

## **17 Governing with multiple policy instruments?**

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### **Summary guide**

The EU's role in determining the overall goals of environmental policy is widely known and well understood. In contrast, its role in determining the choice and use of implementing instruments at EU level is not nearly as well understood. Despite much talk about the merits of 'new' instruments, this chapter finds that EU environmental policy is still mainly pursued via regulatory means. There have of course been circumstances in which the EU has actively explored and even adopted non-regulatory instruments, but they have only appeared very infrequently over the past 50 years. Indeed, policy makers are much more likely to 'govern by multiple instruments' at the national level than at EU level, which raises new challenges in relation to the mixing or packaging of instruments. But for various reasons, regulation is likely to remain the instrument of choice at EU level for the foreseeable future.

### **Introduction**

Policy instruments are the 'myriad techniques at the disposal of governments to implement their policy objectives' (Howlett, 1991: 2; Howlett and Capano, 2019). They provide a 'method through which government seeks a policy objective' (Salamon, 1989: 29). An understanding of these instruments is hugely important to those seeking to influence and understand EU environmental policy. It is important because the choice and application of different policy instruments, tools and techniques (similar terms which are often used interchangeably in the existing literature) arguably constitute the very essence of governing (Hood, 2007: 142–143). Instruments constitute one of the main links between steering

activities within states, and policy outcomes and impacts ‘on the ground’. Policy goals without the enabling policy instruments are somewhat of a dead letter. For many scholars, the way in which policy systems select, calibrate and deploy policy instruments is hugely important. For Howlett (2011: 22): ‘Instrument choice . . . is public policy making . . . and analyzing potential instrument choices . . . is policy design’ (emphasis in original).

Normative political arguments in favour of using a more diverse mix of environmental policy instruments are well developed and have been employed by advocates of both more and less European integration (see Holzinger *et al.*, 2009: 50–51; Jordan *et al.*, 2003a: 12–16). Some policy innovation in the form of new environmental policy instruments is apparent at the EU level. The EU Emissions Trading System (ETS), which became the first international ETS when it was set up in 2005, constitutes the most important new environmental policy instrument in this context (for a discussion of this concept, see Benson and Jordan, 2011; Jordan and Huitema, 2014). However, the EU has had a decidedly mixed experience with voluntary agreements and has failed to adopt any eco-taxes. In practice, regulations have continued to dominate, although their relative share of the total stock of policy instruments has declined in recent years (Holzinger *et al.*, 2009; Halpern, 2010; Wurzel *et al.*, 2019a: 257-8).

The way in which the EU deploys policy instruments certainly challenges some of the early assumptions made in the policy instruments literature. For example, Doern (1981) and Phidd and Doern (1992) 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, the EU has done precisely the opposite, leaping to the coercive end of the spectrum in the face of relatively little societal resistance.

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The EU’s continuing struggles to select, deploy and re-calibrate the full suite of instruments has not been fully explained. The way in which the EU deploys policy instruments certainly challenges some of the early assumptions made in the policy

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This chapter explores the main patterns of instrument use at European level since the dawn of EU environmental policy in the late 1960s. In particular, it investigates how well the EU has escaped the strong functional pressure to regulate by learning to *govern with multiple policy instruments* or *policy instrument mixes*. It explores to what extent has the EU’s new modes and instruments replaced regulation – or combined with it (Jordan *et al.*, 2005, Wurzel *et al.*, 2019b) and what the changing pattern of policy instrument use at EU level tell us about its ability to govern effectively. The next section begins by defining some key concepts, then it summarizes the development of EU environmental policy, noting the most salient trends in instrument use. The following section introduces a number of ways to think about and understand the selection of instruments, drawn from the governance and policy instruments literatures. The specific instrument choices in the area of climate change policy are then investigated in more depth. This particular sub-field of environmental policy has enjoyed a particularly strong period of growth since 2000 (Jordan *et al.*, 2010; Fankhauser *et al.*, 2016; Van Erp *et al.* 2019; see also Chapter 16). Therefore, if there is one sub-area here one would expect to find the EU ‘governing with multiple instruments’, it is probably this one. Given space constraints, this section mainly addresses instrument choices rather than their performance or ‘effectiveness’ (but see Chapters 14 and 15). The final section reflects on what the use of certain types of environmental policy instruments reveals about the EU’s capacity to govern effectively.

### **Summary points**

Policy instruments are the devices employed by policy makers to put their policy objectives into effect.

- The choice, calibration and operation of policy instruments are central aspects of governance in all political settings, including the EU.
- In principle, there are many instruments that could be used to govern the EU; in practice, the EU has largely chosen regulatory instruments, despite much animated discussion of the alternatives.

### **EU environmental policy instruments: Changing times and changing priorities**

There a number of different typologies that can be used to classify policy instruments (Wurzel et al., 2013, 2019b; Delreux and Happaerts, 2016). The different categories of policy instruments we use in this chapter are set out in Box 17.1.

#### **Box 17.1 Categories of policy instruments**

In theory, instruments can be sub-divided into a fairly limited number of categories (Salamon, 1989: 14). The existing literature has put forward a wide range of instrument typologies (Wurzel *et al.*, 2013). *Regulatory instruments* constitute a prescriptive form of governing, through which targets are established and then implemented by public and private actors. Failure to meet them usually triggers punitive action. *Market-based instruments* ‘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 salient in the environmental field (Wurzel *et al.*, 2012). *Informational instruments* seek to provide information to social actors with the aim of

changing their behaviour (Howlett and Ramesh, 1995: 91). Finally, *voluntary agreements* are agreed between public authorities and private actors who volunteer to change their behaviour.

Each instrument type has distinct characteristics and it is difficult to judge precisely what effects each one will have once it has been deployed (Salamon, 1989: 21, 28, 259) as a single instrument or as part of a wider policy mix. More is known about the effectiveness of regulation than the other types. And in the EU, almost all the academic work has been on the implementation of regulation rather than the other instrument types (see Chapter 14). Nonetheless it is abundantly clear that none is a panacea: rather, each one has strengths but also its weaknesses (Salamon, 1989.: 21; Kemp and Pontoglio, 2011: 33-35). Designing policies in part depends upon matching the right tool to the right context (Howlett, 2011).

But is this how instruments have been selected in the EU, i.e. from an open and widely stocked toolbox? EU environmental policy – defined broadly to include goals, standards and instruments – has evolved a great deal since the 1960s (see Chapters 1 and 2). Prior to 1972, common policy measures were mainly concerned with trade and thus had a strong internal market bias (Wurzel, 2008). There was a trickle of new EU regulations – some of which contained environmental protection requirements – but their primary aim was the prevention of trade barriers. Between 1972 and 1987, policy development entered an increasingly dynamic phase that produced a much more substantial and comprehensive framework of regulatory instruments. Policy making became even more dynamic after the ratification of the Single European Act (SEA) in 1987. The SEA stipulated that qualified majority voting should be used to adopt environmental regulations with a trade dimension. The scope and stringency of EU policy continued to grow in the 1990s as the 1992 Maastricht Treaty expanded QMV to most environmental issue areas. This expanded environmental *acquis*

remained largely regulatory in nature. Actors favouring the use of new instruments were boosted by the publication of the Fourth Action Programme which, in 1987, proposed the adoption of non-regulatory instruments. These were in part justified by the need to improve the implementation of regulations (see also Chapter 14). In this context, ‘new’ environmental policy instruments (NEPIs) that were not regulatory, had an obvious political appeal: they appeared both to lower the cost of regulation on businesses and offer a means to solve the EU’s mounting implementation problems, which by then had started to generate intense friction between some member states and the EU institutions (for details, see Chapter 14).

After 1992, environmental policy entered a more contentious phase, as governments became concerned about the mounting costs and intrusiveness of EU regulations. In June 1993, the French, German and British governments compiled ‘hit lists’, which proposed the repatriation of more than 100 EU regulations including 24 environmental ones (see Chapter 5). In this setting, NEPIs could be sold on the grounds that were more ‘subsidiarity friendly’ in that they gave member states more control over their implementation. In 1992, the Commission subsequently invested a huge amount of political capital in a proposal for an EU-level carbon dioxide/energy tax, which ultimately failed (Skjærseth, 2017). Yet again, however, subsequent attempts to govern by multiple instruments or smart mixes (Van Erp *et al.* 2019) made very limited progress due to industry and national government resistance. Since the 2000s, climate change has emerged as a strong political priority, but environmental policy as a whole has struggled to make headway. Having failed to adopt an EU-wide tax, the Commission gradually warmed to the idea of trading ‘licences to pollute’ and eventually pushed through the EU Emissions Trading System (EU ETS), on which more below. Afterwards, the use of policy instruments remained a live political issue in the EU despite and, also in a way, because of the continuing reliance on regulation. It grew especially strongly after the publication of the Commission’s 2001 White Paper on Governance, which

enjoined the EU to govern using a much wider array of instruments. Following the failure by the Member States to adopt the ill-fated draft EU Constitution, the Lisbon Treaty was adopted instead in 2007; it entered into force in 2009. The Lisbon Treaty ‘seem to have triggered a significant downturn in the adoption of legally binding environmental acts’ (Wurzel et al. 2019a: 258). On the other hand, Brexit has triggered a renewed debate of possible EU eco-taxes as the UK has on sovereignty grounds been the most ardent opponent to taxes on the supranational level. However, other member states (such as Poland and Spain under Conservative governments) have also not been keen on EU eco-taxes. Moreover, as will be discussed below, the adoption of the EU ETS already covers carbon dioxide emissions from a large number of industrial installations

### ***The EU: governing with multiple instruments?***

After more than 40 years of development what is the overall pattern of instrument use in the EU? The relative share of regulation vis-à-vis the total stock of instruments has gradually declined since the 1970s (Holzinger *et al.*, 2009; Halpern, 2010; Jordan *et al.*, 2005; Wurzel et al. 2019a: 257-59). Meanwhile, an existing NEPI, the EU’s eco-label scheme, has continually suffered from a low public profile (Wurzel *et al.*, 2013, 2019b). In part, this reflects the strong desire of member states (such as Germany) to protect their long-established and successful national eco-label schemes, and partly the lack of interest among European producers and retailers, many of whom have established their own bespoke labelling schemes. Similarly, the Commission’s attempts to develop EU-wide voluntary agreements have mostly floundered, only really being viable in fairly coherent policy sectors (such as car manufacturing) dominated by a small number of large producers. The European Parliament remains deeply suspicious of the lack of external scrutiny, especially if they are adopted outside the Ordinary Legislative Procedure (in which it has an established role, see



Chapter 8).

However, at the national level the pattern of choices was different again (Jordan *et al.*, 2005, Wurzel *et al.* 2019b). Some member states moved their regulation in the direction of greater coerciveness whereas others moved it in the other direction (Jordan and Liefferink, 2004). Eco-taxes are relatively common, voluntary agreements (at least in some states) are much more popular and eco-labels are numerous. Consequently, the existing literature suggests that the best place to look for ‘governance using multiple instruments’ or ‘instrument mixes’ is the policy systems of the member states. This level has certainly been the focus of more recent academic work on policy instrument selection and design activities (Daugbjerg and Tingaard Svendsen, 2002; Jordan *et al.*, 2005; Wurzel *et al.* 2019b).

#### **Summary points**

- The literature normally differentiates between four main sub-types: regulatory instruments; market-based instruments; informational instruments; and voluntary instruments.
- Over the past 40 years, various attempts have been made to employ a wider array of instruments at EU level, yet with some obvious exceptions, regulation remains the main instrument of choice.

Member states tend to have more elaborate environmental policy instrument mixes than the EU.

#### **The governance of the EU: a policy instruments perspective**

After the publication of the Commission’s 2001 White Paper on Governance, academics and practitioners increasingly examined the different forms and modes of governance that exist in the EU (on forms of governance, see e.g. Börzel, 2010; on modes, see e.g. Citi and

Rhodes, 2006; Jordan and Schout, 2006). At the core of this discussion was an EU move toward further integration in the context both of greater member state wariness about competitiveness and further integration, as well as the need to address politically difficult and contested areas such as the climate change (Zito *et al.*, 2019). In the face of these circumstances, the EU sought to shift from regulatory to more market- and network-orientated governance modes, making more use of information and other tools (Citi and Rhodes, 2006; Jordan and Schout, 2006; Treib *et al.*, 2008). The academic discussion in the 1990s focused on the different levels of governance in the EU (Jordan, 2001) whilst in the 2000s a discussion expanded on the different tools and methods that informed the governing performed at and between the levels (Bähr, 2010; Börzel, 2010; Schout *et al.*, 2010). Perhaps the most significant academic shift in the 2010s was the move by various scholars to interpret EU environmental governance in a wider global context. Issues such as climate change were increasingly seen in terms of polycentric governance as promulgated by Vincent and Elinor Ostrom (Ostrom, 2010). Such governance incorporates multiple sources of authority centred on a range of different public and private actors, operating independently and may address protracted problems such as climate change (Jordan *et al.*, 2018; Domorenok, 2019; van Erp *et al.* 2019). The expectations for governance design is that it will reflect self-organisation (while at the same time benefiting from an overarching set of norms and rules) on the part of these diverse actors (Jordan *et al.*, 2018; Sabel and Zeitlin, 2008).

Another important academic debate focused on policy mixes, which some scholars equated explicitly with ‘new governance arrangements’ (e.g. Howlett and Rayner, 2007). In the late 2010s, van Arp and colleagues (2019) challenged head on the Tinbergen rule, which demanded that one policy instrument only should be used for one particular policy problem, by proclaiming that ‘smart mixes’ of instruments are required especially for transboundary environmental harm. Despite the various proposals for smart sequencing of tools,

environmental mixes reflect certain path dependencies and certain tendencies towards preferred policy styles of a given problem (Wurzel *et al.*, 2019; Capano *et al.*, 2019).

How can we approach the study of instruments at EU level? There is no single theory of policy instrument choice – let alone theory of EU policy instruments – that can be used to explain observed patterns. The earlier body of the policy instruments literature tended to study instruments in rather narrow and instrumental terms. When the production of better definitions and typologies was not the overriding concern, analysts have tended to be motivated by a more normative urge to advocate particular types of instruments (a bias which is particularly apparent in the more economic accounts).

In the 2010s, studies which tried to explain how and why certain instruments and instrument mixes are selected became more prominent. Voß and Simons (2014) argued that policy instruments can take on a life of their own, creating a range of practices and interested actors who invest in the instrument and its future trajectory, forming a network which they term ‘instrument constituencies’. Capano and Lippi (2017) argue for a different approach for linking policy instruments and macro policy considerations; they contend that two key, often conflicting, drivers inform how policy makers choose instruments: legitimacy and effectiveness. First, policy makers should address instrument, paying particular attention to the preferences and interests of certain groups (either within or outside the policy sector). Second, policy makers should address an instrument’s effectiveness in achieving the policy goal or goals, focusing on selecting and constructing instruments more uniquely designed for a particular sector or making use of a more generic design (Capano and Lippi 2017).

Majone (1994) argued that the EU governs largely through regulatory instruments because the member states deliberately limited its ability to engage in distributive and re-distributive forms of governing. By forcing the EU institutions to function at one end of Doern’s spectrum, national governments sought to make them less state-like and limit their

autonomy. Nonetheless, the EU has shown that a great deal can be done in a policy area like the environment even with an instrument toolbox which was initially largely limited to regulation. Moreover, the accumulation of regulations at EU level has impacted heavily on national policy and politics through Europeanization (see Chapters 1 and 4).

What is particularly striking about Majone's analysis is that it searches for underlying explanations for the use of broad categories of instrument, rather than the selection and calibration of specific instruments (although he tackled this question with respect to environmental policy instruments earlier in 1978). Consequently, it should be thought of as a macro-level theory. Majone cited several drivers of the use of regulation, including Commission entrepreneurship, business support for a level playing field and national ministries aiming to simultaneously secure politically popular environmental protection measures while passing on the costs to industry and/or lower levels of governance.

Many of his predictions have been borne out in the path dependent trajectory since the 1990s. For example, his claim that the growth of the regulatory state at EU level was not fully foreseen or supported by member states has generally found support in subsequent literature (Majone, 1994: 98; Weale *et al.*, 2000: 20). The EU's reliance on regulation has also created new political foci, e.g. the emergence of specialized agencies, a growing role for the courts as key governors and the growing influence of technical specialists and their associated lobby groups associated with specific instruments (what Voß and Simons would call instrument constituencies, see also Chapters 7, 9 and 12). Majone also accurately foresaw the rise of countervailing political pressures to audit, assess and otherwise tame the rise of the EU's regulatory state – witness the debates about 'better regulation' and impact assessment (see Chapter 12).

Nonetheless, subsequent scholarship identified limitations in Majone's account. First, Scharpf (1996) highlighted the tendency for the EU to select certain subtypes of regulation

rather than others. He did so by differentiating between *product* regulation and *process* regulation. He argued that the number of environmental *product* standards grew particularly quickly in the EU because a functioning single market requires national standards to be harmonized as products are more widely traded across borders. In contrast, the EU has been slower to adopt common standards governing production facilities and processes which lie behind national borders (Weale *et al.*, 2000: 35).

Second, because Majone's is a macro-level theory, it does not so readily account for the selection of particular regulations and other instrument types. Radaelli (2014) particularly notes the need for micro analysis to be conducted for all the Majone EU integration and policy arguments. Finally, although Majone was at great pains to acknowledge that long-term shifts do occur in the modes and instruments of governing over time (Majone, 1996: 34–35), there remains the lurking suspicion that he thought that the EU would essentially remain 'mono-instrumental'. Is this realistic? As noted above, the environmental policy sector has certainly witnessed intense debates about the role of 'new' policy instruments, and research does suggest that some non-regulatory innovations (e.g. emissions trading) have been successfully introduced (Jordan *et al.*, 2011). Moreover, these 'new' instruments interact with traditional regulation in subtle and puzzling ways: sometimes co-existing; sometimes combining with them; and sometimes replacing them altogether (Jordan *et al.*, 2005).

In contrast to Majone's macro-level theories, Linder and Peters (1989) have made the most systematic attempt to map out the most salient variables affecting instrument choices at a more meso and micro-level. Their starting point was the subjective perspective of the policy makers who ultimately make instrument choices. Their choices are a function of several factors. First, there are the specific features or 'attributes' of individual instrument types vis-à-vis 'the problem' to be tackled (*ibid*: 45). For example, the effectiveness of voluntary agreements is, as noted above, likely to be higher in sectors dominated by a small number of

large players. Second, there is the *prevailing policy style* (Richardson, 1982) – more or less statist – and the nature of the society being governed – generally cohesive or fractured (Linder and Peters, 1989: 50). Third, there is the *prevailing organizational culture* in which those making instrument choices operate. For example, Page (1997) showed that the European Commission’s services were dominated by lawyers and generalists, whereas economists were under-represented, reducing the number of potential advocates for economic instruments such as taxes, . Finally, there is the prevailing *problem framing*. Regulation is, for example, an obvious way to govern the cross-border trade in products (Holzinger *et al.*, 2009).

More recently, scholars have tried to incorporate macro-, meso- and micro-level variables into broader theories of the policy process. Three key approaches focus on the importance of ideas (‘ideational’), institutions (‘institutional’) and the chaotic interplay of many different elements (‘episodic’) (see for example Zito *et al.*, 2019; Capano and Howlett, 2009).

*Ideational* approaches regard ideas as the main driver of instrument choices: it is often said that policy making is mostly characterized by learning about the performance of particular instruments (Howlett and Ramesh, 1993: 15). In these situations, what Linder and Peters (1989) termed the ‘attributes of instruments’ assume much greater importance. However, sometimes policy failures or crises open a given policy area to substantial changes in thinking (see Chapter 11), and with it the possibility of using new instruments. The crucial question is as follows: under precisely which circumstances are we likely to encounter significant shifts in instrument choices (Hall, 1993; Sabatier, 1998)? Machin (2019) makes the case that a discursive turn towards ecological modernisation and its underpinning neoliberal assumptions has shifted the EU towards a market orientation that has resulted in de-politicisation of environmental policy. Other scholars have recently focused on learning

dynamics that can result when compatible beliefs, for example, exist between decision-makers (e.g. Rietig, 2019; Domorenok, 2019).

By contrast, more *institutional* approaches argue that the political context in which instruments choices are made is more important. Institutions contain standard operating procedures and norms that facilitate the choice of particular kinds of instruments. Linder and Peters (1989) were very aware of the role of institutionalized cultures in constraining instrument choices. Moreover, instruments generate path dependencies, as actors alter their preferences to fit older instruments and new problems are understood through the prism of existing instrument choices (Jordan and Matt, 2014; Jordan and Moore, 2020). Consequently, instrument choices need to be studied over longer periods of time, rather than via a series of static snapshots (Pierson, 2004; Lascoumes and Le Galès, 2007: 7). When institutional contexts change, they can increase the importance of new tools and opportunities for actors to wield them. For example, Hofmann (2019) argued that the Aarhus Convention empowered non-governmental environmental organizations in certain EU policy contexts (Hofmann, 2019).

The more *episodic* theories view the policy process as being inherently unstable: preferences are unclear, actors operate under conditions of uncertainty and organizations lack the time to do comprehensive assessments of every instrument's effectiveness. According to these approaches, the policy process resembles less a rational-linear approach of choosing between the available instruments and more an unpredictable jumble of ideas, problems, solutions and decision-making priorities jockeying for attention (Kingdon, 1984; Baumgartner and Jones, 1993). Because of the chaotic way in which these different elements interact, success at defining the agenda depends on luck as well as power resources. Thus instruments may be chosen in a more random way, as and when political and institutional opportunities permit.

Increasingly, public policy scholars are seeking to integrate the whole range of potential interactions into mechanistic approaches that seek to understand at a micro level the causal relationships that lead to specific policy instrument design and selection. Capano, Howlett and Ramesh (2019) outline one of the more important mechanistic approaches as combining a study of the contextual factors (environmental disasters etc.) that spur mechanisms into action, (first-order) mechanisms that alter actor behaviour (for instance subsidies for renewable energy production), and (second-order) mechanisms through which the effects of the first order mechanism are aggregated, assimilated and responded to by actors (for example learning processes where actors learn about the benefits).

Finally, the smart mixes school of thought (van Arp et al., 2019), casts doubt on whether the policy instrument selection process can be orchestrated (Abbott, 2012) let alone steered or selected in a rational manner. Van Arp and colleagues (2019: 335) argue that policy coordination ‘should be conceived of as experimentalism’ rather than ‘straight forward institutional design.’

Wurzel, Zito and Jordan (2019) have also pointed out that the emergence of ‘not so smart mixes’ is hard to avoid for supranational EU and/or Member State actors because of path dependencies, power asymmetries and unintended consequences especially during the implementation process of policy instruments.

#### **Summary points**

- A thriving literature on instruments has emerged, but it is mostly concerned with a relatively small subset of new instruments; it has not yet fully explored the interaction between older and newer instruments; and the EU is not its main focus.
- There is no single theory of policy instruments that can be employed to explain the entire pattern of instrument use at EU level.

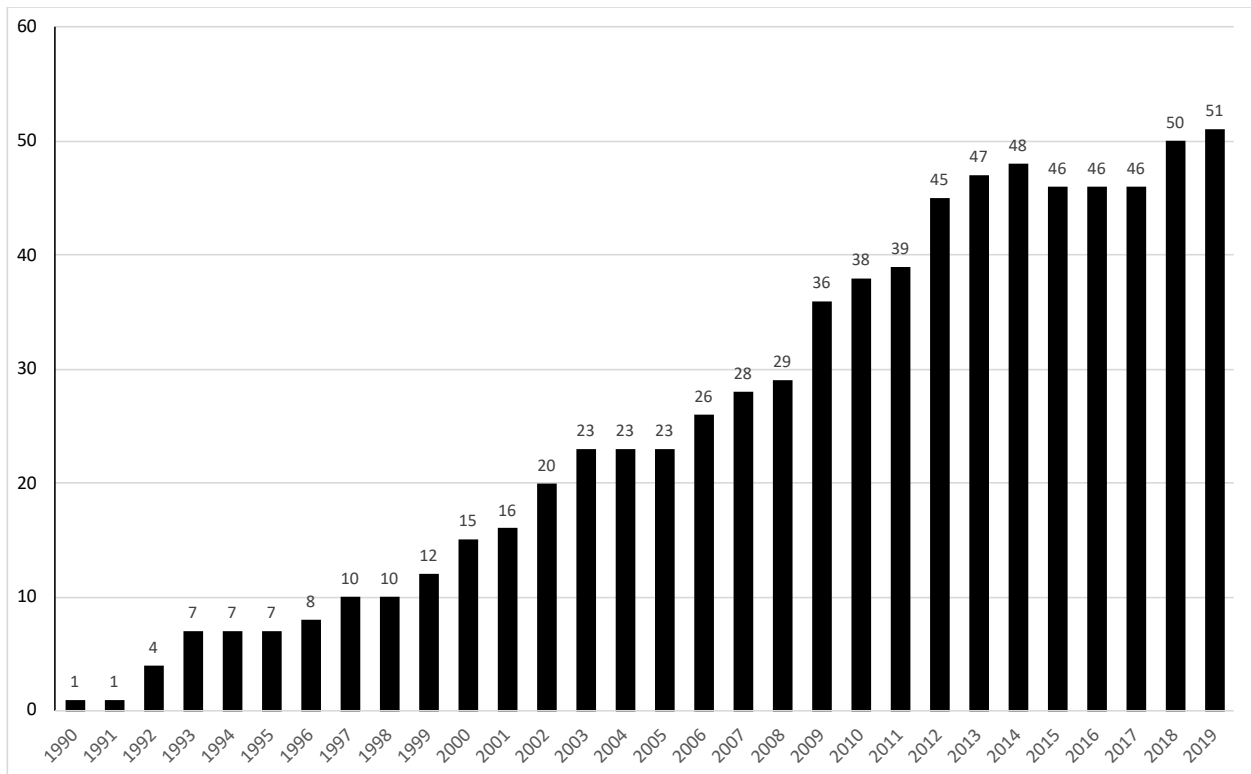


- Majone's theory of the regulatory state goes a long way to explaining the causes and implications of the EU's heavy reliance upon regulation.
- However, other theories which operate at meso and/or micro levels are needed to explain the complex instrument mixes that can now be observed in the environmental sector.

The search for 'smart mixes' of environmental policy instrument has emerged as an important goal.

### **Case study: the instruments of EU climate policy**

Climate change has been an area of especially rapid policy change at EU level. This can be illustrated by analysis the number and types of policy instruments adopted at EU level. When the United Nations Framework Convention on Climate Change was signed in 1992, the EU had only four climate-related policy instruments. By 2019, 51 climate policy instruments were in force addressing sectors as varied as industry, transport, agriculture and buildings (see Figure 17.1).



**Figure 17.1: EU climate policy instruments in force (1990–2019).** Source: own analysis, based on the EUR-Lex Database; Dupont, 2020; Averchenkova *et al.*, 2017.

### The beginnings of EU climate policy (1990–1999)

The EU’s policy response to climate change began in the context of the 5<sup>th</sup> Environment Action Programme, which stated that NEPIs would need to ‘constitute an increasingly important part of the overall approach’ to the environment (European Community, 1993: 71). However, the decade is best remembered for the failure to adopt the Commission’s proposal for an EU carbon/energy tax in the face of concerted opposition from some member states in the Council, especially the United Kingdom (Skjærseth, 2017). Despite this high-profile setback, the 1990s were in some ways the most active period for EU attempts to govern climate through non-regulatory means. Of the thirteen instruments adopted between 1990 and 1999, more than half were NEPIs (see Table 17.1). This was in sharp contrast to the overall picture; two-thirds of the climate instruments adopted between 1990 and 2019 were regulatory. NEPIs adopted in the 1990s included two informational instruments (the EU

Ecolabel, the Consumer Information Directive on Cars and the Energy Labelling Framework), two market-based instruments (the SAVE funding programme for energy efficiency and the ALTENER funding programme for renewables) and three voluntary instruments (on energy efficiency for TV/VCRs and dishwashers, as well as, more prominently, the reduction of CO<sub>2</sub> emissions from passenger cars). Despite this flurry of policy-making activity, most of these NEPIs were eventually abandoned, with only the Ecolabel, the Consumer Information Directive and the Energy Labelling Framework in force in 2019.

**Table 17.1: Instrument types in EU climate policy (1990–2019)**

<b>Instrument type</b>	<b>Adopted 1990–1999</b>	<b>Adopted 2000–2009</b>	<b>Adopted 2010–2019</b>	<b>In force (2019)</b>
<i>Regulatory</i>	6 (46%)	22 (76%)	15 (75%)	38 (75%)
<i>Market-based</i>	2 (15%)	4 (14%)	4 (20%)	8 (16%)
<i>Informational</i>	3 (15%)	2 (7%)	1 (5%)	5 (10%)
<i>Voluntary</i>	3 (23%)	1 (3%)	0 (0%)	0 (0%)
<b>Overall</b>	14	28	20	51

The regulatory instruments adopted in the 1990s fared much better, with all six remaining in force in 2019. They included the EU’s early commitments to greenhouse gas reductions and renewable energy, directives on energy efficiency for hot-water boilers and refrigerators, and the EU’s greenhouse gas monitoring scheme, which would form the basis of the Union’s measurement of its progress in reducing its contribution to climate change.

### **Policy expansion and a shift to regulation (2000–2009)**

The 2000s were a very active period for EU climate policy. Leaders seized on climate change

as a reason for further integration, and the decade saw the expansion of the EU's powers in energy governance and the introduction of broad "climate and energy" legislative packages (Jordan *et al.*, 2010). In 2007, the European Council committed the EU to its headline 20-20-20 by 2020 goals: 20% renewable energy, 20% increase in energy efficiency and a 20% reduction in greenhouse gas emissions. In this context, the number of policy instruments increased rapidly, tripling from 12 to 36 instruments between the end of 1999 and 2009. Unlike in the 1990s, 80% of the instruments adopted between 2000 and 2009 were regulatory (see Table 17.1 above). Though an account of this length does not allow a review of all of these regulations, they included cornerstones of the EU's climate policy, including the 2002 Energy Performance of Buildings Directive, the 2005 Ecodesign Directive, the 2009 Renewable Energy Directive, the 2009 Effort Sharing Directive for greenhouse gas reductions, and the 2009 Car CO<sub>2</sub> Regulation which replaced the 1999 Voluntary Agreement.

Although policy adoption during this period was dominated by regulatory instruments, a number of important NEPIs were also created. Arguably the most important was the EU Emissions Trading System (EU ETS), a market-based instrument and the world's largest cap-and-trade system that eventually covered emissions from electricity generation, aviation, and industries such as steel and cement. Despite its prominence, the EU ETS struggled to remain effective after it began operation in 2005 (Wetttestad and Jevnaker, 2017; Moore and Jordan, 2020). Regardless, it remained a key component of EU climate policy. Revenue from the auctioning of its emission allowances financed a number of market-based funding instruments such as the 2009 NER 300 Programme and later the 2018 Innovation Fund and 2018 Modernisation Fund. Other subsidy-based instruments were also put in place during the 2000s, including the LIFE Programme (which expanded to support climate projects in 2000) and climate-related rural development funding under the EU Common Agricultural Policy. The only informational instrument was the Energy Performance Certificates mandated under

the Energy Performance of Buildings Directive. A final voluntary agreement was negotiated on water heater energy efficiency in 2001 but expired after only three years.

### **Stability in a mature policy field? (2010–2019)**

Starting in 2008, the EU confronted a ‘conglomerate of crises’, including the global financial and economic crisis as well as the failure of the 2009 Copenhagen climate conference (Falkner, 2016; Slominski, 2016). Climate change enjoyed increased importance on political agendas but was also the subject of increasing contestation, including at EU level (e.g. Skovgaard, 2014). In this context, growth in the number of climate instruments continued, although less than in previous periods and showing stabilization after 2012. Intense legislative activity continued, but much more of that activity was aimed at updating existing policy instruments (e.g. the EU ETS underwent three major reforms during this period). It is notable that none of the instruments adopted during this time (or indeed since 2007) have yet been removed.

Among instruments that were adopted between 2010 and 2019, regulation again dominated, making up 75% of newly introduced policies. Many of these instruments were adopted within broader ‘framework’ regulations, such as the Long Term Renovation Strategies programme within the 2010 update of the Energy Performance of Buildings Directive or Large Company Energy Audits required under the 2012 Energy Efficiency Directive. Policy expanded to cover heretofore unregulated sectors, such as van emissions (2011), land-use change (2013) and heavy-duty vehicle emissions (2019). In 2018, the Energy Union Governance Regulation was adopted, which sought to formalize EU-level coordination on climate and energy policy and required member states to regularly submit National Energy and Climate Plans to the Commission.

Alongside these regulations, additional NEPIs were introduced. None were voluntary

instruments, the last EU-level agreement having expired in 2004. The sole example of an informational instrument was the National Energy and Climate Plans mandated as part of the 2018 Governance Regulation. Similar to the pattern found in the 2000–2009 period, the four market-based instruments were funding-related: greening payments from the Common Agricultural Policy, the Connecting Europe facility for infrastructure/energy support, and the aforementioned EU ETS-funded Innovation Fund and Modernisation Fund.

### Summary

Between 1990 and 2019, EU climate policy was far from ‘mono-instrumental’ and solely regulatory. While regulatory instruments made up 70% of all instruments adopted during this period, the remaining 30% were a diverse mix of market-based instruments, informational policies and voluntary agreements (see Table 17.2 for an overview of key instruments in each category). This suggests both that the EU’s preference regulation was clearly evident in this issue area and that non-regulatory instruments played an important role (especially in the case of high-profile examples like the EU ETS). This highlights the importance of supplementing such analysis of broad instrument choices with examination of the relative importance and stringency of instruments, both compared to each other and as a whole.

**Table 17.2 EU climate change policy: major policy instruments, 1990–2019**

<i>Type of instrument</i>	<i>Major policy instrument</i>
Regulatory instruments	1992 Greenhouse Gas Monitoring Scheme
	2001 Electricity from Renewable Energy Directive
	2002 Energy Performance of Buildings Directive
	2003 Biofuels Directive
	2004 Cogeneration Directive
	2009 Renewable Energy Directive

	2009	Car CO <sub>2</sub> Regulation
	2012	Energy Efficiency Directive
	2018	Energy Union Governance Regulation
Market-based instruments	2003	EU Emissions Trading System
	2013	Common Agricultural Policy: Greening Payments
	2018	Innovation Fund
Informational instruments	1992	Energy Labelling Framework
	1992	EU Ecolabel
	1999	Car CO <sub>2</sub> and Fuel Economy Consumer Information
Voluntary instruments	1999	Car CO <sub>2</sub> Voluntary Agreement (replaced by Car Regulation)
	2001	Voluntary Agreement on Water Heater Energy Efficiency

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Source: Updated from Jordan *et al.* (2011).

#### Summary points

- EU climate policy is not ‘mono-instrumental’; one-fourth of the policy instruments in force in 2019 were New Environmental Policy Instruments.
- The most common instrument of climate policy (at least in terms of the number of measures adopted) is still regulation
- Voluntary instruments enjoyed relatively widespread use in the EU climate policy of the 1990s, but there are no longer any in force.

## Conclusion

Building on the broad claim that an instrument-focused approach offers a different but crucial perspective on the processes of governing, this chapter began by asserting that any credible attempt to fully understand the EU's ability to govern must consider how it selects policy instruments. It reveals that policy instrument choices are anything but incidental; they are both an outcome of intense political struggles to govern the EU and also an important generator of new forms of politics and policy at EU and national levels. The sudden emergence of the EU ETS or the renewed debate about EU-wide eco-taxes, powerfully underlines the relevance of this point. Moreover, if policy instruments are not adequately designed and implemented, policy problems will not be tackled, and environmental quality (and social welfare) will suffer. In the case of climate change, the risks associated with policy failure are not simply grave but possibly even catastrophic.

Among academics, interest in instruments and instrument mixes are experiencing a resurgence (Van Erp *et al.* 2019). However, it still remains unclear whether the newest modes and instruments really deserve the analytical attention that they have received. With the possible exception of the EU ETS NEPIs have not supplanted regulations on a grand scale although they have certainly started to supplement them in important ways. Since the Lisbon Treaty has come into force, the EU's adoption rate for legally binding regulations has slowed down while the adoption rate for non-legislative environmental measures has significantly increased (Wurzel *et al.* 2019a: 258). The EU has successfully 'imported' instruments first used outside Europe (emission trading was originally pioneered in the US although to govern sulphur dioxide emissions) and built on pre-existing instrument choices made at the member state level (witness, for example, the various attempts to use voluntary agreements and informational devices), but essentially it remains a *regulatory*

In summary, different combinations of preferences and institutional limits have meant



that the EU uses few voluntary agreements in environmental policy (and, it should be noted, with limited success), struggles to use eco-labelling schemes and has been unable to agree EU-wide eco-taxes. There have been conditions in which the EU has actively explored and even adopted non-regulatory instruments, 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 as opposed to farmers). The adoption of some other types of instrument (e.g. taxation) is barely even on the agenda for discussion. Moreover, the EU's ability to steer environmental objectives through financial incentives, or 'green budgeting', remains constrained by its limited (re)distributive capabilities (Wilkinson *et al.*, 2008). If one is looking for evidence of governors 'governing by multiple instruments', the best place to look is not the EU, but the member states (Jordan *et al.*, 2005).

Clearly, therefore, the EU is not mono-instrumental with instrument mixes becoming more important. The increased policy instrument repertoire has triggered the search for 'smart mixes' (Van Erp *et al.* 2019) in which regulation still plays an important role for EU environmental policy. The EU ETS is an important market-based instrument. 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 as well as the Parliament) and a permissive set of institutional conditions (not least the availability of qualified majority voting). Finally, this chapter has focused on instrument choices. It is conceivable that fewer instruments overall will be adopted as a result of better regulation type initiatives, and that their overall ambition level will be less than in earlier phases of EU environmental policy. One of the most active areas in EU environmental policy in the future may be the reformulation and possibly dismantling of existing instruments and policies (see Chapter 20).

### Summary points

- An instrument-focused approach offers a different but very revealing perspective on the processes of governing.
- Policy instrument choices are anything but incidental and bureaucratic – they are both an outcome of political struggles and an important generator of new forms of politics and policy at EU and national levels.
- The EU essentially remains a *regulatory state* but a range of different theories is needed to explain what types of regulation are adopted, their precise focus and stringency.
- Policy instrument innovation at EU level is only really discernible with respect to emissions trading.
- The EU is not mono-instrumental, but regulation seems likely to remain the main instrument of choice among EU environmental policy makers.

### Key questions

- 1 What are the main types of policy instrument and what are their relative strengths and weaknesses?
- 2 How has the pattern of instrument choices in EU environmental policy changed over the past 40 years?
- 3 To what extent and why do the patterns of instrument selection at EU level differ to those found at the national level?
- 4 Regulatory instruments are widely employed. Could the same be said about non-regulatory instruments?

5 Does climate policy exhibit the same or a different pattern of instrument use as other areas of environmental policy?

### **Guide to further reading**

- For good reviews of the policy instruments literature, see Linder and Peters (1989), Eliadis *et al.* (2007), Schneider and Ingram (1990) and Howlett (2011).
- A number of attempts have been made to describe and explain patterns of instrument use at EU level, such as Jordan *et al.* (2005), Holzinger *et al.* (2009) and Wurzel *et al.* (2012).
- For an introduction to the wider but related literature on different modes of governance across the EU, see Treib *et al.* (2008), Citi and Rhodes (2006) and H eritier and Rhodes (2011).

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