CLIMATE CHANGE POLICY IN THE EUROPEAN UNION

Confronting the Dilemmas of Mitigation and Adaptation?

The European Union (EU) has emerged as the leading player in the international struggle to govern climate change. The transformation that has occurred in its policies and institutions has profoundly affected climate change politics at the international level and within its 27 Member States. But just how has this been achieved when the EU comprises so many actors and levels of governance, when political leadership in Europe is so dispersed and the policy choices are so fiendishly difficult? Drawing on a variety of detailed case studies spanning the interlinked challenges of mitigation and adaptation, this volume offers an unrivalled account of how different actors wrestled with the complex governance dilemmas associated with climate policy making. By opening up the EU's inner workings to non-specialists, it provides an unparalleled perspective on why the EU governs in the unique way that it does, as well as exploring its ability to maintain a leading position in international climate change politics.

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To:
Alexander, Alma, Artem, Ben, Boaz, Eva, Joe, Lauren, Niké, Simon,
Siri, Tilly, Walter and Yenthe.
Fourteen especially important members of the generation that will
grow up in a warming world.

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Foreword

Surveying the role of the European Union (EU) in relation to climate change policy is no easy task. Both have been in the course of evolution for the past several decades. Worries about the risks posed by climate change date back some thirty years within the Union, as the contributors to this important volume show. They distinguish a number of main phases of policy development, beginning in the 1980s, the time at which initial anxieties, prompted by scientific findings, emerged. Over that period, however, the EU itself changed massively, from a group of nine nations to one incorporating twenty-seven Member States.

These changes have been very mixed in their consequences. The EU countries now have a population of some 480 million, and the Union wields considerable economic might. It stretches almost to the borders of Russia and adjoins the Middle East. A number of countries at the margins of the EU have declared their intention to seek to join up, including Turkey, which has formally been recognised as an accession country. Yet enlargement has been far from plain sailing. Rules and procedures of governance designed for a small number of Member States have come under great strain.

Decision-making has become correspondingly more difficult and cumbersome. New divisions among Member States have opened up: for example, the former Eastern European countries mostly have a more fearful and jaundiced view of Russia than those from what used to be Western Europe. The Lisbon Treaty should restore greater leadership capacity to the EU, since it provides for more majority voting and introduces a more permanent President of the European Council.

For the time being, at least, federalism is dead. There is no collective will to create a United States of Europe. The EU as it stands is more than an international body, since its component nations have agreed to pool some of their sovereignty; however, it is a long way from being a super nation-state. As several contributions to this book note, the EU is all about 'governance' rather than government. It has little direct connection with its citizenry, since levels of participation in elections to the

European Parliament are low and people in any case mostly vote on the basis of national issues.

In the early years, decisions were taken largely through energetic leadership on the part of the EU's bureaucracy, the European Commission. With a relatively small group of political leaders involved, it was relatively easy for close contacts to be sustained, even if decision making was almost wholly undemocratic. Progressive enlargement made this approach less workable, while pressures also mounted for more transparency and citizen involvement. Endorsement of the Lisbon Treaty is crucial for the future leadership capacity of the EU, but it is nevertheless something of a first step along a new pathway that must reconcile diversity with coordinated action: a lot more constitutional evolution will be needed if the EU's political resolve is ever to match up to its intrinsic economic strength.

The EU's attempts to respond to climate change both reflect these dilemmas and at the same time offer a possible way of helping to resolve them. Climate change is a type-case of a problem that cannot be dealt with by nations acting on their own. The enlarged EU covers a sizeable geographical area. Effective regional policy in its neighbourhood will make a notable contribution to reducing world emissions of greenhouse gases while providing a possible model for other parts of the world to follow – or at least learn from.

Like individual nations, the EU has a double role so far as climate change policy is concerned. It has to play a part in international negotiations to try to control carbon emissions as well as develop effective policy internally. International negotiations leading up to Kyoto and beyond have gone through numerous twists and turns, and no doubt there are more to come. The European Commission initially looked to a carbon tax as a means of controlling emissions, both within its own boundaries and internationally. Carbon trading, based on a market approach, was favoured by the USA. For various reasons – particularly the fact that the EU lacks the competence to control the financial policies of its Member States – the Union also adopted carbon trading as its prime approach to governing.

Former Vice-President Al Gore played an important role in promoting the idea of carbon markets and, following the fall from power of the Democrats in the USA, remained a major influence upon raising consciousness about the dangers posed by global warming. Under the Presidency of George W. Bush, however, US policy on climate change, as in many other areas, underwent an almost complete volte-face. The USA turned its back on international treaties of most types and the leadership was disinclined to see climate change as a serious issue. The EU deserves a great deal of credit during this period for having continued to push forward its climate change agenda, assuming a vanguard role within the world community at large.

The need for EU leadership on an international level persists, even though President Obama has emphasised that the United States will seek progressively to reduce its emissions and participate fully in international negotiations to limit climate change. The climate change bill introduced into Congress has been weakened by opposition from industry lobbies. It is to be hoped that it will remain fairly robust and ambitious. The feebler the final product, however, the less influential is Obama likely to be on an international level so far as climate change regulation is concerned.

Can an organisation that has no recognised leader actually lead? The question is raised at many points in this book, and rightly so. The best opportunity for leadership for the EU, as in most other areas of its activity, is leadership by example – by showing the rest of the world what can be accomplished. What are the chances that its climate change policies will be successful? On a formal level, the EU has made considerable progress in recent years, since a whole range of agreements have been reached among Member States, prompted by the Commission, about how to fight climate change. These are discussed in detail in the contributions that follow.

I am a committed pro-European, as well as someone who believes that the threats posed by climate change are serious and demand radical measures to counter them. I hope the EU's programme will be successful. Yet there is plenty of reason for disquiet. It is less than ten years to the first generic target date of 2020, by which time 20% of the EU's energy is to be delivered from renewable sources and emissions are to be reduced by a minimum of 20%, and possibly as much as 30% if other industrial countries agree to follow suit. However, whether these targets can be met is an open question. The EU has come to put a lot of faith in carbon trading and in fact has established the largest such system in the world as measured by turnover. The first version of the scheme encountered major difficulties and it is generally agreed that it has had only a minimal impact on emissions. The new version is more rigorous, but how far it will work remains to be seen.

If we look across the Member States, there are large differences in terms of carbon emissions. A few, such as Sweden, Denmark and Germany, have made considerable progress in developing renewable technologies for power generation, but very largely as the result of domestic policy rather than anything driven by the EU. In some cases, such as in the first two of these countries, the policies in question date back as far as the first oil crisis of the late 1970s and were prompted by worries about energy security, not climate change.

Were it not for the recession, which has temporarily brought down emissions, the contribution by a number of Member States towards the EU's collective Kyoto target would have looked even less impressive than it is. In some EU countries, such

as Spain and Portugal, emissions increased far beyond their target levels. Most of the former East European countries lag far behind in terms of developing effective climate change policy. The largest, Poland, is still heavily dependent upon coal for its energy production.

All the EU countries have been set targets in terms of emissions reductions for 2020 and, after much wrangling, all have agreed to meet them. A good deal of prodding and pushing, both from the Commission and from some Member States towards others, will be needed to get them to do so. The EU has few sanctions to bring underperforming states into line, as earlier experience with the Lisbon Agenda has shown. The Lisbon Agenda – not to be confused with the Lisbon Treaty, which is completely separate from it – was a framework of change supposed to make the EU states more competitive in world markets. It only made modest progress, in spite of being based on a new mode of collaboration – discussed in some of the contributions below – the 'open method of coordination'. Those Member States that were not inclined to follow its prescriptions simply ignored it.

In spite of the problems that the EU faces in making its climate change policies count, one should not sound too negative a note. It is possible, as some hope, that responding effectively to climate change will help re-legitimise the Union at a time when it is losing public support. Coping with climate change is not just a matter of incurring costs and making sacrifices: there are major advantages to be gained by being in the vanguard of change, especially as far as technological innovation is involved.

The EU's climate change project will help stimulate investment in renewable technologies and other advances intrinsic to creating a low-carbon economy. The European countries have a lead over many other developed countries – especially the USA – in having pioneered a high speed train system now extending across the subcontinent. Such developments can be a source of cutting emissions at the same time as they in fact converge with the Lisbon Agenda – that is to say, they also enhance competitiveness.

Besides leading the way in terms of mitigation, the EU could also pioneer advances in adaptation, given that a certain level of climate change is inevitable whatever happens from now on in policy terms. 'Adaptation' sounds purely reactive: dealing with the consequences of climate change, in the shape of more extreme weather, a greater incidence of floods, droughts and forest fires. However adaptation should be proactive: we should start preparing now for the changes in weather patterns that will occur. The Commission has produced a number of detailed analyses and action plans so far as adaptation is concerned, covering not just the EU but surrounding regions too, such as North Africa.

Political leaders in China, India, Brazil and the other large developing countries are watching closely to see how far the developed nations – which have created the

bulk of the emissions now in the atmosphere – will live up to their promises of taking radical action to curb climate change. How successful or otherwise the EU might be in this endeavour thus has a resonance across the world. This book provides an invaluable resource for anyone seeking to assess the possibilities and the pitfalls.

Anthony Giddens

Preface

Climate change is shaping up to be one of *the* defining issues of this century. Once a matter that only preoccupied a fairly select group of atmospheric scientists, in the past few years it has forcefully entered the political mainstream in many industrialised states, demanding a political and policy response at all levels of governance. Not only is climate change scientifically very complex but it also raises very challenging governance issues. This is because addressing climate change and its consequences requires governors to make policy interventions that will deeply affect production and consumption decisions right across the world. In this book we focus on the policy choices and their associated governance dilemmas that are constitutive of these interventions. By using the term 'governance' instead of government, we seek to draw attention to the changing context in which these policy choices have been (and will in the foreseeable future be) made. So, whereas in the past, governments made and implemented the key choices, today governing – at least in Europe – is undertaken among a wider array of actors, including those in the private sector.

In the first chapter, we argue that governing is a purposive activity, which involves making difficult choices between alternative options supported by different groups of actors who commonly subscribe to values that are partly and sometimes wholly incommensurate. By using the term 'dilemma' we try to draw attention to the fact that these choices involve very different norms and values – fairness, effectiveness, efficiency, transparency and accountability, to name just a few – which are not easily reconciled. In particular, we seek to explore those choices and dilemmas that flow directly from the desire to mitigate and/or adapt to the unfolding impacts of climate change.

At a descriptive level, the title of this book signals that we are interested in understanding whether and how the ensuing dilemmas were confronted by governors in the past. It also reveals that the main locus of our analysis is the European Union (EU). We contend that nowhere has the debate about the governance of climate change been more high profile and more vibrant than in the EU. What goes on inside the EU is immensely important for several reasons. First and foremost, the EU is a

relatively large emitter of greenhouse gases, accounting for around 10% of global emissions. Second, the EU has slowly emerged as a key player in the global politics of climate change and has well-known aspirations to continue leading the world towards effective governance solutions. There is widespread agreement that it strengthened the 1992 Framework Convention on Climate Change and saved the 1997 Kyoto Protocol from potentially terminal decline after the US government's withdrawal in 2001. Third, the manner in which the EU confronts the dilemmas of governing will significantly and possibly permanently affect national policy and politics within its 27 Member States. Finally, the EU is intriguing because it represents a microcosm of the international climate change *problematique*. It is therefore a potentially rich source of lessons on how to govern when governance is multi-levelled and multi-actored.

In spite of the EU's undoubted importance as a governor of climate change, confusion continues to surround its precise role. This is partly because it does not fit easily into conventional categories: states, international organisations, etc. It is also because of its notorious inherent complexity, which easily baffles those working outside the Brussels 'beltway'. Even people who have worked on climate change issues for many years are not always entirely sure what the EU does and why. In order, therefore, to fully appreciate why and how the EU became involved in climate policy making, we claim that analysts should explore its inner workings – specifically the policy choices made, the dilemmas (not) confronted and the overarching system of governance – all within the context of international and national policy developments. The title indicates that our intention is to critically examine previous, current and possible future policy interventions with respect to climate change. What choices have been made during the past 20 to 30 years? Who made them and on what basis? How willing – and able – were governors to confront the associated dilemmas? And what of the future? What might policy and governance look like 10 or 20 years from now? How well prepared are today's policies and institutions to handle the dilemmas and associated choices that could surface in future worlds? These are some of the many intriguing questions that are outlined and unpacked in this book.

This book draws together some of the principal findings of a large EU Framework 6-funded research project known as ADAM, or 'Adaptation and Mitigation Strategies: Supporting European Climate Policy' (Contract number: GOCE-018476). ADAM ran from 2006 until 2009 and involved a large number of research institutes in and outside Europe. All the authors involved in the writing of this book worked in the policy and governance part of ADAM. Part of the task that we set ourselves was to develop an analytical framework to account for the governance of climate change. It was at this stage that we came to appreciate the central part played by dilemmas in the act of governing a 'wicked' policy problem such as climate change. The rest of this book describes what we discovered when we applied this framework to the EU. We explore what a focus on policy choices and governance dilemmas tells us about EU governance in general and climate change governance in particular.

With hindsight, our focus on dilemmas also served another, more reflexive purpose – that of understanding what it takes to govern a large, multidisciplinary book project involving nine authors from several different countries. If we start with the first dilemma – that associated with the various ways in which problems can be *framed* – then we can now appreciate how differently we approached the 'problem' of understanding EU climate governance. Some of us were interested in contemporary policy making, some policy evaluation and others future policy. Still others were more interested in the role of the law or the broader structures of the EU. This diversity in our respective starting points helped us to understand what it really means to govern. Governance, of course, goes well beyond our immediate focus ('public policy'), but we think that national governments and the institutions of the EU provide a very good place to start.

When it comes to the dilemmas associated with choosing between the best *level and scale* of governing, in the EU these tend to be expressed in rather binary terms – i.e. should policies be enacted at Member State or at EU level? One of the more innovative features of our approach is that we show how this important dilemma is inextricably connected to many other dilemmas: problem framing, the timing and sequencing of action, implementation and of course enforcement. In our part of the ADAM project, there were several different nationalities, but somehow all roads (and hence all team meetings) led to Amsterdam, a choice that had more to do with its central position in the European network of airports than with its undoubted beauty or the variety of its night life.

In this book we also show how the dilemmas associated with the *timing and sequencing* of policy choices are hugely important in the EU, particularly given the ever-present tension between states that want to lead by example and those that prefer to operate in unison or perhaps not at all. During the writing of this book we had to confront – and therefore find ways to govern – similar dynamics among the chapter authors.

We use the term *modes and instruments* as shorthand for the choice between different ways of governing. One of the more remarkable things about the EU is that it has been able to develop so much policy on the basis of a narrow legal mandate and a relatively bare tool-box. On paper, it is heavily reliant on the hierarchical instrument of regulation, but in practice it also relies on what might be termed networked governance. We certainly relied heavily on this particular mode of governing to produce this book, with some authors providing intellectual leadership, others constructive feedback and the rest copious amounts of draft copy to be edited into shape.

Governing climate change has also required difficult choices to be made about the *costs and benefits* of different policy interventions. In this book we show that the EU has always sought to govern as a single entity, but with some actors carrying more of the burden than others. This was very much the basis on which this book was written. Finally, there are *implementation and enforcement dilemmas*. As is well known, the EU has relatively limited powers in this respect. Thankfully, we as editors had to

contend with very few implementation and enforcement dilemmas, and this is largely down to the chapter authors – Eric, Johannes, Roger and Constanze – who responded quickly and carefully to our editorial requests. We owe them a huge debt of gratitude. Without them, this book would never have left the whiteboard in that airless and lightless hotel meeting room in Budapest in March 2008!

We are grateful to the Directorate-General for Research in the European Commission for generously funding the research reported in this book and especially to Wolfram Schrimpf, our scientific officer. We are also grateful to Mike Hulme at the University of East Anglia who, together with Henry Neufeldt, Emanuela Elia, Fiona Ring and Angela Ritchie, steered the entire project to a very successful conclusion. Helen Colyer provided invaluable assistance with the lengthy tasks of indexing and proof-reading. David Benson very helpfully proof-read some of the chapters in draft form. During the very early stages of our work, Suvi Monni, Frank Raes and Sandro Federici from the JRC in Ispra helped us to refine our thinking and collect some useful background data on national climate policies. We would also like to highlight the critical part played by Constanze Haug, who remained a driving force throughout the project and a very diplomatic and effective 'manager of her managers'. Crucially, she set up and ran the policy exercise which is reported in Chapters 10 and 11. Without her and Ivo Wenzler of Accenture Netherlands, the forward-looking part of our analysis simply would not have been possible. Bert Metz kindly agreed to chair the exercise (which also took place in Amsterdam!) and ensured that it ran smoothly. Thanks are also due to all those who took part that day.

Meanwhile, a number of people were particularly helpful in the writing of the five case studies reported in Chapters 4–8. These were: Karin Ericsson and Lars J. Nilsson (renewable energy); Christian Flachsland, Onno Kuik and Frans Oosterhuis (emissions trading); Bryan Boult and Caroline Cowan (adaptation); and Thomas Dworak and Julian Wright (water adaptation). As a team, we also interviewed a large number of experts and policy makers, particularly as part of our future-oriented research. These people are acknowledged in the relevant chapters. We thank them all for agreeing to explore the four future 'worlds' of climate policy with us.

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List of abbreviations

CO_2	Carbon dioxide
CO_2e	Carbon dioxide equivalent
CAP	Common Agricultural Policy
COP	Conference of the Parties
DG	Directorate-General (of the European Commission)
ECCP	European Climate Change Programme
ECJ	European Court of Justice
EEA	European Environment Agency
ERTA	European Road Transport Agreement (ECJ ruling)
ETS	Emissions trading scheme
EU	European Union
GDP	Gross domestic product
FCCC	Framework Convention on Climate Change
IEA	International Energy Agency
INC	Intergovernmental Negotiating Committee
IPCC	Intergovernmental Panel on Climate Change
JRC	Joint Research Centre (of the European Commission)
NGO	Non-governmental organisation
OECD	Organisation for Economic Co-operation and Development
OJ	Official Journal
RES	Renewable energy sources
R&D	Research and development
SRES	Special Report on Emissions Scenarios (IPCC)
UN	United Nations
UNEP	United Nations Environment Programme
WHO	World Health Organization
WMO	World Meteorological Organization
WTO	World Trade Organization