

How 'New' Environmental Policy Instruments (NEPIs) Spread in the European Union: An Analysis of the Role of the EU in Shaping Environmental Governance

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ABSTRACT

This paper examines how 'new' environmental policy instruments (NEPIs) have spread within the European Union (EU) member states and how the EU structure shapes the adoption of these instruments. The paper utilises the policy learning and policy transfer literatures to examine how states learn, and how the EU intervenes in this learning process. The paper provides an empirical overview of how market-based instruments (eco-taxes and tradable permits), voluntary agreements and eco-labels have been introduced on both the EU level and within its member states. The paper presents new empirical findings of NEPI usage in four member states (Austria, Germany, the Netherlands and UK).

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I. INTRODUCTION

Examination of the patterns of governance in the European Union (EU) and its member states suggest the increasing rhetorical prominence *and* the actual utilisation of 'new' environmental policy instruments (NEPIs) in recent years (Jordan, Wurzel and Zito, 2003a). These NEPIs include market-based instruments (eco-taxes and tradable permits) as well as soft tools such as voluntary agreements (VAs) and eco-labels. As an illustration of the increase, one estimate suggests that there has been over a 50 per cent growth in market-based instruments in environmental policy in OECD countries (Ekins, 1999). The EU Commission has commissioned studies which have pointed out the superior performance of NEPIs in terms of efficiency. Its Fifth and Sixth Environment Action Programmes (EAPs) have stressed the importance of an increased use of a wider range of NEPIs (CEC, 1993b, 2000c). However, although there is widespread agreement that the EU has, at various times, acted as a driver of innovation in the environmental policy arena (see, for example, Jordan, 2002; Vogel, 1997; Wurzel, 2002; Zito, 2000), its role in facilitating the uptake of NEPIs has remained a mixed one (Jordan, Wurzel and Zito, 2003c; Weale *et al.*, 2000).

The objectives of this paper are twofold. First it will examine the learning process by which new instruments are being incorporated into the member state toolkit. Particular emphasis is given to the policy transfer literature. This paper simultaneously assesses the EU's role in the member state evolution. In order to assess how and what states learn from each other and from external circumstances, it is useful to draw on Hall's (1993) distinctions about the nature and content of policy and how it changes. Hall differentiates the content of policy into three different levels or parts. First the broader goals contained within a policy will operate within a policy *paradigm* or a framework of ideas that specifies not only the goals of policy and the kind of instruments that can be used to attain them, but also the very nature of the problems

they are meant to be addressing. The second level equates to the instruments or techniques of policy, while the third and lowest level relates to the precise setting of those instruments.

While the evolution of member state policy paradigms -- e.g. discussion of sustainable development and ecological modernisation paradigms -- (e.g. Weale *et al.*, 2000) and the paradigm shifts at the European level have been assessed elsewhere (e.g. Jachtenfuchs, 1996), this paper focuses on the equally important question of how NEPI innovation at the EU level and member states level has occurred in terms of the (re-) calibration of policy instruments. The paper focuses particularly on NEPIs that divert from traditional 'command-and-control' regulation, or at least retain a considerably higher degree of flexibility concerning policy goal achievement.

In order to examine the EU's role in the process of NEPIs adoption, the paper studies three types of instruments: (1) two types of market-based instruments, eco-taxes and tradable permits; (2) voluntary agreements (VAs); and (3) eco-labels. These instruments vary in how they target actors in terms of the level of coerciveness imposed upon them.

Bemelmans-Videc and colleagues (1998) differentiate between sticks (i.e. traditional regulation), incentives (i.e. market instruments) and sermons (i.e. moral suasion). Economic instruments (carrots) are moderately choice constraining; traditional regulatory instruments (sticks) constitute highly choice constraining instruments; and informational devices (sermons) mainly provide information about the implications of certain choices. Eco-labels constitute the 'softest' instrument while eco-taxes and tradable permits are much 'harder' tools. Voluntary agreements (VAs) are somewhere in between although this may vary from jurisdiction to jurisdiction. In most member states VAs are legally non-binding and therefore do not involve any coercion apart from 'moral' and/or public pressure. However, in some countries (for example, the Netherlands) VAs have reached a high level of formalisation and may trigger sanctions which are otherwise imposed only under legally binding regulations. Our differentiation into the above mentioned three categories (i.e. market-based instruments,

VAs and eco-labels) recognises that eco-taxes may retain a substantial element of intervention while VAs are often hard to match completely with any one of the categories.

The study of how the EU intervenes at the level of instruments is important for two major reasons. First, it should enhance our knowledge about how EU and member state governance is changing in an important policy field. Second, it should uncover to what degree, if any, the EU is facilitating (or constraining) the transfer of policy instruments and affecting the process of learning about the use of instruments.

The following three main research questions therefore guide this paper. First, what has been the overall pattern of NEPI adoption in the EU, Austria, Germany, the Netherlands and the UK? Second, what different roles and functions has the EU played in terms of facilitating and/or constraining the use and transfer of NEPIs? Third, what implications for EU and member state governance do the patterns of NEPI usage suggest?

While the policy transfer literature is particularly focused on how (policy) ideas are transferred across countries, it has paid relatively little attention to the transfer of policy instruments (Majone, 1976; 1991) although there have been some notable exceptions (e.g. Dolowitz and Marsh, 1996). This paper aims to help filling this research gap while addressing also the role the EU may have played in blocking the adoption (and transfer) of NEPIs on the member state level thus leading to 'non-decisions'.

The paper proceeds as follows. Part Two is divided into two subheadings. The first sub-section provides a general overview of the policy transfer literature; the second sub-section examines the concept of Europeanisation and explores the ways by which the EU may influence the learning and transfer processes in member state: (1) passive arena, (2) facilitating arena, (3) harmonisation arena, (4) competitive arena, and (5) independent actor. Part Three to Six put forward an assessment of the overall pattern of NEPI use while presenting new empirical findings with respect to our three types of instruments (i.e. market-

based instruments, VAs and eco-labels). Part Seven analyzes the pattern of NEPI use and adaptation in the member states light of the policy learning, governance and instrument literatures and then provides an overall concluding analysis of the EU role.

2. CONCEPTUALISING POLICY TRANSFER IN EUROPE

Policy Transfer

In order to explain why a considerable increase in NEPIs usage has taken place within the EU and many of its member states in recent years, there are different types of explanations we might consider. The policy transfer literature provides some very useful insights into how ideas about policies and instruments spread across political systems (e.g. Bennett, 1991; Stone 1999; Kern, 2000; Tews, 2002). The policy transfer literature focuses on the process by which knowledge at a particular time and place is used (in the development of such arrangements) at another time and/or place (Bennett, 1991: Dolowitz and Marsh, 1996). It is concerned with the *agents* of transfer within broader political structures. The knowledge they transfer could relate to policy goals (or paradigms), the policy content, policy instruments or to administrative arrangements, though we are mainly concerned with instruments in this paper.

An alternative to the policy transfer literature is the policy diffusion model, which seeks to explain variation in the adoption of specific policy innovations across a number of states or political systems (Berry and Berry, 1999: Kern, 2000). Policy diffusion examines the characteristics of political systems and the different kinds of diffusion processes that exist - e.g. proximity of political systems or the leader-laggard dynamic (Kern *et al.*, 1999). However, a number of criticisms have been made of this literature, including its tendency to not address the issues of human agency and its lack of explanation of circumstances where diffusion does not occur.

In order to get at issues of agency, we devote our analytical framework to the explanations provided by the policy transfer and the study of policy learning. Compared to diffusion

studies, policy transfer contains a greater focus on what agents of transfer are doing. The expectation is that various actors will spread or receive knowledge about the wider paradigmatic issues behind a policy or the more particular policy instruments. There are a number of different avenues by which this exchange of knowledge may take place. Some of the adaptation may be due to internal processes while others may be due to the intervention by the EU or international factors.

Bennett (1991) provides a useful typology of the different patterns of innovation which, he argues, can occur through emulation, expert networks, harmonisation/economic competition and penetration (i.e. the fact that states may be forced to conform to actions taken elsewhere by external actors). This paper takes the Bennett typology and applies it to the potential roles the EU may have with regard to NEPI innovation. Our approach differs from the Bulmer and Padgett (2000) framework that typologises the different kinds of EU policy transfers. It is more focused on the transfer influence of the EU *vis á vis* the member states. We argue that the EU's different roles are not mutually exclusive; under particular conditions the EU may foster policy instrument innovation through several of its roles simultaneously which can create certain dynamics leading to policy instrument innovation (or instrument blockage).

In assessing incidents of policy transfer, it is important to take into consideration that the simultaneous innovation (with policy instruments) may have occurred as a result of similar but independent state responses to the same or similar policy problems (Collier and Messick, 1975; Peters, 1998). At the heart of this argument is the expectation that highly industrialised liberal democracies follow similar pathways of (economic/social) development and therefore naturally gravitate towards common policies and instrument usage. This is suggested in Lowi's (1964) often quoted dictum that 'policy determines politics'. Hoberg (1986) argues along similar lines: 'there is only one best way to resolve a problem, and since nations at similar levels of industrial development confront a core of problems, responses will converge accordingly'. This argument has its own range of criticisms, especially as it may beg the question of how problems are identified as meriting solutions.

EU Role in Policy Transfer

As this paper addresses policy innovation in the EU as a whole, we need to examine its important intervening role over member state policy instrument selection.

One possibility for instrument innovation is the scenario where member states converge and transfer policies and instruments horizontally without the EU's involvement. The next three scenarios listed below suggest that the EU arena creates strong incentives for member states to converge while the fifth suggests a 'top-down dynamic' where the supranational institutions push and define the NEPI innovation. Bulmer and Padgett (2000) draw a distinction between the more vertical 'obligatory' transfer where the EU law acts as the main driver and is imposed on the member states and the more horizontal voluntary transfer where member states learn from each other in the EU arena. Their framework can be made compatible with that offered in this paper which is more concerned with the mechanism than the degree of obligation.

A. EU as Passive Arena.

We have already addressed the possibility that internal learning dynamics may occur in the individual countries. Equally policy innovation and transfer within and between member states may occur without substantive contribution from the EU.

Prior to the EU Commission's proposal for a directive on emission trading (which was itself a response to the Kyoto protocol) in 2000, very few member states (such as the Netherlands) had limited previous experience with tradable permits (interviews, 2000-2). Those which did; drew lessons from existing emission trading schemes in the United States of America (USA) which had insisted on the inclusion of tradable permit schemes as policy instrument to achieve reductions in climate change gases in the Kyoto Protocol (Dekkers, 1999, Zapfel and Vainio, 2001).

This scenario expects that EU member states with similar policy problems and resources, as well as geographic proximity, will seek to emulate key aspects of another country's policy which are seen to be successful (Bennett, 1991; Dolowitz *et al.*, 1999). Dolowitz and Marsh (1996) use Rose's notion of 'lesson drawing' to distinguish voluntary policy transfer. Here frequent contact between member state officials occurs in part due to the demands of the EU policy process. Equally member state officials may feel the same policy threat or shared political heritage which may lead them to consider emulation.

In this innovation process and the scenario that follows, it will be important to show that an innovation was occurring in one particular place and time and that others in different localities were aware of this innovation, gathered information and then adopted similar policies and literatures (Bennett, 1991; Dolowitz *et al.* 1999). There is disagreement in the literature about what exactly will be transferred. Dolowitz and Marsh (1996) contend that the most frequent transfer involves instruments and specific techniques while Majone (1976;1991) suggests that it is the larger ideas (and incorporated into the national institutional traditions that are copied rather than the specific details).

B. The EU as a Facilitating Arena

This scenario acknowledges that the complex web of actors and processes that surround EU policy-making create a vital arena in which policy networks (i.e. groups of scientists, experts and other officials centred around a particular policy paradigm or policy problem). The EU's institutional set up facilitates the creation of networks of policy actors within which ideas will more quickly diffuse and be transferred across member states. The EU's institutional structures enhance the creation of networks of Commission and member state actors which have numerous opportunities to discuss ideas and exchange information.

Despite the lack of success in creating an EU-wide carbon-dioxide/energy tax, the EU efforts in this area have highlighted the different approaches taken in various member states, leading to a sharing of ideas and experiences about this instrument within the Council of Ministers as

well as between like-minded countries. The EU framework creates the opportunity for member states to showcase their approach to others and possibly to define the larger regional agenda.

Dutch environmental officials figured heavily in the formulation of the Fifth EAP, which not surprisingly bore some resemblance to the Dutch Environmental Policy Plan. (Lieverink, 1999; Kronsell, 1997, 117-121).

Both the Fifth EAP and the Dutch Environmental Policy Plan emphasised the need for a wider use of market-based instruments. However, because the EU was unable to adopt an EU-wide carbon dioxide/energy tax (due to the unanimity requirement for tax measures on the supranational level), a group of like-minded countries (including Austria, Germany and the Netherlands amongst others) meet to discuss how eco-taxes could be used on the national level without damaging international competitiveness.

We also include in this category episodes of member state policy transfer and learning that has been pushed by the need to implement EU legislation which has not specified the nature of the innovation, but has provided the incentive and opportunity for member states to incorporate NEPIs during the implementation phase. For example, the Water Framework Directive and Packaging Waste Directive have triggered the adoption of market-based policy instruments in the UK.

C. The EU as a Harmonising Force to Prevent Market Disruption

Bennett (1991) notes that policy convergence among states may be driven attempts to harmonise policy via a supranational organisation such as the EU or international regimes. This scenario emphasises EU actions to protect the Single European Market (SEM) which constitutes a vital goal for the EU.

Much of the EU's environmental legislation prior to the 1987 Single European Act (SEA), which introduced for the first time explicit environmental provisions into the Treaty, was

justified with the need to avoid barriers of trade and distortions in competition (Liberatore, 1991; Jordan, 1999a; Wurzel, 2002; Zito, 1999). The early (command-and-control) environmental regulations and many of the framework directives and their daughter directives which since followed, were adopted with the stated aim of protecting the SEM. This motivation has remained important as can be seen, for example, from the EU reaction to the German packaging waste laws which were perceived as creating market disruptions (Golub, 1996).

This concern to protect market competitiveness may increase the incentives for the EU and its member states to innovate, but it may also lead the EU to block innovation or constrain the contents of what member states transfer. This is a critical dynamic in understanding the EU role in the innovation of policy instruments

D. The EU as a Competitive Arena

This fourth category is closely tied to the third scenario mentioned above in emphasising some of the more involuntary processes. It recognises that the EU, with the strong rationale for harmonisation of national policies and integration into further environmental areas, creates the conditions under which different member states have a strong incentive to compete for economic advantage, or at least minimise regulatory adjustment costs. Because the EU integration process has led to a significant adjustment of environmental policies and standards, member states have a clear incentive to stay ahead of EU regulations and regulatory intentions in their national policies (Héritier *et al.*, 1996). If individual states have imposed regulations with significant costs on industry, the national government also may seek to ensure that other member states are forced to impose similar legislation (Héritier, 1996). States that have more elaborate regulatory frameworks will be strongly interested in trying to shape the EU legislative agenda according to their own regulatory patterns. Member states wish to avoid endangering the competitive position of their industries. Having to adjust national legislation to an EU standard will impose competitive costs, especially if another country has managed to

define the EU agenda to benefit its own industry. This explains part of the motivation of British actors to develop a working tradable permit scheme first.

E. The EU as an Entrepreneur

This last category recognises the substantial independent affect that EU actors can have on making the policies of the member states converge. For various reasons, supranational elements within the EU may seek to define the agenda for the member states. Most attention has been paid to the role of the Commission as an entrepreneur, seeking to expand the influence of the EU and the Commission by looking for opportunities to suggest new policy initiatives and to expand into new areas (e.g. Cram, 1997; Jordan, 1999a; Radaelli, 2000).

In terms of NEPIs, the Commission's past commitment to a carbon-dioxide/energy tax and its current desire to harmonise energy taxation, suggest a combination of motives, such as to expand the leadership position of the EU and to increase influence on key environmental and economic issues involving taxation. As Jordan (1999a) notes, the Commission has been highly successful in operating at the international level to develop policies that have ramifications for EU regulation.

Having examined the policy transfer explanation and established the roles that the EU may undertake in defining the mechanisms of policy transfer concerning NEPIs, the next sections examine the empirical evidence. It concentrates on examining the three types of instruments (market-based, VAs and eco-labels) for the four case countries of this study.

3. Learning and Transfer of Market-based Instruments: Eco-taxes

Eco-taxes actually have a long tradition in Europe (see Andersen, 1994; Faure *et al.*, 1994; CEC, 1998a; Ekins, 1999; Andersen and Sprenger, eds, 2000). The Nordic countries, the Netherlands and France adopted eco-taxes on water and air pollution in the 1970s and early 1980s. Germany adopted a waste water levy in the mid-1970s which, however, was not fully implemented until the early 1980s (Andersen, 1994, 136). It is difficult to infer that this initial

diffusion of taxes was due to the conscious emulation of other countries beyond raising the possibility that this instrument merited experimentation in the environment sector. For instance, in the Netherlands the original water charge contained in the 1969 Surface Water Act did not have an environmental aim. The 1976 German waste water levy was championed mainly by economists within the Environmental Expert Council (SRU). Other member states, such as the UK, have been latecomers in adopting national eco-taxes only in the 1990s (OECD, 1995). The empirical findings from our four case countries suggest that there are a diverse range of eco-taxes and targeted sectors. There has been a strong tendency towards energy, mineral oils and transportation taxes, but the revenue use of the eco-taxes has differed.

In the late 1980s and 1990s the discussion in Austria, Germany, the Netherlands and the UK turned to the linkage between economic priorities/growth and the use of eco-taxes. Both of these developments occurred within individual states and international fora. In the 1970s, the environmental economists in Germany and other countries emphasised the idea of a 'double dividend' (i.e. that eco-taxes can be beneficial for both the environment and economy if the rise in the cost for natural resources is matched by a decline for the cost for labour thus leading to higher employment).

The Brundtland Report in 1985 gave a considerable impetus and legitimacy to the European discussion (Interview, Danish Finance Official, 23/2/93). Nevertheless, specific efforts of incorporating the concept had to occur at the national level and were particularly noteworthy in Denmark and Sweden. Policy-makers in Germany and the Netherlands certainly were conscious of these developments (Interview, VROM officials, 26/03/93) although German policy makers did not view Denmark as a particular role model because of its small size and small industrial base (Germany Ministry officials, 2000). It is difficult to argue that detailed emulation of the Scandinavian experience occurred in any of our four case countries; furthermore the four case countries diverged on how they incorporated these discussions in their environmental toolkit. Only in Germany did the debate on double dividend develop into

substantive Ecological Tax Reform in 1999; nevertheless the other countries did have these issues on the agenda, either in a more implicit or explicit fashion.

The whole need to expand the scope and usage of market-based instruments was pushed onto or kept on the member state agenda by the OECD. The OECD conducted a number of studies (such as Opschoor and Vos 1989) that examined national experiences of eco-taxes. Various discussions and working groups were held at the OECD level where national representatives met each other and discussed their individual experiences. This activity gave national policy-makers ammunition to push for more eco-taxes although it is less likely to have led to wholesale adoption of aspects of other country's adoptions.

Turning to the specific country experiences, the Netherlands incrementally adopted a relatively wide range of sectoral levies and taxes (Snel, 2000; Vermeend and van der Vaart, 1998). By the mid-1980s, there were six sector specific environmental acts which allowed for 15 different levy systems to be created – although only seven were implemented at the time (VROM, 1992). The lack of transparency, administrative costs of such a complex levy system, together with the desire to have an integrated system for financing environmental policy expenditures and to boost environmental objectives, gave the impetus for change in the late 1980s when the Dutch government adopted a strategy of general environmental taxes. In 1988 a general fuel levy was adopted. Four years later it was transformed into a general fuel tax. All of these developments suggest an incremental learning process where at least one policy instrument (i.e. the water charge) was transferred internally to environmental purposes.

In this process the Commission pushes to have an EU presence in this area did give an extra momentum to national discussions. Given the continued desire to protect national competitiveness, Dutch officials were eager for the EU process to go ahead. Accordingly, the Dutch set their regulatory tax at the price level for oil found in the Commission proposal for a tax (Heineken, 2002). But the inability of the EU to agree an energy tax has affected the Dutch design which has consciously sought to avoid overburdening national industry in the

absence of an EU provision. The EU has also had an active constraining role on the aspects if not the overall design of Dutch eco-taxes. For instance, the Commission sought to prevent the Dutch from lowering the VAR rate on electricity produced from renewable energy sources (the Green Tax Commission, 1998).

The Dutch government continues with eco-tax expansion in the areas of groundwater, waste and energy followed in the mid 1990s. In 1995 the Finance Ministry set up the first Green Tax Commission which included a wide range of stakeholders although environmental NGOs were not represented. A second Green Tax Commission, which includes a representative from an environmental NGO, was recently set up jointly by the Finance and Environment Ministries, but was unable to decide on definitive directions (Interviews, VROM, Finance Officials, 2002).

Germany has made use of economic incentives and eco-taxes already since the 1970s. However, initially eco-taxes remained limited to certain sectors (such as waste water) and products (e.g. petrol). They were very moderate as regards the level of charges and many of them included exemptions (see Andersen, 1994). Over time eco-taxes were extended incrementally to new sectors and products (see Andersen and Sprenger, 2000; OECD, 1999).

One clear spur to the consideration of eco-taxes was climate change. It is in this context in the early 1990s that Germany together with the Netherlands and Denmark pushed hard for the introduction of an EU-wide carbon dioxide/energy tax. However, unlike its neighbours, the German government refrained from adopting unilaterally such a tax; here we see the EU process helping to constrain the national policy instrument repertoire (see Andersen and Liefferink, 1998).

In the 1990s Germany started to fall behind most Northern European states as regards the use of eco-taxes (see Jänicke *et al.*, 1998; Andersen and Sprenger, eds, 2000). The Red-Green coalition government's decision to adopt a more wide ranging ecological tax reform has

therefore been perceived (at home and abroad) largely as an attempt to catch up again with the EU environmental leader states (interviews in 2000). As noted before, environmental economists had raised this issue in the 1970s, but it is only when an explicit link between eco-taxes and job creation was made that a true political coalition developed to push the re-design forward. Whatever the activity of the Scandinavian countries at the time, Germany considered independently the adoption of an ETR.

The main aim of Germany's ETR is to shift the general tax burden from labour (e.g. social security) to the use of the environment. In late 2000 the all-party consensus about need for an ecological tax reform broke down when the main opposition parties (CDU/CSU and FDP) demanded that it should be scrapped following major protests against rising fuel prices in several German cities in the same year. However, the Red-Green coalition government defended the existing ecological tax reform (often by making reference to (higher) eco-taxes in other member states such as the British fuel escalator tax (interviews, 2001)) although it adopted supportive measures (e.g. for commuters and low income groups).

The EU has acted as a constraining factor on German eco-taxes because of the imperatives of protecting the SEM. With regards to ETR, the EU Commission objected to a number of exemptions (essentially for high energy users) and fiscal incentives for renewable sources (Interviews, BMU and Finance Ministry Officials, 2001). The introduction of the ETR had therefore to be postponed by three months and came into effect only on April 1 1999.

Another earlier example was the German attempt to introduce a roll toll for lorries in the 1990s. The European Court of Justice (ECJ) ruled against this measure, arguing that it was an implicit discriminatory measure against foreign lorries. In 2001 the German government decided to adopt a revised road toll for lorries which takes into account the ECJ decision.

As seen in the other case countries, Austria has used eco-taxes in the transport and energy sectors. Eco-taxes were used mainly for curbing emissions from transport which are seen as a major threat to the environment in general and the ecologically sensitive Alpine region in

particular. Austria has become a transit country for lorries. it has tried to curb (air and noise) emissions by imposing traffic restrictions and charges (so-called eco-point system) for lorries. however, EU membership meant that Austria had to revise its eco-point system (and unlike neighbouring Switzerland) accept a higher number of lorries passing through the Alps (Lauber, 2003). THE government scrapped a national fertiliser tax prior to Austria's accession to the EU because it was feared to be incompatible with SEM rules (Glatz, 1995). Other important Austrian eco-taxes can be found in the energy, agriculture and waste sectors. However, many of these (eco-) taxes were adopted mainly for fiscal reasons in order to avoid a higher national budget deficit which could have threatened Austria's membership in European Monetary Union (EMU).

The debate about a grand scale eco-tax reform played an important role in Austrian politics in the 1990s. The Green party and environmental NGOs were champions of ETR in the 1980s, but the movement gather important support from the Socialists (SPÖ) and the Workers Chamber (AK). However, industry was strongly opposed and the highest political leadership (i.e. the Chancellor and Vice-chancellor) was concerned that an ETR might damage Austria's international competitiveness. In the context rising unemployment, a spiralling budget deficit and increased competition, Austrian governments have decided against the unilateral adoption of an ecological tax reform. The new right-wing-liberal (FPÖ/ÖVP) coalition government (which was re-installed in 2001) has made the ETR a 'taboo subject' for even the Environment Ministry officials (interview, Environment Ministry officials, 2001).

As noted already, the UK has been slow to make widespread use of eco-taxes though this has changed more recently (although it remains opposed to the adoption of taxes on the supranational EU level on the basis of qualified majority voting). Prior to 1995, the UK government has pursued market-based instruments in a very ad hoc manner. The Economics sections of the then Department of Environment had actively explored these instruments. The government hired consultants to examine best practice in other countries, and there were

ministerial visits. Nevertheless, relatively little in the way of eco-tax innovation has ensued and it is difficult to locate a substantive policy transfer process.

In 1993, the Conservative government introduced the fuel escalator, which gradually raised the cost for petrol. It has been kept in place by the Labour government which has made wider use of eco-taxes since it came to power in 1998. However, massive protests against rising fuel prices forced the government to make some moderate concessions in late 2000. While not demonstrably the product of direct policy transfer, other European countries have studied this mechanism with idea of incorporating such a mechanism. The German government has used the British example to defend its controversial ETR which has triggered five annual increases in fuel taxes since 1999. In the UK, eco-taxes have also been used in the energy (e.g. climate change levy and sulphur dioxide taxes) and waste (e.g. landfill tax) sectors (see Pearce *et al.*, 2000; OECD, 1999; CEC, 2000a).

Elements of the ETR debate have made their way into British discussions of instrument design. Under the new Labour government, the Treasury issued a 'statement of intent' on ecological tax reform although this did not develop into a comprehensive plan as seen in Germany. In terms of practical efforts, the Conservatives introduced in 1996 the Landfill Tax which used a small amount of its revenues to offset the cost of labour through a 0.2% reduction in the National Insurance (NI) contributions paid by all employers. The Labour Government implemented a Climate Change Levy in 2001 which was designed to do the same thing.

The EU Commission has sought to create a strong EU dimension to eco-tax usage in the member states. Its most notable effort was the unsuccessful attempt to adopt a common carbon-energy tax (Zito 2000). A coalition operating out of the Commission Environment and Energy Directorates pushed the EU carbon-energy tax idea, using the impending 1992 Rio Earth Summit and increasing concerns about climate change to focus on this particular policy instrument. The Environment Commissioner, Ripa di Meana, and DG Environment, as

well as some of the other supporting Commission actors (including Commission President Delors) acknowledged the environmental advantages but also were motivated by the institutional benefits of increasing the EU's global role and accordingly the Commission's influence. In line with the fifth role (i.e. the EU as independent actor), there was therefore also a clear element of policy entrepreneurship with actors attempting to seize a window of opportunity.

However, the momentum for this proposal was quickly upended by the fundamental institutional constraints operating against EU environment actors. First, DG Environment had to compromise with other Commission Directorates. More significantly, the EU institutional context (i.e. the adoption of supranational taxes requires unanimity within the Council) gave a set of opposing states, motivated for different reasons as seen in the case of the UK (sovereignty fears) and Spain (development fears), the ability to block the proposed tax. This culminated in the 1993 Council declaration that environmental taxes were a national responsibility and shifted the focus towards efforts to harmonise member state tax efforts (Zito 2000).

The slow progress on the EU level encouraged a number of like-minded northern European countries (including Austria, Germany and the Netherlands as well as Denmark, Finland, Sweden and others) to meet up periodically in the mid and late 1990s. The main purpose of these meeting was to learn from each other and to coordinate a common strategy for pushing for an EU-wide eco-tax (interviews, 2001). However, although these meetings fostered the exchange of information and ideas the like-minded countries made little headway as regards the gathering of political momentum for the introduction of an EU-wide tax. Since the late 1990s, no new meetings have taken place although the German government staged a major international conference on eco-taxes in 2001. The conference was attended also by representatives from countries that had not taken part in the meetings of the like-minded countries.

In 1997, the Commission introduced a proposal emphasising the need to harmonize member state taxation on energy products, particularly fossil fuels (CEC 1997). However, again the proposal was frozen, in large part due to Spanish opposition. In 2001 the Swedish EU Presidency managed to get general agreement on the basic principles of this Directive (*ENDS Daily*, 19/03/2001 & 23/04/01). It was the 2002 Spanish Presidency which developed the ultimate framework (*ENDS Daily*, 07/05/02). The proposal conforms with the traditional norm associated with EU environmental protection, i.e. enhancing market harmonization by ensuring a consistent taxation policy (for each fuel) in all the member states. The energy products directive forces national measures towards a minimal convergence on price levels on mineral (already an EU policy), coal, natural gas and electricity while also raising minimum rates for oil products. The EU Finance Ministers finally reached an agreement on the framework directive on 20 March 2003. The basic outline agreed under the Spanish Presidency has been kept although there have been a significant number of derogations and transition periods for particular countries and economic sectors (*ENDS Daily*, 21/03/03). Ultimately the tax gives the EU a basis for raising energy prices over time if a consensus can be achieved.

4. Learning and Transfer of Market-Based Instruments: Tradable Permits

Compared to eco-taxes, tradable permits have been used only very sparingly in some member states until recently. Some limited national innovation was proceeding (e.g. in Denmark, the Netherlands and Sweden), but it is unclear how far this would have proceeded without the Commission's proposal for directive on an EU-wide tradable permit scheme which was published in 2000 (CEC, 2000a; Zapfel and Vaino, 2001). It is clear that the climate change problem changed the entire dynamic for the member states and Europe as a whole. Tradable permits received critical political attention within the context of the Kyoto climate change protocol (see Grubb 1999). However, American demands for the wide use of the so-called flexible mechanism (tradable permits and joint implementation) on the international level in order to implement national Kyoto commitments met with opposition from some EU member states, who insisted that at least 50 per cent of the agreed emission reduction targets should be

achieved through domestic measures. Unbridgeable differences between America and the EU led to the deadlock seen in the climate change negotiations at The Hague in November 2000. Yet, there can be little doubt that tradable permits 'will be an integral and major part of the Community's [Kyoto protocol] implementation strategy' (CEC, 2000a, 4).

The United States was the first country to experiment more widely with tradable permits on the domestic level (OECD, 1999; Zapfel and Vaino, 2001). In Europe the debate was initially limited to academic circles and several national experiments using similar elements to a trading scheme (interviews in 2000-2; Pearce *et al.*, 2000; NATSOURCE and RAND, not dated; Zapfel and Vaino, 2001). However, recently SOME member governments and the EU Commission have shown considerable interest in the use of tradable permits (interviews in 2000-2; CEC, 2000a). Of the four countries studied in this paper, the Netherlands and Britain in particular have gained most experience by instituting environmental pilot projects with tradable permits. Britain introduced a national emission trading scheme which became operational in 2002. The British government's early mover strategy is widely seen as an attempt to influence the EU scheme although Denmark is arguably the most advanced EU member state within this context (Interviews, 2001). While policy actors have followed the US experience and development, the evidence suggests that both countries have developed their own approaches while taking into account their national institutional and industrial structures as well as the existing policy instrument repertoire (see also Zapfel and Vaino, 2001). For example, the British tradable permits scheme is closely linked with the climate change levy. The Netherlands and Britain in particular are often perceived by policy actors in Austria and Germany as having fewer difficulties in adopting experimental pilot schemes in the environmental field in general and tradable permits in particular (interviews in 2000). They have therefore been able to wield considerable influence within the early debate about the scope and design of tradable permits on the EU level.

Turning to the most active countries first, Britain had some familiarity with the use of tradable permits in agriculture, instituting a scheme for milk quotas. Businesses have been a strong

catalyst for the use of tradable permits. Volpak for instance in 1998 designed a scheme for Packing recycling notes (which is overseen by the UK Environment Agency), in order to demonstrate compliance with the EU Packaging Waste Directive (Salmons, 2002). Several key businesses such as BP have also experimented with their own 'in house schemes' to learn more about these types of schemes. In June 1999, some 40 companies and government officials formed the Emissions Trading Group to establish a tradable permit scheme for climate change gases (Pearce *et al.*, 2000, 81-83). Another set of players with a high interest in this scheme is the Finance sector within the City of London, which hoped to gain an edge over competition of other member states in this area.

Instituting this system in 2002, the government and other participants in the scheme had to work out how to fit the scheme's complex details and rules into the existing legal and instrument framework as well as study the interrelationship with the EU plans. Nevertheless, at least one study suggests that the British scheme will require a major overhaul in order to allow the UK scheme to join the EU scheme currently being negotiated; furthermore, the EU scheme will substantially impact upon the other UK climate change instruments including the levy (*ENDS Daily*, 9 January 2003).

As in the case of the UK, the Netherlands has some experience of using similar schemes in the agricultural sector, most notably milk and manure. Dutch policy makers studied the US experimentation and monitored developments in the UK and Germany (Grubb *et al.*, 1999; Interviews, Ministry of Economic Affairs, 2000, 2002). In 1983, the Dutch government and industry sent a delegation to study the tradable permit schemes in the US; this delegation returned with the idea of using 'plant bubbles' for sulphur dioxide and nitrous oxide emissions from combustion plants (Dekkers, 1999). However further developments suggest a strong internal learning dynamic when it comes to specific policy design. Dutch industry, led by the Chemical industry raised the possibility of a nitrous oxide system, which the Dutch ministries accepted. This scheme starts up in 2003. The Dutch government has lobbied the EU Commission heavily to come up with a proposal for an EU-wide nitrous oxide system.

The Dutch have also created a Carbon Dioxide Trading Commission to study the environmental problem and devise tradable permit options. The commission went on to develop specific recommendations but these have been overtaken by developments at the EU level where the Commission's proposal for an EU-wide emission trading system is likely to be adopted by the European Parliament and Council in 2003. There has been a strong preference for a wider EU scheme (which would give more scope for trading and not put disproportion burdens on Dutch business alone as a national scheme would) although the Dutch actually prefer the elements of their own scheme (Interviews, Economics Ministry and VROM officials, 2002).

Turning to the latecomers, German industry and environmental NGO representatives occasionally lament the fact that experimenting with new policy tools and/or 'learning by doing' seems to be more difficult in Germany compared to the Netherlands in particular (interviews in 2000). However, in the 1990s the German Environmental Ministry launched three unsuccessful attempts to undertake pilot projects involving tradable permits. Industry, which initially had shown great interest in this scheme, dropped out of the proposed pilot projects during the policy formulation stage (interview in 2000). It was only in late 1999 that the German government set up a working group on tradable permits (which is open to all stakeholders) in order to discuss the implications of an EU-wide system and to arrive at a national position. The slow progress on the national level has led some states (*laender*) to experiment with tradable permit schemes on the regional level. There have also been limited experiments for the reduction of aircraft noise (written communication in 2000). The so-called compensation schemes (*Kompensationslösungen*) under the Technical Instructions Air would have allowed for the use of tradable permits although in a very rudimentary form. However, it has never been widely used in Germany (Zittel. 1996, 198-9). Germany's recent interest in tradable permit schemes is largely a response to the Commission's proposal for an EU wide tradable permit scheme (CEC, 2000, 2001). Nevertheless, there is a deep split in Germany concerning this instrument which has slowed any progress. In contrast to the German

chemical industry in particular, the German banking sector strongly favours the introduction of tradable permits. Recently the deutsche bank set up a small unit of tradable permit experts within its London offices. Other German banks (such as the deutsche bank and Commerzbank) have been involved in regional pilot schemes in Hesse (interviews, 2002).

Recently Austria has also shown an increased interest in tradable permits though no practical implementation has yet taken place. Austria has had some limited experience with similar mechanisms if one includes the bubble solutions within the Clean Air Act (Glatz, 1995) and the eco-point system to control noise and pollution from heavy goods vehicles (Lauber, 1997). The Commission's proposal for an EU-wide tradable permit scheme has been the key trigger in the increased interest in the instrument; this has led to a change of attitude within the key social groups. The Business chamber, Industrialists' Association and the Labour Chamber now broadly welcome the use of tradable permits although their ideas about the best design of tradable permits diverge widely (Interviews, 2000, 2002). Initially, the Austria government adopted a 'wait and see' approach to the EU scheme, but actors have realised that Austria's ambitious climate change reduction target cannot be achieved without significant additional reduction measures. This has in turn led the government to shift its focus towards desiring to influence the actual design of the EU tradable permit scheme.

The country overviews make it clear that the activity at the EU level has acted both as a goal for member states to explore and experiment with this instrument and as a critical constraint on how they design their own national responses. Part of this dynamic operates because the member states seek to not expose their industries to greater costs than the other countries in the EU system. But a substantial element also centres around the clear entrepreneurial role the EU and the Commission have taken in attempting to meet the Kyoto targets.

The Commission laid out its climate change strategy back in March 2000. In this strategy, the Commission suggested creating an EU-wide greenhouse gas emissions trading scheme from 2005 (CEC, 2000a). The ostensible reason behind this scheme, which would start with CO₂

trading only, was to provide the EU with experience before international rules were introduced. Many of the specifics of how to design such a scheme were left up in the air. In December 2002, the environmental council adopted a (first reading) common position. One of the key issues was focusing on plans to allow groups of companies to pool their allowances and make use of trustees; also significant were the substantial powers given to the Commission (*ENDS Daily*, 5 December 2002). Germany had insisted on this feature in order to rescue the existing national voluntary agreements on the reduction of climate change gases. Especially the German chemical industry favours voluntary agreements over tradable permits. In December 2002 the Environment Council actually agreed in first reading the rules for the trading scheme, which allows companies a limited opt-out clause during the first 3 years, the option of trading pools and the possibility of member states to auction up to 10% emission allowances from 2008. The Commission has the ability to veto installation 'opt outs' and national emission allowance allocation plans; the Commission intends to develop the allocation criteria to guide member states during the course of 2003 (*ENDS Daily*, 5 December 2002).

These developments suggest that the EU supranational scheme is well on its way to defining member state NEPI selection in this area of climate change

5. Learning and Transfer of Voluntary Agreements

Voluntary agreements have been present in EU member states since the 1970s. In terms of the four case countries as well as more broadly, Germany and the Netherlands have been clear pioneers. Germany and the Netherlands also are the clear leaders in using these instruments with over 100 in existence the Netherlands and roughly 130 in Germany in 2002 (Interview VROM official, 2002; interview, UBA official, 2001). However most member states have accepted this instrument as part of their toolkit. In terms of policy learning, policy makers are often keen to learn more about foreign experience with VAs, but they tend to be sceptical about the feasibility of a full-scale transfer of VAs from one to another jurisdiction. Instead

they often stress the importance of domestic policy learning and/or 'learning by doing'; this is borne out in the case material (interviews in 2000).

It is important to recognise in any overview of this policy tool, that member states have substantially different types of voluntary agreements and there may be variation within national jurisdictions (CEC, 1996; EEA, 1997; Mol *et al.*, 2000; Glasbergen, ed., 1998, UBA, 1999; Öko-Institut, 1998). Some involve companies making unilateral commitments while others are negotiated agreements. In Britain VAs have traditionally been non-binding *ad hoc* agreements. This was initially also the case for the Netherlands. However, since the early 1990s Dutch VAs have taken the form of covenants that are published and enforceable under civil law (Mol *et al.* 2000; Glasbergen, ed., 1998; Hanf and van de Gronden, 1998; CEC 1996). Likewise the use of voluntary agreements varies in terms of sectors and whether the focus is on more product or process.

If we examine our pioneer states first, the nature of learning about these instruments suggests an internal process rather than one involving external policy transfer. From the beginning, voluntary agreements have been non-binding due to constitutional restrictions in Austria, Germany and the EU. Nevertheless, In Germany voluntary agreements are usually negotiated 'in the shadow of the law'; this means that industry has sought to pre-empt government legislation or the threat of such legislation. Accordingly Germany VAs often take the form of unilateral announcements by an industrial umbrella group (such as the Association for German Industry – VDA).

In Germany the origins of environmental VAs can be traced to the beginnings of modern day environmental policy in the early 1970s. However, their importance was greatly increased by the last centre-right/liberal (CDU/CSU/FDP) government's coalition agreement in 1994 which stated that preference should be given to VAs (above traditional regulatory instruments) whenever feasible (see UBA, 1999, 30). The new Red-Green (SPD/Greens) coalition government was initially highly sceptical about the use of VAs when it came to power in

1998, but it has in practice accepted a fairly wide range of VAs (interviews, 2000-1). It is the voluntary character of VAs which has led German environmental NGOs to reject the (wide) use of VAs, although they have toned down their criticism in recent years (interviews in 2000; see also Öko-Institut, 1998). Industry, on the other hand, has successfully tried to use both the traditional corporatist features of German industrial policy-making as well as modernising deregulation strategies (by centre-right governments in particular) to push for the increased adoption of VAs on the national level. However, German industry occasionally prefers traditional regulatory instruments on the EU level in order to ensure a legally enforceable level-playing field. Agreements on products have been the most prevalent form.

The EU has figured in the development of these instruments as they have provided targets that required implementation at the national level. For example, most of the VAs in the transport sector are focused on achieving early compliance with EU standards for unleaded and low sulphur petrol and emission limits. Particularly significant have been the relatively ambitious carbon dioxide emission reduction targets that Germany has committed itself to under the Kyoto Protocol. The German Employers Association (BDI) and several sectoral industry umbrella groups have negotiated VAs to reduce greenhouse gas emissions in 1995, 1996 and 2000. Equally significant, occasionally EU legislation has replaced (legally non-binding) member state VAs have been replaced by EU legislation. For example, the EU's end-of-life vehicles directive, which regulates manufacturers 'take back' obligations for scrapped cars, replaced a legally non-binding VA in both Germany and Austria.

In the Netherlands true environmental agreements date from the 1980s with the majority coming in the 1990s (Mol *et al.*, 2000). The consociational and moderately meso-corporatist features of Dutch policy-making though they are fading, are often seen as having facilitated the wide acceptance and use of VAs amongst industrial actors (Mol *et al.*, 2000; van Tatenhove, 1993). The use of VAs became embedded within a wider debate about the 'modernising' role of the state in environmental policy-making (see Mol *et al.*, 2000; Van Tatenhove, 1993; Glasbergen, ed. 1998). VAs became seen as a policy instrument which

fitted neatly into a wider self-regulation strategy that was supported by various coalition governments, but particularly the Centre Right coalition of Christian Democrats and Liberals (Interviews, 2001-2). A 1996 agreement to reduce volatile organic compounds by over 50% was the first extensive effort to negotiate an industry/government agreement. At the same time the government negotiated with industry a wide number of specific product agreements. Glasbergen (1998) views this development as an ad hoc internal process.

However, since the 1990s, covenants in the Netherlands contain statements and plans that amount to legally binding contracts, and the number of these agreements have increased significantly (Mol *et al.*, 2000; Hanf and van de Gronden, 1998). These covenants also tend to have cross-sectoral dimensions and involve multiple issues. Observations of this evolution suggest that it was an internal national learning process that decided to integrate issues and environmental targets as opposed to having single product and sector agreements (Glasbergen, 1998). Nevertheless, the EU can act as a constraint as can be seen in the effect of its Packaging and Packaging Waste Directive. This Directive rendered void a Dutch covenant with packaging manufacturers (Lauber and Ingram 2000, pp. 130-7). The Dutch, who already had a voluntary agreement with relatively more ambitious targets, were forced to discontinue their covenant with all the disruption and start up new negotiations (Lauber and Ingram, 2000). The Dutch actors were pleasantly surprised when the Commission actually approved a new VA version agreed by the various parties as a means of implementing the EU Directive.

In Austria, VAs are usually non-binding self-commitments (Mol *et al.*, 2000; Wirtschaftskammer Österreich, 1996; CEC, 1996, 28-29). As of 2002, there have been approximately 30 VAs, the majority of which have been adopted in the early 1990s. Because of the constitutional reasons, all of the VAs have to be non-binding. In contrast to the Netherlands, the traditional meso-corporatist features and strong emphasis on consensual policy-making have not produced a high number of VAs in Austria. Mol and colleagues attribute the comparatively low number of VAs to the rigid meso-corporatist features of Austrian environmental policy-making (Mol *et al.*, 2000). The social partnership

(*Sozialpartnerschaft*) grants unions, which have traditionally been opposed to the adoption of VAs (interviews in 2000), a considerable say in Austrian policy-making. Austrian environmental NGOs have also been hostile to the use of VAs.

During the 1999-2002 period, the Conservative-Right Wing coalition government formally promoted the use of non-regulatory tools, emphasising the need for deregulation.

Nevertheless, industrial actors have concerns that non-binding agreements cannot protect them from free riders. The majority of the VAs have been offered by industry in order to preempt government legislation (Wirtschaftskammer, 2002).

Of the four countries in this study, the UK has the lowest amount of VAs – around 20 in 2002 (CEC 1997; Öko-Institut, 1998). However, until recently, VAs in Britain were adopted mainly on an *ad hoc* basis between the regulator and individual corporate actors and often remained unpublished (see Jordan and Salmons, 2000). This feature together with the pluralist set up of British interest groups (i.e. the lack of coherent umbrella associations on an industry-wide or sectoral level) has led some observers to systematically underestimate the use of VAs in the UK. Nevertheless, there can be little doubt that the UK has made use of VAs only relatively recently and very sparingly (CEC, 1996, 19). The 1957 Pesticides Precautions Scheme is typical of the informal ‘gentleman’s agreements that typified early UK VAs. The current VAs consist half of negotiated instruments and about half take the form of unilateral commitments or public voluntary agreements that have little or no legal force (Jordan and Salmons, 2000). Some internal policy learning is in evidence nevertheless as VAs in Britain have become more formalised and transparent.

In assessing EU influence on member state patterns of VA use, the evidence suggests a relatively weaker presence compared to the market based instrument types in this study. When compared to the member state activity, the EU appears to be a follower in the area of voluntary agreements, with only 9 in place in 2001 (and really on 3 or 4 actually strictly environmental). We can explain the EU’s low adoption rate of VAs can by the fact that the

use of this type of NEPI on the EU level has raised serious concerns about legitimacy, transparency and legal certainty (see Mol *et al.*, 2000, 121; Friedrich *et al.*, 2000; CEC, 1996, 19).

However, the emphasis on the principles of subsidiarity and shared responsibility in the Fifth Action Programme and other discussions (see CEC, 1993) created an opportunity for VA proponents to push their use at the EU level. Furthermore, the Commission's white paper on VAs was published at around the same time as the Molitor report (CEC, 1995) which argued that the EU's 'command-and-control' environmental regulations put at a comparative disadvantage European businesses in terms of its international competitiveness. The instrument also allowed the Commission to expand its powers (especially vis-a-vis the EP which had gained considerably in power from recent Treaty amendments) without relying on formal legislation.

In 1996 the Commission stated its intention 'to promote and facilitate the use of effective and acceptable Environmental Agreements'(CEC, 1996, 5) as a supplementary measure to traditional environmental legislation'. The experience of VAs in the Netherlands and Germany gave some impetus to the Commission effort (suggesting the importance of the EU as arena for sharing ideas about instruments). The variation in member state approaches (e.g. the Dutch formal and binding instrument versus more informal ones) has created tensions for the EU concerning the appropriate VA design. European Union VAs have taken on the form of an amalgamation of different member state approaches (despite the fact that the Dutch covenants became most influential) coupled with genuinely novel (supranational) characteristics. Considering the concerns raised by critics about the transparency of agreements, it is no surprise that the relatively transparent, consensus seeking and legally binding Dutch covenants have strongly influenced the Commission's thinking about VAs (CEC, 1996; UBA, 1999, 24). Again this suggests a general learning about overarching instrument principles rather than embracing specific details.

Doubts have been raised about the legitimacy, legality and transparency of creating an EU instrument (interviews 2001; Mol *et al.* 2000; Friedrich *et al.* 2000; CEC 1996a). The lack of an explicit treaty base and of consultation, especially with the EP, has made the adoption of EU level VAs controversial. In July 2002, the Commission has sought to give new scope to VAs by proposing 'a half-way-house' for VAs on the EU level 'that would see objectives and timetables fixed in law with businesses given freedom to decide how to meet them' (*ENDS Daily* 17.07.2002; CEC 2002). Climate change and waste management are likely test grounds for the Commission's new emphasis on VAs although their wider use on the EU level is opposed by the EP which remains largely excluded from the decision-making process of non-legislative policy instruments. The Commission's 2002 proposal would entail a significant expansion of self-regulation and the formal introduction of 'co-regulation' on the EU level. Co-regulation would allow the EP and Environmental Council to legislate targets and timetables while leaving it up to industry how to achieve the objectives within the specified time period.

6. Learning and Transfer of Eco-labels

Eco-labels are legally non-binding voluntary policy tools that rely on moral suasion. Eco-labels exert only very moderate constraints on market actors especially when compared with traditional command and control legislation but also in comparison to market instruments such as eco-taxes and tradable permits (CEC 2001). Eco-labels are informational devices which can act as market instruments if their uptake is high and can promote public environmental awareness (although this requires considerable public resources). It is important to distinguish between the self-declaratory and unverified schemes and government-supported, third party verification schemes with focused targets.

Germany acted as a pioneer when it set up and then adopted the first nationwide eco-label in 1978. This proved to be an immensely successful scheme that influenced a number of later national schemes (Kern *et al.* 2001). The Blue Angel is a voluntary third party scheme which

is organised under private law and licensed by the German Institute for Quality Assurance and Labelling. The nature of the scheme has changed little although the comparative drop (3,500 in 2001 as opposed to 4000 in mid-1950s) in the number of labelled products and services has led German policy makers to consider recently giving it a face lift. The focus of the label has been on simplicity and transparency rather than incorporating a complex cradle-to-grave approach (although there has been a greater emphasis on life cycle analysis and more elaborate assessment criteria in the thinking).

The Austrian government set up a national eco-labels scheme in 1991 in the midst of an upsurge of public environmental awareness, the entrance of the Greens in parliament and the general diffusion of eco-labels by the early 1990s. Here is a clear case of policy learning and transfer as the German Blue Angel scheme served as a model for the Austrian one. As German products are heavily sold in Austria, Austrian consumers were familiar with the German label (Interview, Environment Ministry official, 2001). Nevertheless this was not a wholesale copy of the German as the Austrian policy-makers sought to improve the shortcomings they perceived in this scheme. Thus the Austria eco-label has a greater emphasis on life cycle analysis and has been extended into a number of new sectors, especially tourism and schools (Interview, Environment Ministry official, 2002). When compared to the German and Scandinavian labels, adoption of the Austrian label has remained moderate, with 114 companies being awarded eco-labels for 505 products as well as 183 eco-labels for tourist services (BMLFUW, 2002).

It is in the same era of rapid proliferation of national and multinational eco-label schemes that created the Austria scheme, that the EU established its own supranational eco-label as a response. The Commission and, although to a lesser degree, the European Parliament, justified the setting up of an EU-wide eco-label scheme by pointing out that the increasing number of competing national schemes could trigger market distortions and lead to consumer confusion. Export oriented European producers generally supported this line of argument although they opposed the adoption of stringent national eco-labels while favouring instead a

wide uptake of the EU label (*ENDS Daily* 25.06.2002). Thus we see the Commission taking an entrepreneurial role and taking advantage of the institutional dynamics of harmonisation within SEM. However, the Commission and EP objective lacked strong backing and moreover faced a number of influential sceptical states such as Germany which had its highly successful scheme.

From its beginnings, the 1992 EU eco-label scheme was dogged with problems, particular concerning its cumbersome, non-transparent decision-making process (Eiderström 1998). It achieved only a very low degree of acceptability amongst producers and consumers. By early 1999, the scheme covered 18 product groups but only 41 EU eco-labels (compared to 4000 for the Blue Angel in the mid 1990s) had been awarded in its first 7 years of existence (Haigh, ed. 1999, sect. 11.7). Unsurprisingly the 1992 EU eco-label scheme had little impact on consumer choices and producer behaviour; however, producers started to use it as a benchmark although they did not formally apply for the EU label.

In the light of these problems the Commission sought to revise the scheme. After lengthy disagreements between the Commission, member states and the EP (*EWWE* 22.01.1999, pp. 7-8), the Environmental Council and the EP finally adopted a Regulation (1980/2000/EC) in July 2000. The new regulation introduced the following major changes (CEC 2000): (1) establishment of the EU eco-labelling board (EUEB) which is composed of the national competent authorities and thus ensures that member states continue to play a decisive role within the revised scheme; (2) enhanced transparency; (3) expanded scope of the label (to also cover services); (4) stronger involvement of consumer and environmental groups; (5) a ceiling for the fees which allows small businesses that make use of the EU's environmental management assessment system (EMAS) a discount. The 2000 revision has gained greater acceptance from member governments and consumer/environmental groups (interviews 2001). Since 2001 the number of applications for EU eco-labels rose by 150 per cent (*ENDS Daily* 25.06.2002). However, industry largely remains sceptical about the scheme's viability which is still not widely known amongst consumers who generally have better knowledge about

national schemes. Member states with national eco-labels have done little to divert scarce resources for the promotion of the EU eco-label.

Compared to its achievements in other types of instruments, the Netherlands is a striking latecomer to this area, only adopting a national eco-label scheme in 1992. The adoption of such a scheme seemed to do as much with the concerns of individual environment ministers and a general desire on the part of parliament and NGOs to further different kinds of NEPIs (Interview, VROM officials, 2001, 2002). Like the Austrian and German systems, the Dutch scheme is voluntary and organised under private law. The officials in the independent foundation that operates the system (Stichting Milieukeur official, Communication, 2002) do not see the scheme as incorporating any particular model. Nevertheless, the policy actors certainly were extremely familiar with the national labels and the EU eco-label and consciously sought not to duplicate the EU eco-label (Stichting Milieukeur official, Communication, 2002). As with the Austrians, the Dutch actors sought to emphasise life cycle analysis and to break into new sectors, particularly food and flower exports). Despite these innovations, the uptake of the Dutch label has been poor relative to Germany and Austria. This reflects the lack of interest both on the producer and on the consumer sides. These results and the nature of the Dutch markets suggests that the regional eco-label (although seen as less careful and attuned to the Dutch situation) is in the long term more viable; nevertheless, the current Dutch business uptake of the EU label is nearly non-existent (Interview, VROM official, 2002)

This rather moderate performance nevertheless contrasts starkly with the complete absence of a UK national scheme (although British businesses, particularly supermarkets, have created their own house labels). UK policy-makers only began to explore actively the idea of eco-labels in the late 1980s. However, with the actual advent of the EU scheme, no further effort was made to push a national scheme. Although the acceptance of an EU scheme is a significant example of voluntary transfer on paper, the reality is that business has show little

enthusiasm towards the EU scheme. Accordingly the British ministries have shifted their focus to other instruments.

7. Policy Transfer and Lesson Drawing in Europe: Conclusions

Overview of the Patterns

The findings of this study suggest that overall there has been an increased use of NEPIs in all four member states. Generally speaking NEPIs are now more widely found in the Austrian, British, Dutch and German national policy instrument repertoires than a decade ago. However, they have done so at varying speeds and in varying sectors. The evidence suggests that the policy transfer and lesson drawing process has played a significant role in this process, especially where the EU has adopted instruments having assimilated the elements of various national schemes. While this role has been significant in some areas, it has been marginal in other areas. In part this is due to the fact that Germany (eco-labels, voluntary agreements), Netherlands (voluntary agreements, tradable permits and eco-taxes) and the UK (tradable permits and very recently eco-taxes) have been clear leaders and even pioneers in the international community for particular instruments. The study has found clear evidence of policy learning on the part of other states interested in the national schemes produced by each of these three countries (e.g. the fuel escalator in the UK). Nevertheless, there also seems to be an important institutional aspect of how these four member states are adopting NEPIs. The NEPI role often depends on the pre-existing instrument mix and the institutional goodness of fit in each country. Generally policy transfer seems to have involved placing the general idea of a particular type of NEPI (e.g. eco-labels or tradable permits) on the national agenda, rather than a wholesale copying of specific national instruments.

Focusing on each instrument, there is evidence that the EU (and the OECD) stimulated the placement of eco-taxes on the national agenda. Thus in all four countries elements of the

'double dividend' discussion factored into the thinking the late 1980s and 1990s although it was quite limited and implicit in some cases – e.g. the UK. Nevertheless the overall development of this NEPI IN the four member states and on the EU level suggests that most of the learning was internal to the member states and shaped decisively by that national context – notably as occurred in the Netherlands and in Germany. This may at least partly be the case due to the fact that the EU has failed until very recently to harmonise national eco-taxes let alone adopt an EU-wide carbon dioxide/energy tax.

Of all the instruments, voluntary agreements suggests the least amount of policy transfer beyond the EU Commission's efforts to develop a Europe wide instrument. There was some lesson drawing in form of assessing the experience in other countries in terms of greater transparency, legitimacy and effectiveness of voluntary agreements. However, policy transfer was very limited due to national (or supranational) institutional and constitutional constraints. In the member states, consideration of this instrument tended to follow institutional and state-society patterns long established in these countries. Thus the UK efforts tended to take the form of the traditional 'gentleman's agreement' while in Germany voluntary agreements were often adopted 'in the shadow of the law'. The exception is the EU effort to create a voluntary agreement which was influenced by German and particularly Dutch developments. In the interest of achieving a wider member state consensus and due to constitutional constraints, the EU scheme was not a wholesale borrowing of the Dutch scheme.

The story of the ecolabel instruments demonstrates a clear aspect of policy learning about the pioneering Germany system. Austria especially but the Netherlands as well looked to the German scheme (the Dutch also paying attention to the EU scheme). Nevertheless, the instruments that the respective policy actors in each country designed were demonstrably different from the German scheme, focusing more on life cycle analysis and on fitting the

national domestic context. Indeed the German experience was particularly important in providing a 'negative learning model' in the sense that the Austrians sought to improve on the deficiencies they perceive in this highly successful German system. Equally the Dutch sought to avoid duplicating the European scheme and also to provide stricter criteria.

It is tradable permits where the clearest national convergence around an instrument has occurred. Lesson drawing has occurred here as member state policy actors, e.g. the Dutch, scrutinised closely the US models. Nevertheless, the solutions that they and the UK actors have developed in the prelude to the EU scheme have all had strong national characteristics and solutions. But the largest policy transfer has come in the fact that the EU effort to develop a common instrument to meet the Climate change targets has decisively defined the future of the efforts in each of the four countries. With regard to the adoption of tradable permits in the EU, the Commission successfully managed to take on an entrepreneurial role.

The Role of the EU in European Policy Transfer and Lesson Drawing

The influence of the EU on the policy adoption within the member states is clear but also rather mixed. In some countries at certain points in their evolution, the EU has almost certainly prompted domestic change, although it has not actually adopted many VAs, and it has struggled to develop a popular eco-label scheme and to generate member state consensus on any (eco-) tax proposal. The EU has indirectly promoted change by forcing some member states to adopt instruments which they would probably not have adopted otherwise. Thus the EU scheme became the default solution for the UK. Austria and Germany would not have taken practical steps (or at least only at a much later stage) to set up national emission trading (pilot) schemes without the Commission's proposals for an EU-wide trading scheme. Using our modified version of Bennett's scheme, this suggests a strong entrepreneurial influence on the part of the

EU with respect to tradable permits, although much less so concerning eco-taxes, ecolabels and voluntary agreements.

The EU has also exerted a more indirect form of pressure on states to experiment with new tools. In this way the EU has acted as a force for harmonisation, as can be seen in the new energy tax harmonisation proposal agreed by the member states. The packaging waste Directive encouraged private actors in the UK to develop tradable permit systems. In the future, the water framework Directive looks set to push member states towards full cost recovery of water prices and the increasing control of non-point sources of water pollution – a task for which certain types of NEPI (e.g. pesticide or fertilizer taxes) would be ideally suited. The UK is one of a number of countries that are known to be actively exploring this option. On the other hand, we must note that the EU can have a negative impact on member state selection and design of instruments. When Austria joined the EU, it abandoned its national fertilizer tax because of fears that it might be judged by the European Court of Justice (ECJ) to constitute a barrier to trade within the internal market.

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