Escaping the regulatory state? Issues of policy instruments in the EU Environmental Policy Context.

Authors:
Dr. Anthony R. Zito
Newcastle University
Email: a.r.zito@ncl.ac.uk

Professor Andrew J. Jordan
University of East Anglia
Email: A.Jordan@uea.ac.uk

Dr Rüdiger Wurzel
University of Hull
Email: R.K.Wurzel@hull.ac.uk

Abstract:
This paper takes as its starting point the contribution Majone has made to understanding the nature of the state mechanisms and tools existing at the level of the European Union. It takes Majone’s argument about the functional pressure to regulate, as a result of Treaty and budgetary limitations, and asks whether the EU can escape this functionalist trap by learning to govern with multiple policy instruments? In particular it focuses on the history of the evolution of the role of emissions trading schemes in the EU and Member state context as instrument selection that have larger and longer term consequences to the EU state and market governance.

Introduction
For the last two decades, the arena of European Union (EU) environmental policy has experienced intense discussions concerning the role of policy instruments (Jordan et al. 2003a; Halpern 2010), defined here as the myriad devices used by policy makers to achieve their preferred policy objectives. This continuing discussion remains significant to both practitioners and academics seeking to influence and understand EU environmental policy. At the same time, however, it is central for understanding the origins, structure and performance of a ‘policy state’ at EU level. The choice and application of different policy instruments, tools and techniques (similar terms which are often used interchangeably in the existing literature) arguably constitutes the very essence of governing (Hood 2007: 142-3), a task which the EU was originally established to discharge.

This paper takes as it starting point the core ideas of public policy scholars Peter Hall and Giandomenico Majone who have conceptualized and contextualized the role of policy instruments. Hall’s (1993: 278-280) analytical framework for policy change distinguishes between change in the use of existing instruments (first level change), the adoption of new policy instruments (second level change), and paradigm or goal change (third level change). In the first level change, existing policy instruments are recalibrated at frequent intervals. This usually involves learning from new information or (trial and error) experience, but will not involve changes in the types of policy instruments used or the overarching policy goals. Second order change leads to the adoption of novel policy instruments, but not the overarching policy goals. Only third level policy change involves also the change in the overarching policy goals. These goals will be driven by a core set of ideas which Hall (1993, 278-280) terms as a policy paradigm: ‘a framework of ideas and standards 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.’ Because first and second level changes occur regularly and incrementally they are associated with ‘normal’ policy making. A paradigm shift of seismic proportions is required for a third order change. Crucially, first and second order changes do not automatically result in third order change, which requires an evolving societal debate and reflection - social learning - regarding the overall direction of policy. An influential public policy assumption which has been drawn from Hall’s arguments is the idea that critical change tends to happen at the third order level; the core goal of this ECPR panel is to challenge that assumption.

Within this analytical challenge this paper studies the nature of policy instruments and what they have to say about the transformation of political systems. Much of the public policy scholarship has accepted another of Hall’s influential suggestions: namely concerning the need to unpack ‘policy’ into component parts, which include instruments, in order to develop a rounded understanding of how and why a state’s policies change (Hall 1993). At the same time many state theorists have sought to understand the state in terms of its access to and use of policy instruments (Hay et al. 2004: 1). From this perspective, scholars can define a state according to the instruments at its disposal. For example, Dunleavy and O’Leary (1987: 2) contend that a state can be defined by its ability to collect revenues (i.e. through the policy instrument of taxation) and impose authority on its citizens. By implication, governing entities that cannot take these actions are by definition not modern states. Such logic begs the question of what the status of the EU is, and the implications for how the EU governs.

Majone (1994) offered the first systematic attempt to understand the changing relationship between the state, policy and policy instruments at EU level. Majone argued that
the EU Member States had actively limited the EU’s ability to engage in distributive and re-distributive issues (thus making it less state-like). This forced the EU institutions to learn to govern largely with regulatory tools. Crucially, he demonstrated that policy instruments were not simply epiphenomenal; they were both an outcome of and a generator for new policies and politics in the EU. Thus regulation developed at the EU level gradually affected (or Europeanized) national regulatory states. And in turn it gradually re-orientated policies and politics at the national level to the goals of EU policies. Consequently, Member States found themselves unexpectedly transformed by an organisation – the EU – that they had originally designed not to encroach upon ‘core’ areas of state affairs like fiscal, economic and foreign policy (Weale et al. 2000, 447). This point emphasizes the transformational potential policy instruments can have towards the institutions and politics of both the EU and its Member States, in contrast to the perspective derived from Hall’s arguments.

Since the 1990s, the use of policy instruments has certainly remained a central political issue at EU level; this discussion has run in parallel with the discussion about governance, the latter gaining added momentum with the European Commission’s 2001 White Paper on European Governance (CEC 2001). Majone’s core argument - that the EU is an ‘almost pure type of regulatory state’ (1996: 150) - remains highly suggestive. It was notable that Majone not only characterized the EU in state-like terms, but did so expressly in the language of policy instruments. Thereafter, however, the literature headed off in slightly different directions to those originally developed by Majone. The more recent academic literature has tended to focus on the “new modes of governance” (e.g. Treib et al. 2008; Citi and Rhodes 2006), that are more widely defined than the ‘pure’ regulatory approach described by Majone. Although the new modes of governance literature is ostensibly concerned with policy instruments, it has generally focused on why policy makers choose new policy instruments, what form these instruments take, and how well they perform in practice (e.g. Schout et al. 2010). The new modes of governance literature focuses less on how the ‘old’ and ‘new’ modes of governance and policy interact (for exceptions, see Héritier and Eckert (2008) and Jordan et al. (2003a/b)). And crucially Majone’s link back to the changing nature of the state at the EU level has rather fallen out of focus. Consequently a number of questions relating to the EU’s ability to function as a policy state have been obscured. For instance, how well has the EU escaped the functional pressure to regulate (described by Majone) by learning to govern with multiple policy instruments? If so have the new modes and policy instruments supplemented traditional regulation or replaced it altogether (Jordan et al. 2005)? And what does the (un)changing pattern of policy instrument use at EU level tell us about the functioning of the EU’s policy state, bearing in mind the historical associations noted above, that are usually made between statehood and the capacity to utilise certain types of policy instrument?

In spite of Majone’s work, the EU’s continuing inability to select, deploy and recalibrate the whole range of policy instruments has not been fully accounted for. The political arguments in favour of using more of the new non-regulatory instruments (instead of traditional command-and-control regulation) are of course well known and widely employed (see Holzinger et al. 2009: 50-1; Jordan et al. 2003b: 509). Nevertheless, the existing literature suggests that while some new environmental policy instruments (NEPIs) (e.g. emissions trading) have been successfully adopted at EU level, instrument choices remain heavily biased towards regulation, although this instrument’s relative share of the total stock of instruments has declined in recent years (Holzinger et al. 2009; Halpern 2010; Jordan et al. 2005).
In order to get a better understanding for what causes these broad patterns of change in instrument usage in the EU, the remainder of this paper focuses on one particular sub-field of environmental policy – climate change – and one set of ‘new’ environmental policy instruments, namely market based instruments (MBI) that have attracted particular attention. Since the 1980s the EU has slowly emerged as a world leader in the development of ambitious climate targets and policies (Jordan et al. 2010; Wurzel and Connelly, 2011). At the core of the EU’s ambitious climate change policy is one particular MBI: the EU emissions trading scheme (EU ETS) that arguably has helped to transform institutional politics and policy making for the EU and its states at both the global and more local levels. The remainder of this paper proceeds as follows. The second section surveys the existing policy instrument literature, emphasizing certain key concepts. The third section explains the overall pattern of instrument choices in the environmental field using well established theories of instrument selection. In light of their failure to do this satisfactorily, section four begins to reconstruct them for use in an EU setting. Section five juxtaposes the role of MBIs and regulation in the development of EU instrument choices concerning climate change policy. It specifically explores the development of a key NEPI, namely the EU ETS. The final section reflects on what the usage of MBIs in climate change reveal about the EU’s capacity to function as a policy state. More broadly it reviews the impact that particular instruments can have on political and policy processes.

**Policy instruments: a definitional introduction**

Numerous definitions and typologies inhabit the policy instruments literature; none enjoys unanimous support (Howlett and Ramesh 1995: 81; de Bruijn and Hufen 1998: 13). Howlett (1991: 2) defines policy instruments very broadly as the ‘myriad techniques at the disposal of governments to implement their policy objectives’. Bemelmans-Videc et al. (1998: 50-2) differentiate between regulation (or “sticks” which are highly constraining of societal choices), market based instruments (or “carrots” which are moderately choice constraining) and informational devices (or “sermons” which least choice constraining). To this list may also be added voluntary agreements, through which societal actors make pledges in which they commit themselves to undertake certain pollution reduction measures. In return, state actors will often refrain from adopting regulation. Given the analytical focus of the paper, we drill down further into the concept of regulatory instruments and MBIs.

*Regulatory instruments* constitute a prescriptive form of governing, through which targets are established by states and then implemented by public and private actors. Failure to meet these targets usually triggers some form of punitive (state) action. As mentioned above, although the EU is not a state, EU environmental policy makers have relied heavily on regulation in the past. Majone’s (1994) characterisation of the EU as a regulatory state certainly seems apt judging by the total number of environmental laws it has adopted since the late 1960s - some 1,000 separate items (Jordan 2005). Although the exact numbers are unknown, it is safe to assume that member states have adopted many additional environmental regulations at the national level.

*Market-based instruments* on the other hand ‘affect [the] estimates of costs of alternative actions open to economic agents’ (OECD 1994: 17). Eco-taxes and emissions trading schemes, long advocated by economists on cost-efficiency grounds, are the most relevant in the environmental field (Wurzel et al. 2012). However, EU decision making rules require unanimity for tax proposals. This institutional rule creates a very high threshold for policy instrument change, such that no EU-wide eco-taxes have been adopted at EU level.
The use of policy instruments in the EU is rather varied. Any discussion of the EU’s capacity to function as a policy state in the environmental realm, must account for the fact that although it is heavily reliant on regulation it is not mono-instrumental. The next section seeks an explanation for the overall pattern of governing by policy instruments by interrogating some long established theories of public policy instruments.

Policy instrument choices: rival theoretical approaches

There is no single theory of policy instruments let alone a theory of EU policy instruments. As noted above, the policy instruments literature has rather side-stepped debates about explanation and instead focused on developing and refining different definitions and classifications (e.g. Treib et al. 2008). Finally, although it has long been acknowledged that instrument selection is not a neutral or value free activity which is devoid of politics, it has taken public policy scholars a considerable amount of time to explore the politics of instrument selection and usage (Eliadis et al. 2007: 40; Lascoumes and Le Galès 2007).

Early theories

Doern (1981) and Phidd and Doern (1983), were among the first scholars to turn a classification system into a more general theory of instrument choice. Operating from an Anglo-Saxon perspective on law and policy, they arranged the main types of policy instruments along a scale ranging from ‘self-regulation’ (least coercive) to ‘public ownership’ (most coercive). Assuming that all instruments were technically substitutable, they argued that liberal democratic states would generally prefer to employ the least coercive instruments first and then ‘move along the scale’ as necessary to overcome societal resistance (Howlett and Ramesh 1995: 159). However, as Majone quickly realized, this Anglo-Saxon orientated model (by contrast, some of the Continental literature on state building emphasizes the importance of coercive measures used in state building) fails to explain the EU’s instrument choices. In many areas, the EU has effectively leapt to the coercive end of the spectrum, rather than moving in incremental steps along the scale. If one moves down to the national level, the pattern is even more puzzling: some states have moved in one direction whereas as others have moved in the other. The use of different policy instrument mixes in different states is perhaps best explained with different national policy styles which have developed in different capitalist systems.

Moreover, there are many political coalitions that actively support environmental regulation (not least environmental pressure groups) almost as a matter of principle. Nor are the various instruments substitutable in practice. As noted above, the EU is institutionally restricted from adopting a key NEPI – taxation - and struggles to select legally binding voluntary agreements.

Regulatory federalism

As an alternative, Majone’s approach certainly offers a more politically nuanced view of the instrument choice process. Regulations in the environmental field have, as Majone suggested, grown both quantitatively and qualitatively. He identified many of the factors driving this growth: Commission entrepreneurship; businesses looking for a level playing field; and environmental ministries seeking to secure politically popular protection measures whilst passing on the costs to industry and/or lower levels of governance. Majone’s (1994: 98) claim that the growth of the regulatory state at EU level was not fully foreseen or supported by states, is generally borne out by developments in the environmental policy sector (Jordan and Liefferink 2004) which emerged unexpectedly, ‘by stealth’ in the early 1970s (Weale et al. 2000: 20). Following Lowi (1972), the EU’s reliance on regulation has, as Majone correctly predicted, created many new forms of polities – e.g. the emergence of specialized agencies.
and the courts as key governors that can acquire political functions; the growing influence of technical specialists and their associated lobby groups.

Majone also successfully foresaw the rise of a countervailing political pressure for institutional mechanisms to audit, assess and otherwise control the EU regulatory state. This is demonstrated in the debates about “better regulation” (Radaelli 2007) and new procedures such as impact assessment (Turnpenny et al. 2009). Those seeking to understand the EU as a kind of policy state should bear these insights in mind.

Nonetheless, several authors have identified flaws in Majone’s account, namely his functionalist view of instrument choices (Levi-Faur 2006: 7) and his overstatement of the EU’s transformative impact on national regulatory states that have at best been differentially affected (Lodge 2008: 287; Jordan and Liefferink 2004). Writers such as Scharpf (1996) have also tried to account for the fact that the EU seems better able to select certain types of regulation (i.e. product standards) than others (i.e. process standards) Scharpf argued that EU environmental product standards grew quickly because a functioning single market requires national standards (e.g. on car emissions) to be harmonized (or at least approximated) as products are regularly traded across borders. According to Scharpf, the EU has been much slower at adopting common standards governing production facilities and processes (see also Weale et al. 2000: 35).

Finally, although Majone (1996: 34-5) was at pains to acknowledge that long term shifts do occur in governing over time, and that therefore we should not assume that the regulatory state will always remain dominant, there remains the lingering suspicion that he thinks the EU is and seems set to remain essentially mono-instrumental (i.e. biased towards traditional regulation). Yet the empirical evidence, as noted above, suggests that non-regulatory alternatives are being successfully introduced, and are interacting with traditional regulation to form new policy instrument mixes. ‘New’ and old’ policy instruments therefore interact in subtle and puzzling ways: sometimes co-existing; sometimes combining with another; and sometimes replacing one another. Understanding instrument choices and complex policy instrument mixes therefore requires a multivariate explanation.

Critical variables: identification and operationalization

Linder and Peters (1989) made the most comprehensive attempt to map out the most salient variables. Their starting point was the subjective perspective of the policy makers who ultimately make instrument choices. Their choices, Linder and Peters (1989: 45) argued, are a function of several factors. First, there are the specific features or ‘attributes’ of individual instruments vis-à-vis ‘the problem’ to be tackled. These can vary in relation to their resource intensiveness (i.e. how administratively costly are they to set up and run?), their targeting ability (i.e. how precisely do they focus?), their political riskiness (i.e. how well supported are they?) and feasibility (i.e. how institutionally possible are they?). In the EU, regulation is attractive to policy makers, as Majone pointed out, precisely because the costs of compliance are picked up by states and/or corporate actors. Regulation is also generally cheap to design and adopt. In addition, regulatory instruments are relatively clear in delineating who should do what, where and by when. This targeting can of course be shaped by political bargaining at the design and implementation stages. By contrast, with market based instruments, more uncertain forces determine critical targeting issues, namely the ‘invisible hand’ of the market. Finally, the EU remains institutionally limited in its ability to adopt fiscal measures.
Secondly, what is the *prevailing policy style* (e.g. is it more or less statist?) (Richardson, 1982) and what is the basic nature of the society to be governed (e.g. is it generally cohesive or fractured? See Linder and Peters 1989: 50)? For example, the complexity of coordinating a large number of actors in several Member States which exhibit different policy styles is one important factor which has militated against the adoption of voluntary agreements, which rely heavily on consensus and trust, on the EU level.

Thirdly, what is the *prevailing organisational culture* in which those making instrument choices operate, how does it relate to those operating in cognate organisations and what kinds of interconnecting networks are there? The point being made here is that certain types of organisations staffed by certain types of officials may gravitate towards certain types of instruments instead of others (Linder and Peters 1989: 51-3). It used to be said that the European Commission’s services were dominated by lawyers and generalists, whereas economists were under-represented (Page 1997).

Finally, what is the *prevailing problem framing*? Certain types of instruments may favour certain types of problems (i.e. selecting ‘the right tool for the job’). Regulation is, for example, an obvious way to govern the cross border trade in products (Holzinger et al. 2009), particularly those that are highly damaging. However, Linder and Peters (1989) were careful to avoid lapsing into a form of crude functionalism. Certain problems may, they proposed, elicit particular instrument choices but careful comparative work could well reveal that the same type of instrument is used irrespective of the problem. This point was certainly not lost on Majone, who did not attribute the dominance of regulation at the EU level simply to its functional appropriateness. The suite of environmental issues addressed by the EU is too broad for regulation to be the only solution.

**Policy instrument choices: re-assembling the pieces**

The main problem with Linder and Peters’ (1989) systematic cataloguing of the most potentially salient variables is just that: it is a list. It is better at identifying variables than explaining how they interact with one another to generate instrument choices. Instead of seeking to develop and test a specific theory of instrument choices, it is more fruitful to examine the choice process from the perspective of broader theories of the policy process and avoid ploughing a theoretical furrow detached from the mainstream. There is after all a growing appreciation amongst instrument specialists of the need to situate instrument choices alongside broader contextual factors that affect all aspects of the policy process (Peters and van Nispen 1998; Howlett and Ramesh 1993: 5; Lascoumes and Le Galès 2007: 59).

The remainder of this section therefore focuses on the potential links between choices and wider contexts. It takes the various variables identified by Linder and Peters (1989) and relates them to three main bodies of public policy theory: *ideational*; *institutional*; and *episodic* (Jordan et al. 2003b). *Ideational* approaches regard ideas as the main driver of policy change. Ideas and beliefs certainly appear to drive the choice of instruments: policy making in ‘normal’ times is in effect mostly characterized by learning about the performance of different instruments (Howlett and Ramesh 1993: 15). In these situations, what Linder and Peters (1989) termed the attributes of instruments are more important. Normally instruments are simply fine-tuned to meet changing political demands, but sometimes policy crises open a given policy area to substantial changes in thinking and with it the possibility of using new instruments. The crucial question is under what circumstances are we likely to encounter significantly different instrument choices? Hall (1993) and Sabatier (1998) offer parallel explanations for the learning process. For them change occurs as actors are confronted by
new problems and anomalous events that are at odds with their policy paradigms and/or belief systems.

By contrast, more *institutional* approaches argue that the political context in which instruments choices are made is critical (Steinmo *et al.* 1992). Institutions contain standard operating procedures and norms that give preference to particular instruments. Linder and Peters (1989) were very aware of the role of institutionalized cultures in particular organisations and policy systems which may constrain instrument choices. Furthermore, the policy instrumentation approach of Lascoumes and Le Galès (2007: 9) suggests that, once in place, instruments themselves become endowed with an institutional quality. They help to reflexively structure politics according to their own internal logic (*Ibid.*: 10). Moreover instruments generate path dependencies, as actors alter their preferences to fit older instruments and new problems are visualized through the prism of existing instrument choices – a point which, interestingly, comes close to Majone’s line of argument. Consequently, instruments (i.e. their “careers” - *ibid.*: 7) should be studied over long periods of time, rather than as a series of static snapshots. Only when the entire sector faces a notable policy failure or catastrophe, will actors consider a wider selection of ideas and their associated policy instruments.

Politics may not, however, necessarily be preoccupied with the struggle to fit instruments to prevailing institutions; when making choices about instruments, actors will devote at least a proportion of their energies to shaping prevailing institutions in order, in part, to affect the next cycle of instrument design choices (Majone 1976). In other words the politics of policy instruments might not be wholly concerned with policy instruments *per se*; other considerations can also bulk large such as symbolism (firmly penalising polluters by regulating them for example) or norms of appropriate behaviour (e.g. the EU should not operate in a state like manner by becoming involved in the politics of taxation).

Finally, the more *episodic* theories view the policy process as being inherently unstable: preferences are unclear; actors operate under conditions of uncertainty; and organisations lack the time to do comprehensive information searches. According to these approaches the policy process resembles less a rational-linear process of choosing amongst the available instruments to find the one that solves problems, and more a “garbage can” (Cohen *et al.* 1972). In a garbage can setting, there is normally an unpredictable assortment of ideas, problems, solutions and decision-making priorities (Baumgartner and Jones 1993; Kingdon 1984). Because of the chaotic way in which these interact, success at defining the agenda (similar to Linder and Peters’ (1989) notion of problem framing) depends on luck as well as power resources. So unlike the ideational approach, there may be fleeting opportunities for some new instruments to be adopted; these opportunities do not necessarily require a systematic change in the dominant worldview or paradigm within a given policy subsystem. Thus instruments may be chosen in a more random way, as and when political and institutional opportunities permit. Because the EU contains so many access points, there is a reasonable chance that any actor will be confident of being able to influence some aspects of instrument choice. However, the Commission, with its quasi monopoly for policy proposals and superior access to information might be expected to be better at seizing opportunities to push for particular policy instruments, particularly those that extend EU competence into new areas (such as taxation). The next section employs these three broad approaches to interpret and decode instrument selection patterns found within EU climate policies.
Climate policy: Instrument focus
Despite its contemporary salience, EU climate policy only really gained momentum after 2000 (Jordan et al. 2010). Initially the EU focused mostly on the setting of targets and goals rather than the selection of policy instruments. However, the EU ETS quickly become the central policy instrument for the EU’s ambition to act as a leader in international climate change politics (Wurzel and Connelly 2011).

Regulation
Despite some politically high profile (but isolated) examples of dramatically different instrument choices (namely the EU ETS), the most common instrument of climate policy (at least in numerical terms) is still regulation (see the Table 1.1 below). Many of the listed regulations target products (the free trade in which is an integral part of the EU’s single market) or monitoring requirements. As the EU’s desire for international climate leadership has grown its climate policy instruments have if anything become more, not less, regulatory (both in quantitative and stringency terms). For example, the voluntary agreement with motor manufacturers was replaced by a regulation. Moreover, the EU’s 2009 climate-energy package of measures contained no less than six separate items of legislation (Jordan et al. 2010). While there is evidence of learning and some unexpected instrument choices (e.g. the appearance of the EU ETS), on the whole policy instrument choices appear to have been heavily constrained by institutional factors.

Table 1.1 Regulatory instruments focused on climate issues, 1990-2010

<table>
<thead>
<tr>
<th>Climate change focused regulatory instruments</th>
<th>1992 Monitoring CO₂ emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2001 Electricity from renewable energy</td>
</tr>
<tr>
<td></td>
<td>2003 Energy performance of buildings</td>
</tr>
<tr>
<td></td>
<td>2003 Biofuels</td>
</tr>
<tr>
<td></td>
<td>2004 Promotion of combined heat and power</td>
</tr>
<tr>
<td></td>
<td>2009 Climate change and energy package of instruments (covering: CO₂ emissions; carbon capture and storage; renewable energy; revision of emissions trading; ‘Effort sharing’ agreement )</td>
</tr>
<tr>
<td></td>
<td>2009 CO₂ emissions from light duty vehicles</td>
</tr>
<tr>
<td></td>
<td>2009 Monitoring guidelines for emissions from aircraft</td>
</tr>
</tbody>
</table>

Sources: Amended from Jordan et al. (2010).

Market based instruments - taxation
Throughout the 1970s and much of 1980s the idea of using tax instruments to supplement or even replace traditional environmental regulation was simply not on the EU agenda. While some member states (e.g. Denmark and the Netherlands) possessed a range of eco-taxes, traditional regulation remained largely unchallenged as the main environmental policy instrument in most member states and on the EU level. Only towards the late 1980s did DG Environment officials push the idea of an EU-wide carbon dioxide/energy tax. Global warming was becoming important and environmental ‘pioneer’ states (e.g. Sweden) were adopting eco-taxes. Increasing regional and international (e.g. the OECD, see Opschoor and Vos 1989) policy instrument discourses focused on the sustainability of eco-taxes and other MBIs (e.g. Delbeke 1991).

By the start of the 1990s DG Environment officials drafted a proposal for a common carbon dioxide/energy tax (CEC 1992). An EU Commission instigated Task Force on the
Environment and Internal Market (1990) emphasized the need for fiscal instruments and other MBIs. The then Environment Commissioner, Ripa di Meana, and DG Environment used the impending 1992 UN Rio Earth Summit and increasing climate change concern to push through the College of Commissioners a proposal for an EU-wide carbon dioxide/energy tax. This particular NEPI had the institutional benefits of increasing the EU’s global role and the Commission’s scope of influence (Zito 2000). The Commission received the support for an EU-wide eco-tax from environmentally minded member states (such as Denmark, Germany and the Netherlands) because they feared the competitive impact of unilateral eco-tax measures.

However, the fundamental institutional constraints operating against EU environment actors quickly upended this proposal’s momentum. 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 the opposing member states, the ability to block the proposed tax (Zito 2000).

Although only operating as a strategic guidance document, the Fifth EAP itself perhaps had a more long-lasting impact in guiding the EU agenda. It emphasized, amongst others, the principles of shared responsibility across all public and social actors and flagged up the need to broaden the EU’s policy instrument mix by suggesting the inclusion of eco-taxes (CEC 1993b). The then Commission President Delors backed the White Paper on *Growth, Competitiveness and Employment* (CEC 1993a) which advocated substituting national eco-taxes for employment taxes to lower social security contributions and therefore boost economic growth and environmental protection. Nevertheless the idea of the EU fiscal tax measures grounded on the opposition of a sufficient number of member states.

In 1997, the Commission proposed a directive to harmonize member state taxation on energy products, particularly fossil fuels (CEC 1997). This proposal initially incurred stiff opposition although member states finally agreed on some basic principles. In December 2002 the Danish EU Presidency managed to get agreement to a compromise from all member states apart from Germany, (which feared the negative impact of the EU tax rates on German road hauliers and also opposed the provision for zero taxation of energy intensive businesses) (EurActiv 2002). In March 2003, the Finance Ministers (meeting in the ECOFIN Council) finally agreed a framework directive which made heavy use of derogations and transition periods to placate various member states and their economic sectors (*ENDS Europe Daily*, 21/03/2003). Hedged as it was with so many derogations and transition periods, it could hardly be described as a market-based instrument. Therefore for the time being, the only actors who seem genuinely capable of choosing this particular instrument are the Member States. In 2011, the Commission is seeking to revise the directive by introducing a carbon element to reflect the environmental impact of the actual fuels (*ENDS Europe Daily*, 13/4/2011).

This case demonstrates that *ideational* approaches can help to understand the growing political attractiveness of ‘ecologically modern’ arguments favouring eco-taxes as against regulation. *Episodic* approaches by contrast can explain the Commission’s attempted seizure of the opportunity which was provided by the international climate change negotiations at the United Nations’ (UN) Rio Earth Summit in 1992. Thereafter the advocacy coalition in favour of the Commission’s carbon/energy tax proposal failed to gather sufficient political support to secure the adoption of the EU’s first market-based fiscal policy instrument. The actual
instrument selection strongly reflects institutional constraints (i.e. unanimity requirement) and national interest politics (i.e. sovereignty issues).

**Market based instruments – emissions trading scheme formulation**

The development of the EU ETS provides a fascinating and sharp contrast to the EU experience with eco-taxes (e.g. Wurzel, 2008). The Commission first issued a proposal in 2001 which was adopted by Member States just two years later in 2003. The EU’s emission trading scheme, which became operational in 2005, is the world’s first and so far only transnational emissions trading scheme.

The Canadian economist John Dales (1968) is widely seen as having laid the intellectual foundations for emissions trading in his book *Pollution, Property and Prices* (Hansjürgens, 2005:5; Wurzel, 2008). However, for a long time emissions trading remained a theoretical concept which was discussed amongst (environmental) economists but shunned by policy makers. The environmental economics literature has long praised emissions trading as the most cost-efficient MBI for certain environmental problems (e.g. Siebert, 1976). International organizations such as the OECD and the World Bank have also stressed the economic and environmental benefits of emissions trading. The principle idea behind emissions trading is that establishing a market for the purchase and sale of emission allowances leads to emission reductions where the cost is lowest, consequently lowering the overall reduction cost of a certain pollutant. Greenhouse gas emissions are particularly well suited to emission trading because they cause the same effect to the atmosphere wherever they are emitted. Textbook economic thinking therefore argues that greenhouse gases should be reduced where it is cheapest and with the most cost-effective instruments (i.e. emissions trading).

The USA pioneered using emissions trading to reduce domestic sulfur dioxide and nitrogen oxide emissions (rather than to tackle transnational or global environmental threats). Most European policy-makers initially were sceptical about emissions trading and favoured instead various combinations of policy instruments made up of traditional regulation, eco-taxes and voluntary agreements. Heavy American lobbying induced the endorsement of emissions trading as a possible policy instrument for reducing greenhouse gas emission reductions under the United Nations (UN) 1997 Kyoto Protocol (Grubb et al. 1999). Several EU member states (including Austria and Germany) initially opposed listing emissions trading in the Kyoto Protocol, fearing that it might lead to the neglect of domestic efforts to reduce greenhouse gas emissions in favour of a trade in ‘hot air’ with foreign countries (which had managed to get generous reduction targets and/or incurred significant reductions due to falling industrial production rather than environmental policies). European environmental NGOs initially criticized the idea of making profits out of selling pollution rights (Wurzel 2008).

The EU finally bowed to American pressure and accepted emissions trading as a possible policy instrument under the Kyoto Protocol (Damro and Méndez, 2003). Ironically, President George W. Bush later announced that the USA would not ratify the 1997 Kyoto Protocol. The EU and its member states were nevertheless determined to keep alive the Kyoto Protocol even without American participation. The Commission seized this opportunity to publish a Green Paper on an EU ETS in 2000 (CEC, 2000a). One year later it published a formal proposal for an EU ETS (CEC, 2001). To the surprise of most observers, the Commission’s controversial proposal was accepted by the EP and the Environmental Council with relatively few amendments within a period of less than two years (CEC 2003;
Hansjürgens 2005; Wettestad 2005; Wurzel, 2008). However, the Commission was able to act as a policy instrument entrepreneur only because it received the backing of the majority of member states and the members of the European Parliament (MEPs) for its EU ETS proposal. The Council and the EP adopted the Directive on EU ETS after arduous but speedy negotiations in 2003 (CEC 2003).

The adoption of the EU ETS fell under the co-decision procedure which allows for two readings followed by a conciliation committee in cases where disagreement between the EP and Environmental Council continues after the second reading. In the first reading, the EP tabled more than 60 amendments while in the second reading it upheld merely 14 of its first reading amendments which were all aimed at make more ambitious the EU ETS (ENDS Europe Daily, 30.4.2003). The member states’ amendments to the Commission’s proposal were mainly concerned with the cost-implications of the EU ETS. The adoption of the detailed rules (on issues such as new entrants, closure rules, transfer rules and ex-post adjustments) were left to member states which had to draw up national allocation plans (NAPs). The EU ETS therefore became a highly decentralized scheme although the Commission issued several guidance notes (e.g. CEC 2005).

The Commission’s original proposal (CEC 2001) proposed the auctioning of all CO₂ allowances. However, this was unacceptable to the majority of member states which instead demanded grandfathering (i.e. free allocation). Because the EP insisted on some auctioning, a compromise had to be found with the Environmental Council. Directive 2003/87/EC therefore demands grandfathering but grants member states the option of auctioning up to five per cent of allowances in the first trading phase (2005-07) and up to ten per cent in the second trading phase (2008-12). The British government welcomed the Commission’s proposal for an EU ETS (CEC 2001) but demanded, amongst others, voluntary (instead of mandatory) participation, a downstream (instead of upstream) approach and the grandfathering (instead of auctioning) of allowances (Wurzel 2008).

There were four main reasons why the EU ETS was adopted so quickly. First, several actors (particularly the UK and Denmark as well as the Netherlands and Sweden) acted as pioneers. Having already adopted (or planned to establish) their own national trading systems, they saw EU level action as a means to avoid competitive disadvantages. Second, it offered a policy solution to the practical political ‘problem’ of how the EU would deliver the greenhouse gas emissions reductions it had signed up for under the 1997 Kyoto Protocol (Jordan et al. 2010; Wurzel and Connelly, 2011). Episodic theories point to the unexpected policy window created by the Protocol which was actively championed by the EU and most Member States. In other words, the Commission itself helped to create the policy window even though at the time, it and most of its Member States were opposed to the use of emissions trading. Third, emissions trading was unencumbered by the Council unanimity requirement that limits the scope for eco-taxes. Here institutional factors had an enabling as opposed to a constraining effect (for the initially only slowly growing emissions trading advocacy coalition); not being a tax, it could be adopted under qualified majority voting rules. Fourth, the instrument itself was designed in such a way that some of the most serious objections by Member States were taken into consideration. For example, the Commission had originally proposed the auctioning of all emissions allowances (i.e. the approach advocated in economics textbooks), but the Member States insisted on their right to distribute for free most of the emission allowances in the first few phases.
Some member states (e.g. Sweden) have found emissions trading schemes attractive because they already extensively used traditional regulatory instruments, which over time lead to diminishing margins of return, and eco-taxes which increasingly met with industry resistance on competitiveness grounds (Wurzel et al. 2012). Other member governments (e.g. Austria’s) dropped their resistance to the EU ETS when they realized that such schemes were crucial to their countries fulfilling the greenhouse gas emission reductions target commitments under the Kyoto Protocol and subsequent EU legislation (Wurzel et al. 2012). Germany’s resistance ended following changes to the draft directive (which included ensuring the continued use of domestic level voluntary agreements and the consideration of so-called early actions i.e. abatement measures taken prior to the EU ETS becoming operational) and elections in which the pro EU ETS Green party gained in votes (Wurzel 2008).

**ETS Implementation**

As a result of the negotiations, the EU ETS became a compulsory cap-and-trade scheme which does not stipulate an EU-wide cap but obliges member states to set national caps in their NAPs that allocate CO\(_2\) allowances to individual installations. Member states’ NAPs must be consistent with a path towards achieving the national targets agreed on under the EU burden sharing agreement (Wurzel 2008). In 2003, a Linking Directive (CEC 2003) was adopted which linked the EU ETS to the Kyoto Protocol’s flexible mechanisms (i.e. emissions trading, joint implementation and clean development mechanism). The Directive created an EU ETS for greenhouse gas emissions (although the main focus will initially be on carbon dioxide emissions) in 2005 for more than ‘10,000 installations in the energy and industrial sectors which are collectively responsible for close to half of Europe’s emissions of CO\(_2\)” (CEC 2006b, 1). The EU ETS initially differentiated between two phases. The first phase, which ran from 2005-2007, was widely considered as a pilot phase intended to make the EU fit for global emissions trading under the Kyoto protocol (Ellerman et al., 2007). The second phase from 2008-12 coincided with the Kyoto protocol’s first global emissions trading phase. The third phase will run from 2013-20.

Companies which want to emit more CO\(_2\) emissions than they have been allocated under a particular NAP must purchase additional allowances on the market. Otherwise they face a fine which was fixed at €50 in the first phase and €100 in the second phase. Companies which reduce their CO\(_2\) emissions below the level of their allocated allowances can sell any surplus on the market. There is therefore a financial incentive for companies to innovate in order to reduce their need for allowances. However, this is only the case if allowances achieve a market price which is attractive to potential sellers.

The UK was the first member state to publish a draft NAP (ENDS Report, January 2004, 18-22). However, together with nine other member states the UK missed the NAP submission deadline for the end of March 2004. Ironically, Austria and Germany, which had initially opposed the EU ETS, submitted on time their NAPs (Wurzel et al., 2003a, 2003c). Six weeks after the submission deadline had elapsed, the Commission threatened infringement proceedings against Belgium, France, Greece, Italy, Portugal and Spain which still had not submitted their NAPs (ENDS Europe Daily, 18/05/2004). Moreover, several member states that had submitted on time their NAPs used a very wide interpretation of their obligations under the Directive which demands that the ‘total quantity of allowances to be allocated for the relevant period shall be consistent with the Member State’s obligation to limit its emissions pursuant … the Kyoto Protocol’ (CEC, 2003b, Annex II).
The NAP submission for the second trading phase saw a worse implementation. By October 2006 the Commission had received only 17 (out of 25) NAPs for the second trading phase although the submission deadline had expired on 30 June 2006. The Commission therefore announced infringement proceedings against eight member states (Austria, the Czech Republic, Denmark, Hungary, Italy, Portugal, Slovenia and Spain) which had all failed to submit their NAP on time (ENDS Europe Daily, 18/07/2006, 12/10/2006). Only Estonia submitted its final plans before the submission deadline although other states such as Germany have followed (ENDS Europe Daily, 18/07/2006).

The Commission has admitted that the ‘[r]esult of this nationally-driven process is that the national allocation plans differ from each other’ (CEC, 2006a, 7). For (the first four months of) the first trading phase, the EEA (2006) found significant implementation differences which include different national definitions of what constitutes an installation that is eligible for permits and different compliance and enforcement regimes. The early experience with emissions trading therefore suggests that this NEPI is not a panacea for the implementation problems which have plagued traditional ‘command-and-control’ regulation. Moreover, in 2010 large scale fraud and money laundering involving EU ETS allowances was discovered in some member states. The EU Commission subsequently proposed the tightening of the rules and the centralization of trading platforms.

The rapid and unforeseen concatenation of problems, solutions and politics does seem to fit the predictions of episodic theories; the idea of the Commission acting as some kind of policy instrument entrepreneur also fits quite nicely. In fact the first phase (2005-07) was even described as one of ‘learning by doing’. Nonetheless, constraints have remained, not least the ability of states to dominate the implementation process. Some exploited this freedom to protect their high energy users. But during the second phase (2008-12), the Commission secured support from the majority of states for a tougher stance. In the third phase (2013-20), there will be one single cap set at EU level (as opposed to currently 27 separate national caps) and over time the proportion of allowances that are auctioned will rise to 50%. There is, therefore, evidence that lessons learned in earlier phases have shaped the EU ETS design of subsequent phases, although institutional path dependencies have constrained the implementation of this particular NEP: numerous derogations and extensions having been created for particular industries and/or energy producing companies.

Discussion of the Political Implications of the ETS
There are serious question marks about the EU’s ability to achieve its agreed collective climate change reduction targets, despite the existence both of the EU regulations and the EU ETS, as well as the minimalist carbon tax approximization. However, putting to one side the environmental impact of the EU ETS scheme operating within a basket of EU policies, the political implications of the scheme have been striking. We need to examine the implications for the EU level actors and institutions as well as the member states.

The EU ETS rapidly has become a central plank for the EU’s global climate change leadership ambitions. The ETS represents more than simply an attention-gathering political symbol and legitimization of EU global leadership ambitions. The EU ETS not only links various policy sectors but also geographic regions within the EU and, at least potentially, also outside the EU. The EU ETS has become a means for the EU to extend the outward scope of the EU towards other parts of the global political economy. A classic example of this is the move of the EU to try to extend the EU ETS system to the aviation sector while not only including EU based airlines but all airlines which take off and/or land in the EU’s territory.
Starting from 2012, nearly 4000 airlines flying in and out of EU airports will need tradable permits under the ETS scheme (Willis 2011). Unsurprisingly, several US airlines are challenging this EU move.

The EU ETS has had a significant impact on the EU’s institutional balance in EU (and possibly also international) climate change policy. After years of failure with the carbon dioxide/energy tax scheme, the Commission managed to put forward a policy instrument that gives it considerable influence on national economies and industries, even with the hard fought concessions won by member states. Moreover, the Commission created a new DG for Climate Action in February 2010. Climate change was previously the responsibility of DG Environment. DG Climate Action, which is staffed with a considerable number of economists, has been allocated all climate change related dossiers (including international climate change dossiers) and is in charge of developing and monitoring member state implementation of the ETS. This institutional shift of power within the Commission (and between EU and member state actors) has found parallels at the national level, with the creation of new institutions (e.g. the 2004 creation of the German Emissions Authority which was set up in the Federal Environmental Agency, and the enhancing of the role of particular public and private actors.

Returning to our theoretical approaches, each gives an important, albeit partial explanation for the adoption and evolution of the ETS. Episodic approaches help to explain the Commission’s seizure of the discovery of large scale fraud in emission allowances in some member states to propose a more centralised EU ETS in which EU actors (and the Commission in particular) should play a stronger role to play. In one sense the Commission used a particular event of the policy cycle to bring in some ambitions that had existed prior to the event. Ideational approaches on the other hand help us to understand why the EU ETS has played such a central role within the EU’s desire to act as a leader in international climate change politics. The more neo-liberal idea of using market solutions to bring positive outcomes in both economic performance and environmental protection have helped inform the EU position that fighting climate change, and taking leadership, can have a net benefit. Finally, institutional approaches help us to understand why the EU ETS has been reformed only incrementally although its adoption amounted to fairly radical policy instrument change for the EU and most of its member states which had no prior practical experience with this policy instrument.

Conclusions
Policy instrument research is central to a better understanding of the inter-relationships between policy, the state and society (Hood 2007: 142-3). Building on the broad claim that an instrument-focused perspective offers an important perspective on the processes of governing, this paper began by asserting that any credible attempt fully to understand the EU’s ability to function as a policy state should consider the manner in which it selects and deploys policy instruments. It has revealed that policy instruments are anything but epiphenomenal. This paper has also shown how EU policy instrument are both an outcome of intense political struggles to govern the EU and an important generator of new forms of (environmental) policies and politics and at EU and national levels. The sudden emergence of the EU ETS or the ongoing debate about EU-wide (eco-) taxes, powerfully underline the relevance of this point. Moreover, at a time when many citizens view the EU as remote and obscure, the successful use of environmental policy instruments becomes even more important for the EU to regain public legitimacy which it seems to have lost in recent years. If policy instruments are not adequately designed and implemented by policy states, policy problems will not be
tackled, and social welfare and environmental quality will suffer. In the case of climate change, the risks associated with policy failure are potentially grave. So one way or another, policy instruments play a fundamentally important, if routinely unacknowledged role, in the everyday governance of the EU. The EU

In this case the actual likely effectiveness of the ETS and the EU’s overall programme for reducing climate emissions can be debated at length. Nevertheless, it is important to note the substantial array of regulatory instruments that the EU has developed to combat this problem. The number relative to other EU level policy instruments supports Majone’s view of the EU as a regulatory state - hinting at limitations on policy instrument selection and use not fully accounted for in the more ideational and episodic theoretical approaches. Fears about endangering economic competitiveness in the international and regional context, business concerns about compliance, political constraints embedded in the treaties, member state objections to loss of sovereignty and multiple institutional arenas acting as veto points have all meant that the EU currently uses only a few voluntary agreements in environmental policy (and, it should be noted, with mixed success) and has been unable to agree EU-wide taxes.

EU Policy innovation – which we take to mean the successful choice of new combinations of instruments - is only really discernible with respect to emissions trading. So whereas the responsibility for governing policy targets, goals and timetables does seem to be steadily accumulating at EU level, the power to choose instruments remains constrained. The episode of the ETS cautions us from assuming that the selection of instruments cannot have substantial transformational impacts. In part because the economic and financial implications of the ETS scheme are extremely large, with the potential to extend themselves into other geographic and sectoral markets, the ETS has helped to change the EU climate change policy sphere. It has become a central instrument in a traditionally regulatory political system; it has the ability to shape behaviour by local businesses and regions as well as underpin EU leadership ambitions. The case of ETS suggests that, if an instrument is (a) adopted in highly visible political circumstances, (b) has such significant potential to alter the nature of important political markets and alter political institutions and more informal networks, and (c) has the ability to engage a wide range of EU and non-EU actors, it can have a radical role in reshaping policy and politics at the EU level and perhaps beyond.

What does this overall pattern tell us about the EU’s ability to function as a policy state? As regards environmental policy the EU’s role in this sector is stronger in relation to the determination of the ends (i.e. environmental targets) to be achieved than the means or tools (i.e. the instruments) which can be chosen to achieve them. Crucially, this pattern would not have been uncovered had we not disaggregated policy into its component parts.

With respect to a possible transfer of power to the supranational level, the evidence is mixed. There are conditions under which the EU is willing to actively explore and even adopt non-regulatory instruments (e.g. voluntary agreements and emissions trading), but they seem to occur relatively episodically. Voluntary agreements seem to be easier to adopt when the problem to be tackled encompasses a small number of relatively large actors (e.g. car producers). It is telling that, since the demise of the voluntary agreement on car emissions, the Commission’s enthusiasm for this type of NEPI has cooled considerably. Moreover the future Europeanization of some instruments (e.g. taxation) is barely even on the agenda for discussion in most states. If ‘power’ means the ability to choose freely from the toolbox of theoretically available policy instruments, states retain the whip hand. The theories discussed
above draw our attention to – but are not yet capable of making definitive statements on the relative importance of - the main factors behind policy instrument selection decisions. Indeed, if one is really looking for evidence of states ‘governing by multiple instruments’, the best place to start looking probably national policy systems (Jordan et al. 2005).

Empirical evidence suggests that for the time being, regulation looks set to remain the main instrument of choice for EU environmental policy in general and EU climate policy in particular. The EU ETS is one, admittedly significant, exception. In this case, one actor (the Commission) was able to behave entrepreneurially because of help received from other actors (principally those Member States and influential business groups which also favoured this type of NEPI) and a permissive set of institutional conditions (not least the availability of qualified majority voting and the EU’s ambitious Kyoto Protocol commitments). Moreover, the adoption of the EU ETS does not necessarily mean that the instrument of emissions trading has somehow triumphed, and it will soon be applied in a wide range of other sectors and areas. During the development of the EU’s 2009 climate-energy package (designed to prepare the EU for the post-Kyoto period) there was strong opposition from many Member States to a Commission proposal to facilitate the trading of certificates in the supply of renewable energy (Jordan et al. 2010). The politics of instrument design and adoption tends to defy such simple predictions.

Bibliography


