses according to the IPPC standard and were therefore ineligible to enter into a sectoral CCA in exchange for an 80% levy discount. Lack of a CCA option left these businesses significantly more exposed in cost and competitiveness terms to the CCL (CBI, 2002). Furthermore, without the ability to demonstrate green credentials through volunteering CCA targets, these businesses were also confronted with the loss of an important political bargaining chip against the imposition of less favourable standards. In this context of double-edged regulatory threat, pressing for even a flawed, downstream trading scheme made good business and political sense:

So, here are companies with big [CCL] exposures, UK based, recognizing that these issues had to be taken seriously – that carbon control is a big issue and it will become a bigger issue in the future. And therefore that there was a political and an economic game to be played. . . . It needed to be dealt with, it was a long term issue, and what you needed to do is to begin to establish those institutions which would enable this issue to be addressed most effectively (member of ETG secretariat).

Returning briefly to the economic rationale behind emission trading, advocating a *voluntary* trading scheme, even for largely symbolic reasons, also appears to have made good economic sense. Participants

could choose to become 'symbolically involved' at a comfortable level that posed little real financial risk, particularly when offset by incentive payments. Whilst it is conceivable that some other form of voluntary agreement could have offered similar low-risk, self-regulatory benefits, the concept of a UK ETS was already on the table prior to the Marshall Report (ACBE, 1998), and the influential companies at the core of the ETG (particularly BP) were committed to pursuing emission trading as a long-term regulatory strategy for the energy industry.

Lessons and Implications

Hahn and Stavins (1992) note that despite the 'substantial amount of work that has been done by economists on designing market-based approaches to environmental protection, relatively little effort has been devoted to developing or testing a positive theory of environmental instruments choice' (Hahn and Stavins, 1992, p. 466). These authors go on to observe that a useful exercise in building this theory might be to 'focus on the incentives faced by key decision makers and the institutions and environments in which they function' (p. 466). The preceding analysis reveals that, in addition to more traditionally recognized concerns for comparative cost effectiveness, industry's preferences for emission trading in the UK distinctly reflected the surrounding socio-political climate. As time wore on, and the CCL presented itself as an unavoidable obstacle to the ETG's tax aversion plans, the importance of negotiating an emission trading scheme for the ETG became more focused on symbolic posturing and green impression management.

Of course, it might be argued that even the more symbolic motives discussed in this paper carry obvious financial risk and opportunity components. For instance, top up legislation could add significant operational costs, and the imposition of such legislation could lead to negative social scrutiny by a green public, which might affect profits. In this sense, voluntary participation in emission trading could be rationalized as an efficient and cost effective means of mitigating this financial risk, particularly if the degree of volunteered participation was fairly superficial. There is certainly evidence of such 'business as usual' or symbolic participation in the UK ETS in our data and in the findings of other commentators (see NAO, 2004; ENDS, 2002). Even so, this abstract and longitudinal risk calculation reflects a contextualized construction of social, political and financial implications that are far removed from a simple efficiency comparison of emission trading to taxation. Our analysis suggests that symbolic factors, far from being a 'knock-on benefit' or an aside to more pressing financial concerns, can drive industry support for emission trading, given the right contexts. Furthermore, such contexts may not be as far removed from the practical underpinnings of policy making as one might expect (see Meidinger, 1986, for similar findings from the US SO₂ case).

With these conclusions in mind, it is also important to reflect on the value of the scheme itself and what was actually achieved by the UK ETG. The scheme drew quietly to a close in March 2007. Despite talk of extension in an altered form (see DEFRA, 2006), the passing of the original scheme attracted little political or media attention, nor was it publicly mourned by any of its participants. It is probably safe to conclude that the UK ETS will not be remembered as a financial or legislative success (see Von Malmberg and Strachan, 2005; Roeser and Jackson, 2003; Sorrell, 2003; NAO, 2004; ENDS, 2002, among others). Ultimately, the analysis presented here suggests that the longer-term regulatory interests of a small number of powerful companies dominated the policy agenda surrounding UK emission trading, pushing through a relatively weak and complicated programme that had little to offer mainstream business. Contrary to DEFRA's optimistic early estimates (DEFRA, 2002), many businesses were reluctant to volunteer binding reduction targets, even in exchange for financial incentive payments. Those who did so tended to be core ETG members, or those for whom recent changes in production or efficiency offered

easy access to large volumes of incentive payments in exchange for 'hot air' (see NAO, 2004; ENDS, 2002). One of the lessons that could be drawn from this analysis is that, although symbolic politics can form a strong drive for policy advocacy, on their own they might not drive anything more than *symbolic participation* in a voluntary programme.

What the preceding analysis shows very clearly is that the business-led advocacy of UK emission trading was as much a product of the economic potential of the trading mechanism as it was a reciprocal adjustment to, and an attempt to change, the wider regulatory framework in which the scheme would be located. We recognize that not all of the issues examined here will be relevant in the case of a mandatory trading scheme (such as the EU ETS, or perhaps the proposed extension of the UK ETS). Nevertheless, this case study offers some important lessons about the choice of policy instruments, particularly in terms of how the risks and rewards of such instruments are shaped by the surrounding legislative and social constellation. As we look ahead towards the probable expansion of international trading schemes and the possible reincarnation of the UK ETS, it is important to bear these lessons in mind. Symbolic politics and regulatory background threats can pose as great a perceived risk to policy-relevant actors, and as great a motive for seeking policy change, as efficiency concerns linked to prices and quantities.

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