Environmental Policy in the United Kingdom and Germany

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The chapter examines developments within environmental policy making in the United Kingdom and the Federal Republic of Germany and asks: (i) can we identify patterns of convergence and/or divergence between the two countries?; and (ii) to what extent does the European integration process impact upon these patterns? It uses an historical institutionalist framework within which to frame the analysis.

Introduction

This study examines developments within environmental policy making in the United Kingdom and the Federal Republic of Germany and is examined along three dimensions: (i) the historical context; (ii) policy instruments and discourses; and (iii) policy outcomes. In empirical terms, it asks: (i) can we identify patterns of convergence and/or divergence along these three dimensions between the two countries?; and (ii) to what extent does the European integration process impact upon these patterns? The second question is particularly useful in a comparative context because it also serves to enhance our understanding of the scope and scale of the processes of Europeanization and policy transfer within the United Kingdom, Germany and, by inference, further afield. In
theoretical terms it uses an historical institutionalist framework within which to frame the analysis.

The historical institutionalist approach is useful because it provides a macro-level theoretical lens within which it is possible to both embed and problematize the meso-level concepts of ‘Europeanization’ and ‘policy transfer’. The mechanics of these two concepts are expanded upon elsewhere in this volume. However, let us clarify the study’s use of the concept of Europeanization at this point. There is a lively debate within the literature as to whether Europeanization is a ‘top-down’ or ‘bottom-up’ process and this debate also touches on the role of intervening variables (nation-specific norms, standard operating procedures) in the process. It is beyond the scope of this paper to engage with these debates. It is, however, useful to point out that although reference is made to a bottom-up conception of Europeanization – for instance, with regard to the uploading to the European Union level of German regulatory practices in the 1980s - the study gives more weight to a top-down conception of the process. There are two reasons for this. First, because the top-down approach explicitly places member states as the ‘receivers’ of Europeanization, it provides a better framework for concentrating on a comparison of policy practices in the United Kingdom and Germany. Second, the top-down approach complements the historical institutionalist framework in that it requires some degree of institutional ‘misfit’ at the member state level to exert the adaptational pressures for Europeanization to occur. Again, this allows us to concentrate upon institutional settings in the United Kingdom and Germany. At the same time, however, the study is responsive to criticisms of the top-down approach found in the literature and places significant weight on intervening variables that determine the scope and scale of Europeanization.
This emphasis on intervening variables in the process of Europeanization ties in with debates surrounding the nature of policy transfer and the more recent and less-developed idea of ‘policy resistance’. But in order to engage with these concepts, the study first sets out the historical context of environmental policy making in the United Kingdom and Germany.

**The historical context**

Environmental policy is a paradigmatic example of a ‘trans-boundary’ policy domain. Be it degradation of wetlands, rivers, and other water resources, or air pollution and global warming, many environmental problems are not - and cannot - be confined within national borders. It is no surprise, therefore, that there is a tension between the trans-boundary nature of such problems and the dominant mode of governance, which remains based around the institutions of the nation state.

It is a given in the historical institutionalist literature that when institutions are in equilibrium they are characterised by the phenomenon of ‘path dependence’. The day-to-day operation of path dependant institutions is shaped by established norms and standard operating procedures, many of which were laid down at a very early stage in these institutions’ history. Any institutional change or development that takes place in this context is incremental. Path dependence is not a universal phenomenon, however, and institutions can also evolve through a series of ‘punctuated equilibria’, in which ‘rapid bursts of change (are) followed by long periods of stasis’. Throughout this process, however, the policy choices made and standard operating procedures established around
the time of institutional formation shape the scope and scale of subsequent developments. Sometimes, as with the abandonment of Keynesian economic policy in the United Kingdom after 1976, certain institutions are able to leap free of the shackles of prior practice and achieve what amounts to a ‘paradigm shift’ in the substance of policy making. In most cases, however, we see a more prosaic process in which standard operating procedures often inhibit anything more than incremental change. This leads to two possible ideal types of outcome. In one, successful institutions are able to work with the grain of existing procedures, build upon past successes and enhance existing institutional capacity. In the other, poorly performing institutions are unable to achieve a paradigm shift and the subsequent inability to successfully adapt can then lead to further institutional underperformance and policy failure. Most institutions, of course, fall between these two ideal types but, where failure is clearly evident, the ability of institutions to break the cycle is dependant on the configuration of policy goals and discourses within them – and the more contingent phenomenon of whether key institutional agents are able or willing to do so. This is looked in more depth later in the article.

So where does this leave the development of environmental policy in the United Kingdom and Germany? The historical institutionalist approach requires that current practices in a given policy area are best explained through a reasonably detailed analysis of its development over time. And as we shall see, such an analysis of the institutional development and performance of environmental policy making in the two countries clearly demonstrates (i) significant variance in institutional performance between the two countries; (ii) the persistence of standard operating procedures in both countries; but also
indicates (iii) a capacity for learning and adaptation\textsuperscript{9}. Nevertheless, and despite the activist role assumed by the European Union within the policy domain, we can identify nation-specific standard operating procedures that persist to the present day. So, let us look at the historical development of each country in turn, before examining the role of the European Union.

\textit{The United Kingdom context}

In the United Kingdom it is possible to identify the emergence of an environmental policy domain from the early 19\textsuperscript{th} Century onwards, thus making it the first industrial democracy in which an identifiable environmental policy domain was to develop. As the first country to industrialize, the United Kingdom underwent a process of political-economic, demographic, and physical change that was unprecedented in human history. This process was particularly notable in England and Wales, where industrialization prompted huge levels of both population growth and population transfer. Thus, in the 100 years from the early 19\textsuperscript{th} to early 20\textsuperscript{th} Centuries, the population of England and Wales grew from 8.9 million to 32.5 million and, in the first 50 years of the 19\textsuperscript{th} Century, over 4 million people migrated to towns and cities. As a result, by the mid 19\textsuperscript{th} Century, over 50 per cent of the population lived in urban areas\textsuperscript{10}. The resulting urban squalor prompted a number of environmental reforms, albeit embedded within a wider policy concern for public health, physical and sometimes even moral, improvement, rather than one explicitly predicated on the idea of environmental sustainability. Given that Victorian Britain was the exemplar of a strong unitary state, the standard operating procedures established at this time were consistent with a pattern in which a strong central
government took limited measures to empower sub-national levels of government in order to impose what were intended to be broadly uniform (albeit pragmatic and minimalist) standards prescribed by the centre.

As environmental concerns where contingent on the wider set of concerns noted above, it is to be expected that early initiatives were either (i) focused on relatively narrow policy problems; or (ii) nested in legislation that was primarily focused on other – albeit related – policy concerns. Early examples of the former focused on, for instance, hydrogen chloride emissions from alkali works, starting with the 1863 Alkali Act and followed by a number of associated pieces of legislation in the latter half of the 19th Century. By contrast, a more holistic approach to tackling environmental issues could be found in the wider public health policy domain, as well as in private philanthropic initiatives associated with it. Government initiatives of this kind included legislation prompted by the 1840 Select Committee on the Health of Towns and the 1845 Royal Commission on the State of Large Towns, such as the 1848 Public Health Act, the 1851 Shaftesbury Act, the 1868 Torrens Act, and the 1875 Cross Act. Private initiatives were predicated on the perceived link between living conditions and labour productivity and focused on the creation of new model towns such as Birmingham’s Bournville - created by the local Cadbury family – and similar creations elsewhere such as Port Sunlight in the Wirral, and Saltaire near Bradford.

By the end of the 19th Century we can identify an emerging set of policy discourses and associated norms, buttressed by an institutional architecture and array of standard operating procedures that were to persist into the last decades of the 20th Century and, arguably, were only first seriously challenged under the impact of the Aquis
In terms of discourses and norms, we can identify the persistence of a highly empirical problem-solving approach to environmental issues. This manifested itself in two ways. First, in as far as we can identify a stand-alone domain of environmental policy, United Kingdom environmental initiatives eschewed the explicit incorporation of abstract concepts such as the German norm of *Stand der Technik* (‘Best Available Technology’) as *a priori* requirements within the policy discourse in favour of focusing on specific problems as and when they emerged and/or were identified as such. This ‘tactical rather than strategic’ style of policy-making can be seen in the Alkali Act noted above, but was still identifiable a century later in the 1956 Clean Air Act. The Act, which sought to control industrial and domestic emissions in specific urban areas, was enacted in response to the ‘Great Smog’ of December 1952, which is estimated to have killed around 4,000 Londoners. To be sure, the Clean Air Act was effective in tackling the specificities of the smog problem of the 1950s, but it was enacted before the exponential growth of automobile ownership that was to take place in the 1960s and 1970s. Thus, it was an effective ‘fire-fighting’ measure at the time and brought about long-term improvements. But its failure to enshrine abstract policy principles meant that it was of little use in tackling subsequent emissions problems associated with increased car use. Having said that, however, it would be wrong to over-exaggerate the legacy of British empiricism and we can see the development of a number of *implicit* abstract principles that would continue to underpin environmental legislation. Thus, as Bell points out, in order to be effective, the 1874 Alakali Act effectively introduced the ‘Best Practical Means’ principle that has become accepted as a distinctive underlying
component of United Kingdom environmental legislation. Best Practical Means and other standard setting philosophies are returned to later in this study.

The second manifestation of this empiricist approach was the ongoing practice, discussed above, of nesting environmental measures within a wider and/or cross-cutting policy agenda. Examples of this include the 1909 Housing, Town Planning etc Act, which granted powers to sub-national tiers of government to regulate suburban growth, and the 1919 Housing and Town Planning Act, which widened the policy remit established in the 1909 Act, the 1947 Town and Country Planning Act, which further extended the policy remit to include the planning of green spaces, reservoirs, security of water supply and sewage disposal, and the 1949 National Parks and Access to the Countryside Act, which established national parks in England and Wales and designated a number of Areas of Natural Beauty.

As noted above, these policy discourses and associated norms were buttressed by an institutional architecture and set of standard operating procedures that persisted well into the late 20th Century. As Carter and Lowe observe, ‘government structures … relating to environmental protection have been (and largely remain) an accretion of agencies, procedures and policies’\textsuperscript{14}. The key institutional features have historically been those of fragmentation and the apparently arbitrary division of policy competences across ministries, quasi-autonomous non-governmental organisations (Quangos) and associated agencies. Thus, as Baldock observed in the 1980s, England was the only nation that had sought to make the kind of distinction between policy competences seen in the roles of the Countryside Commission (responsible for landscape preservation) and English Nature (responsible for nature conservation)\textsuperscript{15}. 

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Apparently nonsensical divisions of competences within policy domains are not limited to the United Kingdom’s management of environmental policy, of course. Yet one cannot escape the sense that this persistent institutional pathology undermines the advantages associated with the feature that has traditionally defined the United Kingdom’s structure of government – the strong unitary state. A discussion of the relative strengths and weaknesses of unitary and federal states is beyond the scope of this study, but even the most enthusiastic federalist would not deny that one potential advantage of the unitary state structure is its steering capacity and relative lack of veto players. However, when - as was the case in 1969 – up to ten separate ministries were involved in United Kingdom environmental policy making\textsuperscript{16}, we cannot escape the conclusion that this one specific advantage over federal states such as Germany was effectively being squandered. And this was recognised by policy makers, who in 1970 unified many of the previously disparate policy competences within the newly-created Department of Environment. The remit and title of the Department has changed over the years with successive governments but, at the time of writing (May 2006), the Ministry of Environment, Food and Rural Affairs portfolio is a cabinet post and is occupied by David Milliband.

Amongst the Department’s responsibilities at present are the management of the Environment Agency and, from October 2006, a new unified Quango (made up of English Nature and the Countryside Commission) called Natural England. But this gradual consolidation of competences over time has, however, been matched by an additional degree of fragmentation associated with the process of Devolution and constitutional change following Labour’s 1997 General Election victory. Thus, in
Scotland, the Scottish Executive manages environmental policy and there is a separate Environment Protection Agency. In Wales there is a Minister for Environment, Planning, and Countryside. But in Northern Ireland the suspension of devolved government means that environmental policy is still effectively being run from London.

The German context

The institutional development of German environmental policy is at least as path-dependant as that of the United Kingdom, although the emergence of a distinct environmental policy domain did not take place until later in the 19th Century. As noted earlier, the pattern established in the United Kingdom was one in which a strong central government passed legislation intended to both impose standards across the territory of the unitary state and empower sub-national levels of government to work within prescribed parameters in order to further these goals. By contrast, and in keeping with the kind of standard operating procedures associated with federal states, the first institutional feature of note in Germany was that of independent Land involvement, dating back to local ordinances such as the Prussian Gewerbeordnungen.

In the late 19th Century, the newly united Germany was engaged in a process of economic and military catch-up with the United Kingdom; and in such an atmosphere of national competition, industrial growth and the wider social welfare were considered to be coterminous. As a result, legislation was limited in scope and focused on individual emissions. Air pollution control authorities issued ‘technical instructions’ (Technische Anleitungen) to individual emitters and, from 1895 onwards, these technical instructions enforced corrective measures commensurate with standards of Best Available
Technology. The early establishment of Best Available Technology standards is consistent with the German tradition of formulating public policy within the parameters established by abstract principles. And, as we shall see, the focus on individual emitters and the use of Best Available Technology standards are operating procedures that persist today and were uploaded to the European Union level. Individual Land responsibility for pollution control was less appropriate for the management of wetlands and waterways, in which it is notoriously difficult to establish responsibility for individual acts of pollution and enforce subsequent measures against emitters\(^{18}\). In response to this problem of institutional misfit, Land governments set up a number of partnership agreements (Genossenschaften) to manage pollution problems affecting adjacent Länder on, for instance, the Rhine, Wuppe, Lippe and Ruhr rivers\(^{19}\). Nevertheless, established standard operating procedures remained embedded in wider practices of horizontal co-operation between sub-national tiers of government.

These practices were so well-embedded that, by the end of the 1950s, there was still no meaningful role for the Federal level of government and most of the regulatory devices in use had been in place since the start of the Great War. But under pressure from a range of societal actors, the Federal level began to involve itself. Initial Federal legislation, such as the Water Household Act of 1957 and the Clean Air Maintenance Law of 1959, was limited in scope and ambition but the Federal government slowly began to assume a more activist role. Building on a template established in the SPD-run state of North Rhine-Westphalia\(^{20}\), the Federal government issued its own TAs and set out air quality standards for dust, chlorine, sulphur dioxide, nitrogen dioxide, and hydrogen sulphide, which were coupled to Best Available Technology requirements. The
establishment of the SPD-FDP coalition in 1969 increased the impetus for Federal involvement and it was at this point that Germany began to undergo a phase of ‘activist policy design’ that was close to the idea of a paradigm shift discussed earlier in this study. The Brandt government framed its new environmental policy program around existing Best Available Technology standards, but also encouraged the codification of three normative principles - the ‘Precautionary’ Principle, the ‘Polluter Pays’ Principle and the ‘Co-operation’ Principle – that were also subsequently to be uploaded to the European Union level. These three abstractions informed a raft of new legislation, including the Air Traffic Noise Act (1971), the Leaded Petrol Act (1972), the Waste Disposal Act (1972), the DDT Act (1972), the Federal Air Quality Protection Act (1974), and the (1974) Technical Instruction for the Maintenance of Air Purity. In addition, the Federal Agency for the Environment (Umweltbundesamt) was set up in 1974. The agency became an effective enforcer of environmental standards and diffuser of best practice. However, it was and remained essentially a technocratic institution and it would be another 12 years before a fully-fledged Environment Ministry was established in the wake of the Chernobyl disaster – 16 years later than its British equivalent.

The economic crises of the mid-to-late 1970s led to a shift in government priorities and, as a result, the environmental agenda was temporarily eclipsed by what appeared to be the more pressing needs of economic retrenchment. However, the late 1970s and early 1980s saw a revival of environmental interest amongst the political class and the beginning of a period of cross-party consensus on the need for an activist policy agenda. Subsequent initiatives included the 1982 Ordinance on Large Combustion Plants (Grossfeurungsanlagenverordnung), the 1983 Air Pollution Control Law in July 1983 -
that became the model for the subsequent European Communities Directive on Large Combustion Plants – the setting up in 1986 of the Federal Ministry for Environment, Nature Protection and Reactor Safety (Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit) and the 1987 Commission of Enquiry on Preventative Measures to Protect the Earth’s Atmosphere (Enquete-Kommission Vorsage zum Schutz der Erdatmosphäre).

By the mid-1990s, however, Germany’s leadership role in the field of environmental policy had come under pressure on three fronts. First, the economic costs of managing the process of German unification had led to a resurgence of worries about German economic competitiveness amongst elites and had served to erode what had effectively been a decade-long cross party consensus on environmental policy. This manifested itself both within the Bundestag and, with the accession of five relatively poor eastern states, in the Bundesrat. Second, and in response to the economic pressures noted above, the preferences of an enlarged and more socially diverse electorate had shifted away from post-materialist concerns such as environmental protection back towards materialist concerns such as job creation and economic growth. This further constrained the scope of environmental policy innovation elites were prepared to endorse and increased the opportunities for partisan conflict over the issue. Third, not only did the relative lack of domestic consensus on environmental protection at both the elite and mass levels make it harder to articulate German interests in the environmental policy domain at the European Union level, but Germany’s ongoing economic difficulties also made it harder to pursue these interests through the use of side-payments to other member states. Nevertheless, if taken in the round, the Federal Republic today still
retains an enviable record in most areas of environmental policy – despite its lower profile compared with the 1980s and early 1990s.

*The impact of the European Union*

From the 1980s onwards the development of environmental policy making in both the United Kingdom and Germany took place within the context of an increasingly assertive European Union level policy agenda. But, although there was a common impact on both countries, the effects of this impact were somewhat different. In other words, as in other policy areas, the scope and scale of the Europeanization of environmental policy making was partly dependant on the level of institutional misfit between the two member states and the European Union. This level of misfit can be conceived as taking place along three dimensions.

The first dimension relates to established standard operating procedures directly associated with the policy domain. Although the dichotomy between environmental ‘leaders’ and ‘laggards’ is problematized in the literature, it is clear that those member states that were perceived (or perceived themselves) to be leaders in this regard sought to impose standards as close as possible to their own upon other member states through the medium of the European Union. As a result, at least in the initial period of Europeanization, the adaptive pressures exerted on the United Kingdom (as a perceived ‘laggard’) were stronger than those felt by Germany (widely regarded at the time as a ‘leader’). Before the 1980s, environmental policy was originally very much a ‘Cinderella’ policy area at the European level and in as far as environmental concerns had any leverage it was as a tangential element to stated Community objectives such as those
embodied in European Economic Community Treaty Articles 2 (quality of life, harmonious economic development, balanced expansion), 100 (dismantling barriers to the Common Market) and 235 (allowing Council of Ministers to take action in areas not covered by treaties). From 1973 onwards, the European Community also issued Environmental Action Plans, but it was the Single European Act and the Maastricht Treaty that enabled the European Union to carve out a distinct set of Environmental policy objectives and principles.

During the 1980s in particular, a ‘German’ regulatory culture was uploaded to the European level and subsequent legislation was thus predicated on the precautionary, Polluter Pays, and Best Available Technology principles. These abstractions were absorbed and adapted by British policy makers but, nevertheless, the 1980s saw a number of instances in which the United Kingdom came under both horizontal pressure from other ‘leader’ states and vertical pressure from the European Union level. This led to the United Kingdom using its veto, for instance with regard to a planned European Communities Directive on Vehicle Emissions and a later proposal to adopt a common carbon dioxide and energy tax. More recently, however, European Union environmental policy (in line with other policy domains) has moved towards a mix of economic instruments and so-called ‘soft law’ that is closer to United Kingdom practices and preferences. By contrast, the increasing emphasis on soft law approaches served to restrict the ability to upload German environmental practices up to the European Union level and, at the same time, Germany itself has come under increasing pressure to adapt its own standard operating procedures. In particular, Germany’s reluctance to embrace
economic instruments has been criticised\textsuperscript{28}. This is discussed at greater length later in the study.

The second dimension of misfit related to the wider governance structures in the two states. At the European Union level, the institutional architecture of environmental policy is very close to the kind of multi-level governance ideal-types posited in the literature\textsuperscript{29}. Thus, the Single European Act in particular provided the impetus for the European Commission to take an active role, yet we find a clear fragmentation of competences between the Environment, Industry, and Agriculture Directorates General. At the same time, the European Parliament has used this policy domain as a means with which to widen its policy scope, to the extent, as Weale observes, that the European Parliament enjoys ‘more influence...than...far more established national parliaments’\textsuperscript{30} in this area of policy making. Moreover, the European Court of Justice has often ruled in favour of the environmental lobby, for instance in the 1988 ‘Danish Bottle’ case, which led to a ruling that environmental protection may override the free movement of goods within the European Union. The European Union also has a European Environmental Agency – modelled on its German equivalent – which acts as a decentralized information-gathering and advisory body, often in concert with the Europe-wide ‘European Information and Observation Network’. Finally, although environmental lobbying at the European Union level is relatively weak, the Commission has – as in other policy areas – sought to enhance its legitimacy by effectively by-passing national governments and dealing directly with societal actors at the sub-national level.

It is clear that the existence of multi-level governance dynamics generated at the European Union level has differential (and slightly paradoxical) effects on the two
member states. On the one hand, and as already noted, internal environmental policy making in the United Kingdom is distinguished by its incremental and fragmented nature. As a result, multi level governance dynamics are already commonplace in United Kingdom domestic policy making, albeit ‘in the shadow of hierarchy’\(^\text{31}\). At the same time, however, the United Kingdom still regards itself as a strong unitary actor in its interaction with the European Union level. As a result, where multi level dynamics have generated European Union level links with sub-national levels of governance, this was perceived as undermining the ‘gate keeper’ status of central government, and was not particularly welcomed. By contrast, the standard operating procedures associated with German federalism - such as bargaining and consensus-building at multiple levels of governance - meant that European Union level interventions did not present such a problem for ‘national’ policy makers who were less accustomed to the gate-keeper role enjoyed by their United Kingdom equivalents\(^\text{32}\).

The third dimension along which Europeanization exerted differential adaptational pressures was the simple one of political salience and its impact upon party political competition. As Wurzel observes, the framing of European Union environmental policy making within a ‘quality of life’ discourse has been used strategically ‘to increase the political legitimacy of the European Union, especially at times of high public environmental awareness’\(^\text{33}\). However, levels of public awareness, the salience it is accorded, the priority it is given over other concerns, and the means with which it is represented within party systems varies across member states. In Germany, for reasons that are beyond the scope of this study, public awareness is high, the issue is given relatively high salience and priority, and Germany’s ‘multi-member proportional’
electoral system allows for the efficient representation of environmental issues, not least through the vehicle of the German Greens, who have been instrumental in bringing issues of environmental protection into the political mainstream\textsuperscript{34}. By contrast, in the United Kingdom – and especially in the 1980s – public awareness was lower, prioritization was very low, and the ‘first-past-the-post’ plurality system prevented the effective representation of such issues by shutting out the Green Party, for instance\textsuperscript{35}. At the time of writing, the use of environmentalism as a campaign issue by the Conservative Party has temporarily at least – led to higher levels of public awareness, issue salience and prioritization, at least in terms of rhetoric. In addition, the introduction of proportional representation for European Parliament elections in the United Kingdom, combined with some success for the Greens in local elections in cities such as Brighton and Sheffield, has enhanced the representation of environmental issues within the party system. It remains to be seen if this is a long-term development, which would surely ease adaptational pressures on the United Kingdom, or if eventually the \textit{status quo ante} will be restored.

\textbf{Policy instruments and discourses}

In this section we compare and contrast the ‘styles’ of environmental policy making in the United Kingdom and Germany, with an emphasis on the instruments used by policy makers and the types of policy discourses in which these instruments are selected and justified. Let us turn first to the use of policy instruments.
There are three broad categories of policy instrument. First, there are the classic command-and-control regulatory instruments. In addition, however, internationally we have seen the emergence in the last few decades of two additional types of so-called ‘new’ environmental policy instruments. The first of these are voluntary agreements, ranging from informal methods (e.g. eco-labelling, encouraging re-cycling, and other lifestyle changes) to more formal instruments such as the International Standards Organisation (ISO 14001), which provides environmental management system benchmarks. The second type of these new instruments are market-based instruments, which can be further divided into two categories: first, rights-based mechanisms, such as tradeable permits and quotas, and, second, ‘green’ or ‘eco’ taxes.

Policy instruments and discourses in the United Kingdom

As already noted, environmental policy making in the United Kingdom has traditionally been characterised by a piecemeal approach, in which a unitary state has overseen the activities of subordinate tiers of sub-national government, as well as a fragmented mosaic of national-level ministries, agencies, and quangos. The style of policy making has been embedded in the British tradition of empiricism and problem-solving and where abstract policy principles have existed, these have been as much implied as made explicit. Whilst all this is true, of course, it would be a mistake to over-state such nation-specific characteristics. Thus, whilst there are clear differences between national policy making styles and standard operating procedures, the reductio ad absurdum of such an analytical position. – of national policy styles that are effectively prisoners of path-dependence, with little or no capacity to learn or adapt – is not particularly helpful. As touched upon
earlier in this study, the environmental policy community in the United Kingdom has clearly learned and adapted in recent years. Let us now examine the mix of policy instruments and discourses that characterise United Kingdom environmental policy making today.

As described in the previous section, the United Kingdom has a long history of environmental regulation, dating back to the mid-19th Century. At the same time, however, although we often refer to regulatory instruments as ‘command-and-control’ measures, the capacity of United Kingdom policy makers to do so was constrained by a distinctive approach to the mechanics of regulation. Carter and Lowe\textsuperscript{36} identify the key distinguishing feature of United Kingdom regulatory culture as the prioritisation of administrative rather than judicial procedures. Thus, established standard operating procedures have tended to be ‘informal, accommodative and technocratic rather than formal, confrontational and legalistic …. there has been an avoidance of, indeed a distaste for [my emphasis] legislatively prescribed standards and quality objectives …. [and] when laws are broken, in the vast majority of cases, officials prefer not to prosecute’\textsuperscript{37}. In hindsight, and under pressure from both the Commission and other member states, this cosy, opaque and – some would argue – ineffectual approach has been supplemented by a more transparent, arms-length and potentially conflictual relationship with potential polluters. Nevertheless, the standard-setting philosophies that underpin United Kingdom environmental regulation remain artefacts of established operating procedures and the discourse of empiricism and problem-solving. As a result, the ‘light-touch’ philosophy of Environmental Quality Objectives are preferred to prescriptive Uniform Emissions Limits, the pragmatism of Best Practical Means or Best
Practical Environmental Option are preferred to Best Available Technology, and scientific proof of existing environmental damage is given greater weight than the requirement to react to the potential for damage codified in the Precautionary Principle\(^\text{38}\).

Give the traditional informality of United Kingdom regulatory practices, it is paradoxical that the United Kingdom’s recent embrace of new environmental policy instruments has not involved an enthusiastic embrace of voluntary agreements. Thus, there remain far fewer voluntary agreements in the United Kingdom than in other European Union member states and they tend to be (i) concentrated in the sectors of agriculture, chemicals, and energy; (ii) non-binding rather than ‘in the shadow of the law’; (iii) relatively recent in origin; and (iv) piecemeal and unilateral rather than part of wider, long-term commitments. The lack of voluntary agreements even includes a reluctance to use eco-labelling, which provides a relatively low cost means of increasing the informational resources available to consumers. As Jordan et al observe, ‘one might have expected to find many more voluntary agreements in a sector …. that has such a long historical tradition of decentralisation, consensus building and negotiation with industry’\(^\text{39}\). On the other hand, one could argue that the traditionally accommodative style of environmental regulation in the United Kingdom has served to not only make voluntary agreements less necessary but also to undermine the analytical distinction between such agreements and regulatory instruments.

By contrast, and after a slow start, the United Kingdom has become one of the leading users of market-based instruments amongst European Union member states. In terms of rights-based instruments, two achievements are of note. First, the Department of Environment, Food and Rural Affairs oversaw the setting-up in March 2002, of the
United Kingdom Emissions Trading Scheme, in which 33 major companies agreed to reduce their emissions over a four-year period by an estimated 11.88 millions tonnes of carbon dioxide equivalent. In addition, up to 6000 additional companies subject to Climate Change Agreements are able to sign up to the scheme and – if they meet their targets – qualify for a reductions in charges from the Climate Change Levy (see below). Over the first three years of operation, the department estimates a total of 5.9 million of carbon dioxide equivalent was saved through the scheme. The second achievement is the United Kingdom’s active role in setting up the European Union Emissions Trading Scheme, which began operation in January 2006. At the time of writing, the European Union’s first interim assessment of the scheme had just been released and the United Kingdom’s performance under the new scheme was generally regarded as being relatively good, although it did exceed its quota and was forced to buy up allowances from other member states.

In addition, to rights-based schemes, the United Kingdom has also been a relatively enthusiastic practitioner of eco-taxes. Here, seven examples are of note: the 1987 unleaded petrol price differential (rescinded in 2001), the 1993 decision to impose Value Added Tax on domestic fuel, the 1993 fuel duty escalator, the 1996 Landfill Tax, and differential vehicle excise duties according to engine size (at the time of writing, a modest sharpening of the differential was recently announced in Chancellor Gordon Brown’s 2006 Budget speech), the 2001 Climate Change Levy, and the 2002 Aggregates Tax. Despite early resistance to eco-taxes within the United Kingdom environmental policy community, such instruments have become attractive, not only because they generate revenue for the public purse but also because they have the capacity to
permanently change the behaviour of polluters. This is because eco-taxes can capture the marginal environmental costs of production and thus tax the externalities of production and resource depletion. Unlike regulatory instruments, eco-taxes embed a set of incentives that make it rational for firms and individuals to constantly to improve their environmental practices. Eco-taxes come with political costs and, as the 2000 Fuel Protests demonstrate, their continued success depends on both careful design and political calibration over time. Nevertheless, eco-taxes and indeed rights-based mechanisms work with the grain of the norms and practices of the United Kingdom’s relatively liberal political economy. But as we shall see below, Germany’s social market economy provides a less benign environment for either variety of market-based instruments.

Policy instruments and discourses in Germany

As noted above, the environmental policy community in the Federal Republic remains uneasy about the use of market-based instruments. The reasons for this are discussed later in this section. Voluntary agreements, on the other hand, are a well-established element in the armoury of policy instruments and, unlike the United Kingdom, this includes the enthusiastic use of eco-labelling in which Germany – through the use of the ‘Blue Angel’ and ‘Green Spot’ schemes - has been a world leader. The widespread use of voluntary agreements in tandem with a strongly judicialized regulatory culture makes up a distinctly ‘German’ policy mix.

Between 1972 and 1994, the Federal government enacted eight major pieces of environmental legislation. These were: the Waste Disposal Act (1972); the Federal Air Quality Protection Act (1974); the Waste Water Charges Act (1976); the Ordinance on
Large Combustion Plants (1982/3); the Waste Avoidance Act (1986); the Environmental Impact Assessment Act (1991); the Environmental Liability Act (1991); and the Waste Management Act (1994). All of these pieces of legislation, as Pehle and Jansen observe, are heavily reliant on either traditional command-and-control measures or, in the case of the water, waste, and transport sectors, a mixture of command and control plus voluntary agreements.

During the period in office of the 1998-2005 Red-Green coalition, however, Germany’s reliance on regulatory instruments was augmented by the use of economic instruments. The partial shift in the policy mix is best demonstrated by an examination of the instruments used in two main planks of the Red-Green coalition’s environmental program during its period in office; first, the phasing out of nuclear power and, second, the introduction of an eco-tax.

The move to phase out nuclear power was a paradigmatic example of Germany’s long-established propensity for voluntary agreements made ‘in the shadow of the law’. In particular, path-dependency was evident in the use of ‘consensus talks’ with the nuclear industry in order to establish a timetable for the closing down of reactors. This was a device very similar to the talks on nuclear energy that took place in Lower Saxony during the 1990-1994 Red-Green coalition in that state. The eco-tax, by contrast, was something of a departure from the standard operating procedures of environmental policy making in the Federal Republic. Whereas Germany was an undisputed leader in the use of voluntary and regulatory instruments to pursue environmental ends, the forerunners in the use of eco-taxes were the Scandinavian countries and, to a lesser extent, the Netherlands. Indeed, by the late 1990s, when it came to the use of eco-taxes, Germany
had also fallen behind former environmental laggards such as Britain, as already noted, as well as France, and Italy⁴⁴.

Germany’s laggard status in the use of this specific policy instrument is, on the one hand, surprising - especially given the potential environmental benefits of such instruments. The general benefits of eco-taxes have been described above, but the argument in their favour in Germany was augmented by a general perception at the end of the 1990s that non-wage labour costs in the Federal Republic were too high. Thus, it was argued that a revenue-neutral eco-tax could produce a so-called ‘double dividend’ in Germany, because it would serve to both improve environmental practices and, by shifting the burden of taxation from labour to emissions and resource use, lower non-wage labour costs.

In practice, however, there are a number of reasons why Germany was relatively late in adopting eco-taxes as a major tool of environmental policy. First, as already discussed, once operating procedures are established it is difficult for institutions to transcend them. Thus, for the German environmental policy community, when a new or persistent environmental problem is identified, the instinct is to reach for the tried-and-tested toolkit of existing instruments. In Germany, this tendency was further aggravated by the fact that internal and external perceptions of existing policy performance were favourable, so there were no major drivers for change in this respect. And by-and-large this self-regard was justified, although – as is discussed later in the article – in recent years the upward curve of German environmental performance has flattened out. The second reason is that, as noted above, eco-taxes go against the grain of some of the Federal Republic’s more prized political-economic orthodoxies. No policy instrument is
perfect and eco-taxes have been criticized for, for instance, distorting the market, carrying substantial implementation, administrative, monitoring, and transaction costs, and leading to lower revenues over time as agents adjust their behaviour in response to the new market signals. However, the most potent criticism – and one that carried more weight in Germany than the United Kingdom – is that eco-taxes are socially regressive and inevitably punish the poorest members of society, who spend a greater proportion of their household income on energy use. This is consistent with Padgett’s findings that demonstrate that in Germany, voters’ preferences on welfare issues significantly restrain the use of policy instruments with socially regressive distributionist effects.

Although not socially regressive in the manner of eco-taxes, a general distaste for the instrumentalization of environmental policy can also be detected in the German environmental policy community’s resistance to the use of rights-based mechanisms such as the European Union Emissions Trading Scheme. German performance under the new scheme has recently been subject to close scrutiny and the German government has been criticised for being too generous in its initial allocation of allowances – resulting in its running a surplus of allowances and contributing to a fall in the effective price of carbon. It remains to be seen if this policy failure was the result of misfit between the national and European levels of governance or of a more cynical over-estimation of future emissions in order to generate surplus allowances to be traded across the European Union (and thus provide windfall profits for German industry).

**Policy outcomes**
As Jörgens observes, the debate about policy diffusion has tended to focus on the impact of policy instruments on outputs. Ultimately, however, the test of the effectiveness of policy instruments lies in their impact upon policy outcomes. Yet making outcomes the dependant variable in our analysis is no simple task. On the one hand, we can identify countries such as Sweden and the Netherlands that have embraced the full array of new environmental policy instruments – including market-based instruments – and are regarded as environmental leaders. But this does not mean that we can demonstrate with confidence that $x$ (use of new environmental policy instruments) leads to $y$ (enhanced environmental performance).

A comparison of the United Kingdom and Germany such as the one in this study highlights two specific problems in making outcomes the dependant variable. First, the institutional history of the policy sector, and in particular the cumulative impact of standard operating procedures and discourses, serves to both constrain the scope of policy alternatives and also introduces a degree of complexity that makes a simple causal narrative $x \rightarrow y$ impossible. Second, nation-specific environmental characteristics create different incentive structures in the two countries. As Wurzel points out, Germany is subject to significantly higher levels of ecological vulnerability than the United Kingdom. Germany shares land borders with nine other states, has rivers (such as the Elbe and the Rhine) that originate outside its territory and are often slow-flowing, and is a major north-south and (since the collapse of communism) east-west transit country. The United Kingdom, by contrast, is situated on two North Sea islands, shares one land-border (with the Republic of Ireland), has relatively short fast-flowing rivers that originate within the territory, and is not a significant transit country (apart from air travel). In addition, the
effects of strong winds and what Wurzel calls the ‘scouring sea’ help to disperse air and water pollution⁴⁹. These benign environmental characteristics have meant that the United Kingdom has been slower to react to the problems of managing the environmental commons. The United Kingdom has not been subject to significant trans-boundary pollution from its neighbours and over the years became too reliant on the carrying capacity of the environment. Thus, environmentally damaging policies such as those of ‘high chimneys’ and ‘long sea outfalls’ went unchallenged for longer than was practically or politically possible in Germany.

Taken together, these different levels of ecological vulnerability mean that the United Kingdom and Germany start from different baselines in terms of both the (real and perceived) severity of environmental problems and the incentives to tackle them. Yet, some degree of rough comparison between the two countries is still possible. As has been discussed earlier in this study, the United Kingdom is not necessarily the environmental laggard that it was twenty years ago and in many ways it is ahead of Germany in its use of new economic policy instruments, especially market-based instruments. But, unlike the Scandinavian countries and the Netherlands, it still lags behind Germany in terms of outcomes. Thus, Germany still has the highest number of low-emission cars in Europe, the highest proportional use of lead-free petrol, and retains some of the most stringent emission limits. Germany remains a global leader in sewage purification technology, in controlling dioxin emissions, and in research and development in the field of renewables. Indeed, its capacity for wind-generated electricity now exceeds the United Kingdom’s nuclear-generated capacity and it is expected that German photo-voltaic capacity will soon do the same. In addition, Germany continues to take an active role in international
initiatives\textsuperscript{50}, such as the 1992 UNCED Conference in Rio, the Helsinki and Sofia protocols on long-range air pollution, the Vienna Agreement and Montreal Protocol on protecting the ozone layer, and in forging collaborative strategies with its neighbours to protect the North Sea and Baltic\textsuperscript{51}. Germany is under pressure from organisations such as the Organisation for Economic Co-operation and Development to make more use of economic instruments\textsuperscript{52}, but this is suggested in order to transcend the ‘law of diminishing returns’\textsuperscript{53} that accompanies policy success rather than as a means to address poor environmental performance.

By contrast, the United Kingdom has embraced market-based instruments but its failure to seriously invest in renewables is now beginning to look like a strategic mistake. With rising oil and gas prices, diminishing and unpredictable supply, and the practical and political constraints on any replacement for the United Kingdom’s ageing nuclear plant, it remains to be seen how serious a mistake this really is. What can be deduced from the United Kingdom’s relatively poor performance in the field of renewables is that agents will react to market signals within the energy market and, in order to foster renewables, the signals required must be strong enough to offset short-term incentives such as those that underpinned the ‘dash for gas’ in the 1990s. Yet in order to do so, a degree of old-fashioned command-and-control regulation is necessary and, in this, Germany remains more effective than the United Kingdom in establishing the incentive structures that make long-term investment in renewables worthwhile. In short, in the United Kingdom there has seen an over-reliance upon market forces and insufficient recognition of the consequences of market failure.
Finally, it is worth noting that, although there is a long history of British-German co-operation in such areas as trade liberalization, defence and security policy, there has been very little evidence of co-operation between the two countries in the field of environmental policy. If one looks back to the 1980s and early 1990s, this is not particularly surprising, given the mismatch between the two countries in terms of both environmental performance, the priority given to improving that performance, and indeed attitudes to the political arena – the European Union – in which much of this co-operation might have taken place. However, the relative absence of overt gestures of co-operation in recent years is more intriguing – particularly in the context of the so-called ‘Third Way’ and ‘Neue Mitte’ agendas of the late 1990s. Indeed, if one re-reads the Blair-Schröder paper of July 1999\textsuperscript{54} one is struck by the emphasis on ‘economic dynamism’, the ‘unleashing of creativity and innovation’, ‘catching up with the US’ and the establishment of a ‘robust and competitive market framework’ rather than environmental initiatives. The document does mention the need to pursue a ‘tax policy to promote sustainable growth’ by shifting the tax burden from income to consumption, but little detail is provided and - given the subsequent ditching of the paper and slow deterioration in relations between the two leaders – we shall never know what they might have intended in this regard. The replacement of Schröder as Federal Chancellor by Angela Merkel in 2005 has led to an improvement in relations between the United Kingdom and Germany and this, combined with the slow convergence in policy instruments noted above, does open the door for co-operation between the two countries on environmental matters in the future. But whether this possible co-operation will serve to facilitate or
Conclusions

This study has examined developments within the environmental policy domain in the United Kingdom and the Federal Republic of Germany along the dimensions of: (i) the historical context; (ii) policy instruments and discourses; and (iii) policy outcomes. In addition, it asks if we can we identify patterns of convergence and divergence along these three dimensions and to what extent does the European integration process impact upon these patterns? In order to answer these questions, let us look at each of the three dimensions in turn.

In terms of the historical context of environmental policy making in the two countries, we can see variance in institutional policy performance, the persistence of standard operating procedures, and a capacity for learning and adaptation. In the United Kingdom, environmental policy making first emerged within the context of the strong Victorian unitary state. The operating procedures established in its early phase, with central government taking limited measures to empower sub-national levels of government to impose uniform, pragmatic, and minimalist standards, persisted well into the 20th Century and were only significantly challenged by growing environmental competences sited at the European Union level. The intellectual style of policy initiatives, from the 1863 Alkali Act through to the 1956 Clean Air Act and beyond, was ‘tactical rather than strategic’ and eschewed the explicit incorporation of abstractions such as
Best Available Technology. This tactical approach led to ‘an accretion of agencies, procedures and policies’\textsuperscript{56} in which the key institutional features were those of fragmentation and the division of policy competences. Even after the foundation of the Department of the Environment in 1970, this fragmentation continued and, since Devolution, this pattern has been repeated in Scotland, Wales and Northern Ireland. By contrast, German standard operating procedures were grounded in the principle of independent \textit{Land} involvement in the policy sector, with individual \textit{Länder} enjoying powers to enact local ordinances that would become the template for Federal legislation\textsuperscript{57}, from the Water Household Act of 1957 through the Clean Air Maintenance Law of 1959 to the Ordinance on Large Combustion Plants of 1982. As early as the 1890s, local ordinances enforced corrective measures framed by abstractions such as Best Available Technology and this tendency to abstraction has persisted in ideas such as the Precautionary Principle. Prior to the involvement of the Federal level, there was a significant degree of horizontal co-operation between \textit{Länder} through the \textit{Genossenschaften}. But even after the involvement of the Federal level, the multi-level character of the policy sector persisted. It took until 1986 to set up a Federal Environment Ministry and the resulting portfolio still shares competences with rival ministries (such as the Economics Ministry) and rival levels of governance. Nevertheless, high levels of expert and cross-party consensus at all levels of governance in the late 1980s and early 1990s provided the platform for significant uploading of environmental policy to the European Union level.

In terms of policy instruments and discourses, the study demonstrates how nation-specific patterns remain central. Thus, despite some absorption of German-style
abstraction, in the United Kingdom we see the persistence of traditions of empiricism and problem-solving, as seen in the emphasis upon Environmental Quality Objectives in the United Kingdom rather than German-style Uniform Emissions Limits, Best Practical Means or Best Practical Environmental Option rather than the wholehearted embrace of Best Available Technology, and a reactive approach to existing environmental damage rather than a proactive approach to potential threats as codified in the Precautionary Principle.

Finally, as noted in the previous section, we can discern a strong variance in the environmental outcomes between the two countries; although, for reasons already described, it is of little value trying to ascribe a simplistic causality to the relationship between standard operating procedures and outcomes.

So we have established significant levels of variance across the three dimensions. This study, however, has also identified instances of policy diffusion and adaptation, particularly by the United Kingdom. For instance, the old light-touch ‘informal, accommodative’ style of regulation\textsuperscript{58} has been replaced by a more transparent, arms-length and potentially conflictual regulatory style. Moreover, after early resistance to market-based instruments, the United Kingdom has become an enthusiastic advocate of this type of new environmental policy instruments. Germany, by contrast, has a long history of voluntary agreements but has been far more resistant to market-based instruments. So, in answer to our first question, although all European Union countries have widened their portfolio of policy instruments, one must conclude that there has been only limited convergence between the United Kingdom and Germany. This is not to argue that there cannot be such a process of convergence and Wurzel\textsuperscript{59}, in particular,
makes a strong case for the combination of United Kingdom-style pragmatism and German abstraction. Nevertheless, at present such a synthesis has not taken place in any meaningful way.

Paradoxically, one of the reasons for this is found in the development of environmental policy competences at the European Union level. As already noted, from the mid-1980s the European Union became increasingly assertive in the development of environmental policy making. However, although in the early years Germany was relatively successful in uploading policy principles to the European Union level, from the mid-1990s it increasingly found itself working against the grain of developments at the European Union level. By contrast, after an initial period in which the United Kingdom was embattled at the European Union level, the level of ‘misfit’ between United Kingdom and European Union policy making has eased.

It will be recalled that this misfit took place along three dimensions: (i) established standard operating procedures directly associated with the policy domain; (ii) governance structures; and (iii) political salience and party political competition. And as has already been discussed, the strength of adaptional pressures varies across them. In terms of standard operating procedures, the shift at the European Union level towards a mix of economic instruments and so-called ‘soft law’ is closer to United Kingdom practices and preferences. At the same time, the emergence of multi-level governance within the sector has challenged the gatekeeper status of the United Kingdom core executive. Finally, in terms of political salience and party political competition, it remains to be seen whether the recent (re)emergence of the environment as key concern in United Kingdom party political discourse represents a substantive shift by the United
Kingdom along this dimension. What is clear, however, is that the shift away from command-and-control measures towards market-based instruments – but crucially combined with the soft law approach – provides a challenge to our understanding of the scope and scale of the processes of Europeanization and policy transfer. In particular, the emphasis on misfit as the *sine qua non* for Europeanization over-emphasises the top-down effects\(^6\) of engagement with the European Union. This study has worked from the premise that intervening variables such as nation-specific standard operating procedures, norms, and discourses really do determine the scope and scale of Europeanization.

Thus to conclude, it is as much the shift to a soft law approach as it is the emphasis on market-based instruments that has determined the shape of environmental policy making in the United Kingdom and Germany. Soft law approaches still allow policy transfer to take place, but they re-emphasise the role of agency at the national and sub-national level. Moreover, this is a development that impacts upon *all* policy areas in which the European Union has enjoyed a shared competence and not just that of environmental policy. Given this new emphasis on agency at the member state level, it follows that the relatively recent concept of policy resistance\(^6\) will become an increasingly important analytical tool, both in the study of environmental policy, and in the study of the Europeanization of policy making more broadly defined.
Endnotes


22 Weidner, 1995 Op Cit.
28 Lees, 2005a Op Cit.
32 For a more detailed discussion on this theme, see Lees, C. (2000a) ‘Reconstituting European Social Democracy: Germany's pivotal role’ in German Politics Vol. 9, No. 2: 71-88.
38 see Wurzel, 2002 Op Cit; also Héritier et al Op Cit, 1996.
39 Jordan et al, 2003 Op Cit: p. 194
40 www.defra.gov.uk. Accessed 14/05/06.
47 www.euractiv.com Op Cit. Accessed 29/05/06.

53 Lees, 2005a Op Cit.
59 Wurzel, 2002 Op Cit.
60 Borzel 2005 Op Cit.
61 Flynn, 1997 Op Cit.
62 Radaelli, 2005 Op Cit.
63 Bache and Taylor 2003 Op Cit.