Part I

Introduction and overview

1

Climate change policy in the European Union: an introduction

ANDREW JORDAN, DAVE HUITEMA AND HARRO VAN ASSELT

Introduction: climate change enters the political mainstream

In recent years, climate change has shifted from being a marginal political issue to one that has – depending on one's point of view – potentially transformative and/or calamitous consequences for virtually all policy areas. The change in its political status has been remarkably rapid but also substantial. So when the global economy slipped into a deep recession in the late 2000s, climate change remained alongside economic growth, employment and crime as a key political issue in the majority of industrialised states. As part of this political transformation, new actors have entered the debate. Whereas before, climate change had mainly preoccupied environmental ministries and their associated policy networks, it now attracts the sustained attention of political core executives: prime ministers, presidents and their inner cabinets. Since 2005, climate change has been a standing item at all G8 summits, and has been regularly debated at United Nations (UN) General Assembly sessions and in countless European Council meetings comprising the Heads of State of the European Union (EU).[1] The issue of climate change has, in short, entered the political mainstream.

Having struggled for years to persuade politicians to take the issue seriously, environmental actors are now finding themselves under intense pressure to deliver policy solutions that are sufficiently coordinated with their counterparts in 'non-' environmental sectors such as energy, transport and agriculture. However, whether at the national, European or international levels, these solutions have proven much harder to identify, agree upon and implement than was first thought. Climate change policy is certainly not delivering emission reductions of the scale or at the speed demanded by scientists (Anderson and Bows 2008; Helm 2008). With hindsight, putting climate change onto political agendas was probably the easy part; the big challenge now is to agree *how* to address it in ways that avoid significant and potentially irreversible effects.

Climate Change Policy in the European Union, ed. A. Jordan, D. Huitema, H. van Asselt, T. Rayner & F. Berkhout.
Published by Cambridge University Press.

Nowhere is this challenge more obvious or more acute than in the EU, which has well-known aspirations to lead the rest of the world towards solutions, but has struggled to deliver the necessary internal changes. Arguably, the bulk of the greenhouse gas emission reductions that it has made to date have been fortuitous, rather than the intended outcome of climate mitigation policies (Skou Andersen 2004; Kerr 2007).[2] If the contributions of shipping, aviation and the consumption of globally traded products are also factored in (Helm *et al.* 2007), emissions from the EU have remained on a sharply increasing trajectory despite all the political promises to the contrary. Globally, carbon dioxide emissions have been predicted to rise by around 50% by 2030 (IEA 2007). In other words, the world – including the EU – seems to be heading substantially in the wrong direction (Helm 2008: 214).

Identifying strong, and above all implementable, policies has proven difficult in the EU (as elsewhere) because climate change belongs to a particular category of problems that have been aptly termed 'wicked'. Rittel and Webber (1973) originally defined wicked problems as those that challenge established social values and institutional frameworks, defy analysis, and have no obvious solutions. Climate change certainly exhibits the same problematic characteristics as many other environmental issues (e.g. scientific uncertainty, public ambivalence, significant lag effects between policy interventions and environmental outcomes, inter-generational asymmetries, etc.), and this helps to explain the abundance of long-term targets, often of a rather declaratory nature (for example, 'seek to achieve an 80% reduction by 2050'). However, it exhibits many other characteristics that make it especially wicked. For example, it is highly cross-sectoral; it cuts across international borders, exacerbating existing tensions between rich and poorer states; it is stubbornly resistant to simple 'technological fixes' such as new forms of energy generation or carbon capture; and it challenges prevailing social norms and practices, which are predicated on very high levels of carbon consumption (Wynne 1993; Biermann 2005).

Climate change is therefore not just a difficult problem, but a wicked one par excellence. Its sheer breadth and complexity spans such a huge agenda of different sub-issues – ranging from poverty alleviation in the developing world to long-term energy supply decisions in the countries of the Organisation for Economic Co-operation and Development (OECD) – that the normal channels of inter- and intra-state policy making struggle to cope. In the past, this has culminated in slow and sometimes even deadlocked negotiations at the international level (Biermann *et al.* 2010).

In this chapter we set the scene for the rest of the book by explaining why it is both important but difficult to understand how a multi-levelled governance system such as the EU has confronted the multifaceted challenge of climate change. We do so by drawing on theoretical debates about how it operates and relating them to empirical

accounts of how policy has evolved over the past 20–30 years. In this book, we study climate governance as a series of interacting choices that 'governors' (be they at national, international or EU level) make when they develop policies to address such a challenging issue as climate change. We argue that the development of policy requires choices to be made: choices that in turn constantly provoke governance *dilemmas*, which systems of governance have been established to handle. These policy choices and governance dilemmas are especially problematic in relation to a wicked problem like climate change, where there are few 'best' options which are immediately self-evident or easily implemented. We analyse the choices that have underpinned the emergence of climate policy and examine how far they were made in ways that depart from the manner in which policy choices have traditionally been made in the EU and/or its Member States. One of the key aims of this book is to identify *which* policy choices have been made in relation to climate change and to examine who made them and how they affected – or were affected by – the broader framework of the EU. We will also try to explore the 'non-' choices too – the decisions that were *not* made or were actively deferred – as well as those that may have to be made after 2020. In the final section of this chapter, we set out a plan for the whole book.

Before we go into more detail, it is important to be aware that our decision to focus on the inner working of the EU means that this book will not directly address the way in which the EU participates in international meetings and/or the degree to which it possesses 'actorness', namely the 'extent and weight of the capability of an actor' (Bretherton and Vogler 2006: 248). Nor do we seek to enter the debate about the meaning or measurement of the EU's leadership capabilities or compare its performance to that of other international actors. These two aspects are not entirely absent from our analysis, as experience suggests that international dynamics deeply affect the inner workings of the EU and vice versa, but they are not our immediate focus. We do show, however, that the complex, two-way interaction between internal and external dimensions affects policy choices in the EU. On the one hand it makes internal policy making more problematic, in the sense that it complicates the task of achieving agreement (itself made even more difficult if we include the EU – Member State dynamic). On the other hand, it also generates new opportunities to move policy forwards, opportunities that would not be there if the EU were absent and its 27 Member States negotiated independently. We are also not directly concerned with explaining or assessing national climate policies (see, for example, Harrison and Sundstrom 2010) in Europe, to the extent that they are independent of EU-level policies. Finally, we do not seek to directly and comprehensively assess the outputs and outcomes of EU climate policies in terms of their effectiveness (but see Haug *et al*. 2010), as sadly this important task goes well beyond the scope of this book.

Understanding climate change governance: the importance of the European Union

Searching for policy responses to the threat of climate change inevitably raises difficult issues of governance. Much has been written about the governance of climate change, but most of it focuses either on the international negotiations flowing from the UN Framework Convention on Climate Change (FCCC) and its associated protocol, signed at Kyoto in 1997 (e.g. Grubb *et al.* 1999; Oberthür and Ott 1999; Yamin and Depledge 2004) or on national and/or sub-national policy dynamics (e.g. O'Riordan and Jäger 1996; Collier and Löfstedt 1997; Bulkeley and Betsill 2003; Compston and Bailey 2008). Although these levels make a hugely important contribution to the governance of climate change, there is still relatively little book-length material on the evolution of climate policies within the EU (but see Gupta and Grubb 2000; Deketelaere and Peeters 2006; Harris 2007). This is rather surprising, as nowhere has the political debate about the governance of climate change been more dynamic and arguably more advanced than in the EU.

Going back as far as the late 1980s, the EU has sought to play a strong leadership (or front-runner) role *inter alia* by fighting to secure international agreement on the Kyoto Protocol, adopting a large-scale greenhouse gas emissions trading system within its borders, and pledging to achieve the long-term goal of limiting the global average temperature increase to no more than 2°C above pre-industrial levels (Sbragia and Damro 1999). More recently, it has sought to advance debate about adaptation to some of the predicted impacts of climate change (such as droughts, floods, heat stress and sea level rise), identify new funding streams to help developing countries cope with rising temperatures (and thus feel more inclined to join international policy efforts), and employ innovative technologies such as carbon capture and storage. In fact, by the mid-2000s, the EU's main executive body – the European Commission – claimed that tackling climate change constituted *the* central, overriding policy challenge facing Europe in the twenty first century (Oberthür and Kelly 2008; Environment News Service 2007). In 2008, it adopted a hugely complex package of climate and energy measures aimed at reducing emissions by 20% from their 1990 levels by 2020, centralising and toughening the emissions trading system, boosting the use of renewable energy, limiting emissions from new cars and funding new carbon capture and storage facilities.

We contend that the EU's efforts to govern climate change merit closer and more intensive examination for various reasons. First, the EU is a relatively large emitter of greenhouse gases, contributing around 10.5% of global emissions in 2006 (EEA 2008). Although it now emits less than the USA and China, and its share of global emissions is set to decline to less than 10% during the remainder of this century (COM (2005) 35 final: 3), the EU is – and will remain – an important cause of

climate change for the foreseeable future. Moreover, depending on the assumptions made, the countries that made up the EU until 2007 (the EU-25) are responsible for 26–28% of historical greenhouse gas emissions, compared, for instance, with 19–21% generated by the USA (Dellink *et al*. 2008).[3] In addition, because it is still heavily reliant on fossil fuels (many of them imported), any shift to less carbon-intensive forms of energy will continually raise very complicated governance dilemmas.

Second, the EU is an important player in the global politics of climate change. It expressed its ambitions to lead on climate change relatively early on and with considerable force. As early as 1991, the Commission claimed that the EU 'owes it to both present and future generation to put its own house in order and to provide both leadership and example to developed and developing countries alike' (quoted in Wagner 1997: 314). Since then, it has drawn on its bilateral links with developing countries and various 'soft power' resources to shape international policy making (Bretherton and Vogler 2006). Although analysts remain somewhat divided in their assessments of its ability to lead,[4] there is fairly widespread agreement that it strengthened the FCCC (Haigh 1996: 182; Paterson 1996: 73–4; Wagner 1997: 313) and effectively 'saved' the Kyoto Protocol after the US government, led by George W. Bush, withdrew its support in 2001 (Bretherton and Vogler 2006: 110). The EU could be said to have led in at least three quite specific respects: by pushing for specific and time-bound targets; by implementing novel policy instruments and mechanisms (e.g. emissions trading and internal burden sharing); and by disseminating and promoting the application of guiding norms and principles such as the precautionary principle (Schreurs and Tiberghien 2007: 19).[5]

However, in order to be credible, leadership has to be backed by action, and here the EU's performance has been far less exemplary (EEA 2008; Helm 2008: 218), particularly in sectors such as road transport and shipping, where emissions have been rising rapidly. One thing is clear: very much more will have to be done if the EU is to come anywhere near to achieving its reduction target of 20% by 2020, let alone the 30% it has pledged to achieve if other countries make comparable commitments beyond 2012 (EEA 2008). The political pressure on the EU to make its commitments credible has grown, particularly since the US government's 2001 decision to withdraw from the Kyoto Protocol. Since then, the fate of the international climate regime – and with it the world's climate change policy – has rested largely in the EU's hands. If international policy is eventually deemed to have succeeded, the EU will rightly claim credit; but if it fails, the EU could do enormous harm to its own credibility and leave itself open to accusations that it led the international community down the wrong path. So when it comes to confronting the governance dilemmas associated with climate change, the stakes for the EU are very high indeed.

Third, the EU plays a very important role in national and local political life in Europe. Over the past 50 years many important aspects of national politics, policy and administration have been steadily 'Europeanised' (Jordan and Liefferink 2004) by the EU; that is, re-shaped to fit EU-level norms. In the environmental sphere, most aspects of national policy are now made by or in discussion with the EU. In the sphere of energy and transport policies – two very significant sources of greenhouse gas emissions – the EU's involvement is less significant but nonetheless important. In order, therefore, to fully comprehend national climate change policies in Europe, analysts have to examine those of the EU, since the two have become inextricably intertwined. In Chapter 3, we shall show that the Europeanisation of national climate change policies has been relatively recent (dating back only to the turn of the century), but since *c.* 2000 has progressed remarkably rapidly. In 2008, the European Environment Agency (EEA) estimated that 80% of the climate policies and measures implemented at Member State level either were introduced in response to EU policies or have been reinforced by them (EEA 2008: 7). Even as recently as the late 1990s, most climate policy was made and implemented exclusively at the national level. This suggests that in their continual confrontations with different climate governance dilemmas, governors have progressively shifted the locus of governing from the Member State to the EU level – a shift that deserves thoughtful analysis.

Finally, climate change represents a significant collective action problem in a world divided into separate states, each with very different historical responsibilities and response capabilities. To a large extent, these problem characteristics also appear in the EU. Thus, a small group of large states account for the lion's share of emissions. In fact, two of the most populous states (the UK and Germany) account for around one-third of total greenhouse gas emissions from the EU's 27 Member States. Italy and France account for around another quarter (11% each) and Spain and Poland are responsible for a further 8% each (EEA 2008: 13). In other words, six states account for around 70% of the total emissions. If we remember that the 15 states that made up the EU until 2004 – the so-called EU-15 – are generally much richer than those that joined after 2004, then it becomes more obvious why some analysts treat the EU as a microcosm of the international climate change *problematique* (Wagner 1997: 303).[6] Because the EU was established to govern cross-border problems in Europe, some have argued that it could serve as a 'social laboratory for the global future' (Wynne 1993: 128) and a source of transferable lessons for other quasi-federal settings and regions. We return to this claim in the concluding chapter.

The emergence of climate policy in the European Union

Existing accounts of the EU suggest that its climate change policy has evolved slowly and incrementally over the past 20 years. Prior to 1988, the EU's

involvement was, as outlined in Chapter 3, very limited indeed. In fact, the first EU institution to show any interest was not the European Commission, but its elected legislature, the European Parliament. However, at the time it was far too weak to do any more than identify it as a matter for the other EU institutions to respond to. The European Commission's environment department – Directorate-General (DG) Environment[7] – commissioned scientific research on climate issues as long ago as the late 1970s, but lacked the political support from Member States to initiate common EU-level policies. Nevertheless, ongoing developments at the international level – namely the crystallisation of concern within international scientific networks – eventually encouraged it to develop more substantial policy proposals. The European Council's 1988 declaration in Rhodes gave these internal developments high level political backing and, just as importantly, signalled the EU's determination to adopt a leading position in the international governance of climate change. As this desire was phrased in such general terms and because its implications for the EU's policies were arguably not that obvious to those involved, it was a stance to which just about everyone in the EU could sign up. At this point, therefore, the choices concerning climate change seemed relatively obvious and the associated dilemmas relatively mild.

After 1988, this initial phase of agenda setting quickly gave way to a period of more determined policy initiation, strongly dominated by the Member States of the EU. Internal EU proposals developed quickly – with hindsight, perhaps too quickly – and certainly far quicker than in the area of ozone depletion, where the EU was lagging well behind the USA (Sbragia and Damro 1999; Wagner 1997: 312). In the Council, the appetite for common emission reduction policies grew among the 'greener', front-runner states such as Denmark, the Netherlands and Germany. However, when the Commission eventually tabled proposals for relatively strong EU-level policies (namely a common carbon/energy tax), it found itself blocked by a small but determined group of 'laggards' in the Council. In many ways, the Commission's determination to throw all its energies into championing the (ultimately doomed) tax proposal 'overshadowed' (Skou Andersen 2004: 143) a number of other more conservative, but potentially more achievable, climate policy options. Hence, although the EU played a significant part in securing the adoption of the FCCC, its own policy in 1992 remained largely symbolic, adding up to little more than the combined total of national policies.[8] The process of European integration – that is, developing joint policies at EU level – had barely started.

The following period, until 1997, was one of much more introspective and sober reflection on some of the potentially crippling economic costs of unilateral leadership. For a number of 'non-' climate reasons – the public backlash against the pace of European integration, manifest in the 1992 rejection of the Maastricht Treaty, for

example (see Chapter 3) – the Commission found itself on the back foot and at loggerheads with the Council on a host of different matters. Some of the large states even pushed for the repatriation of existing EU environmental policy powers. That the EU was able to summon any enthusiasm for the post-FCCC negotiations was in large part due to the fact that a decline in greenhouse emissions, albeit largely due to 'non-climate policy' reasons relating to German reunification and energy market liberalisation in the UK, made the problem appear more tractable. The EU just about did enough to remain united (principally by adopting a burden sharing agreement – see Chapter 4 for details) and signed the Kyoto Protocol as a single coordinating bloc. In reality, this internal agreement had no legislative force. In fact, the Member States continued to operate on the basis of their own national targets and policies, with little or no EU-level coordination.

After Kyoto, the EU was forced to adjust to a rapidly changing policy landscape, dominated by two issues: the US government's withdrawal from the Kyoto Protocol process; and rapidly rising emissions from an enlarging EU. Still smarting from the carbon/energy tax debacle, the Commission now acted much more tactically, and waited for a window of opportunity to open before pushing for stronger EU powers. It also deepened its dialogue with a range of different civil society groups through a new arrangement known as the European Climate Change Programme (ECCP). So, when the right opportunities presented themselves, the Commission was ready to propose new policies, chiefly a voluntary agreement with car manufacturers in 1998 to limit emissions from new vehicles and proposals for what eventually (in 2003) became the Emissions Trading Directive (Oberthür and Kelly 2008: 12–3). These proved to be springboards for a much more active and dynamic period of EU policy making after *c.* 2000 and, eventually, the gradual Europeanisation of national climate policy.

By 2005, events had moved on so much that the Commission started to believe that by leading the world on this issue, the EU could achieve many other goals, such as spurring technological innovation, increasing energy security and creating jobs. This is not to deny that some of its policy proposals after 2000 were weakened – sometimes significantly – by the Council, but for reasons that are elaborated upon in Chapter 3, Member States found it increasingly difficult to block progress and steadily more and more EU-level policies were adopted. It should also be noted that leading on climate change issues in international fora fitted with the EU's wider geopolitical strategy, formalised in the 1993 Maastricht Treaty, of developing a more coherent foreign policy to project its 'normative power' globally, and to build alliances with developing countries while differentiating itself from the USA (Schreurs and Tiberghien 2007: 41). So, by the turn of the century, climate policy began, somewhat unexpectedly, to emerge as a new and important driver of the wider European integration process (Oberthür and

Kelly 2008: 43). This was in sharp contrast to the 1980s and 1990s, when it was widely perceived to pose a threat to it.

Political opportunism has always played an important part in shaping the EU's thinking about climate change. For example, following their failure to adopt and ratify a unified European Constitution in 2005 (Benson and Jordan 2008), EU leaders desperately cast around for issues that they hoped would be better received by citizens than rather abstract projects like 'better regulation' and 'the internal market'.[9] A high point in the EU's enthusiasm for stronger climate change powers came in 2008 when the Commission published its integrated package of energy and climate policies. As noted above, this was principally aimed at reducing emissions by 20%, but it also sought to boost the share of renewable energy to 20%, both by 2020. The package also reiterated an existing commitment to reduce energy consumption by 20% by 2020. Implementing this '20–20–20' package will require massive changes to current practices in the EU; changes that will demand new choices to be made and new and much more challenging dilemmas to be confronted. For example, achieving the renewable energy target alone will require a doubling of existing generating capacities in little over a decade (EEA 2008: 7); new regulations on car emissions will require manufacturers to develop much more fuel-efficient vehicles; and new forms of financial and technological support will be needed to establish prototype carbon capture and storage facilities.

The switch to a more collaborative mode of working at EU level did not, of course, necessarily mean that henceforth everything would run more smoothly. Far from it. When the EU institutions began to negotiate their way through the details of the Commission's package, many of the old and still essentially unresolved conflicts quickly resurfaced. For example, the EU's weekly newspaper *European Voice* (19–26.3.08: 11) wryly noted how the political desire for ambitious targets had dissolved into 'special pleadings and calls for exemptions, exceptions and delays' as governments started to work out the real cost to their economies. Despite this, the entire package – encompassing no less than six separate items of legislation – was adopted in December 2008. It was an astonishingly quick turn of events by the EU's standards, but was only achieved by building in significant concessions to appease the more reluctant Member States. The limits to deeper harmonisation were also evident in relation to adaptation policy. In 2008, a joint report by the EEA, the European Commission's Joint Research Centre (JRC) and the World Health Organization (WHO) revealed that only seven Member States had adopted national adaptation strategies (EEA, JRC and WHO 2008). Other than issuing a Green and a White Paper (in 2007 and 2009, respectively), which triggered internal debate but little concerted policy making, there were still no adaptation policies with legislative force at EU level (see Chapters 7 and 8).[10] Evidently, the trend towards greater harmonisation and centralisation has its political limits. Nor does the adoption of the