

# PROJECT MUSE

# Understanding the Paradoxes of Multilevel Governing: Climate Change Policy in the European Union

Andrew Jordan Harro van Asselt Frans Berkhout Dave Huitema

Global Environmental Politics, Volume 12, Number 2, May 2012, pp. 43-66 (Article)

Published by The MIT Press



For additional information about this article
 http://muse.jhu.edu/journals/gep/summary/v012/12.2.jordan.html

# Understanding the Paradoxes of Multilevel Governing: Climate Change Policy in the European Union

Andrew Jordan, Harro van Asselt, Frans Berkhout, Dave Huitema, and Tim Rayner\*

# Introduction

The European Union (EU) has a well-known aspiration to lead the rest of the world in the governance of climate change. While the precise expressions and consequences of its "lead by example" approach have been widely discussed,1 not least in the period since the 2009 Copenhagen summit,<sup>2</sup> few doubt its desire (as distinct from its ability) to function as an "international agenda setter"<sup>3</sup> in this policy area.<sup>4</sup> In one of the most comprehensive article-length accounts of the evolution of EU climate policy, Miranda Schreurs and Yves Tiberghien drew attention to the various ways in which the EU has sought to lead by example.<sup>5</sup> Writing in the pages of this journal, they documented how it has continually backed targets and goals that are more ambitious than those of other large emitters, such as its commitment to limit warming to 2°C. Internally, it has adopted innovative policy instruments to attain these targets, chiefly the world's largest greenhouse gas emissions trading system (the EU ETS), as well as a range of other policies and measures that go significantly beyond what some Member States had adopted at the domestic level.<sup>6</sup> Prior to the Copenhagen conference, the EU adopted a complex package of climate and energy measures, which

- \* We would like to acknowledge the support of the European Commission (ADAM—contract 18476; DIVERSE—contract 211392; RESPONSES—contract 244092; CLIMATEGOV (Marie Curie Fellowship—Harro van Asselt—contract 253090)) and the Leverhulme Trust (Major Research Fellowship—Andrew Jordan) who kindly funded the research reported here. We are also very grateful to three anonymous reviewers, whose constructive comments helped us to greatly improve our thinking. Responsibility for all remaining errors and omissions rests entirely with us.
- 1. Gupta and Grubb 2000; Oberthür and Roche Kelly 2008; Parker and Karlsson 2010; and Wurzel and Connelly 2010.
- 2. Haug and Berkhout 2010.
- 3. Schreurs and Tiberghien 2007, 19.
- 4. Kelemen 2010.
- 5. Schreurs and Tiberghien 2007.
- 6. Schreurs and Tiberghien 2007, 25.

Global Environmental Politics 12:2, May 2012 © 2012 by the Massachusetts Institute of Technology aimed, among others things, at: reducing greenhouse gas emissions by 20 percent from their 1990 levels by 2020; centralizing and toughening the ETS; and boosting the use of renewable energy.<sup>7</sup> Had some of the other major emitters tabled similar packages at Copenhagen or at Durban in 2011, the EU would probably have adopted a 30 percent reduction target.

One of the distinctive features of Schreurs and Tiberghien's analysis is that it aimed to offer a comprehensive account of EU climate governance. Whereas others focused on particular aspects of EU climate governance, such as its behavior in international negotiations,<sup>8</sup> or particular policy instruments (such as emissions trading),<sup>9</sup> they tried to stand back and comprehend the whole of EU climate governance in a way that echoed some of the initial accounts of EU climate policy.<sup>10</sup> They were brave to do this because EU policy had expanded greatly since these first accounts were made. What, they asked, accounts for the overall pattern of governance in the EU? More specifically, what explains the "sustained pattern of policy innovation" it has achieved, particularly since the late 1990s?<sup>11</sup> Despite some obvious "policy failures"—to which we can now add its inability to influence the deal brokered in Copenhagen—how and why does the EU continue "to be [an] international policy leader" in the area of climate change?<sup>12</sup>

These are very big questions, to which Schreurs and Tiberghien offered one similarly all-encompassing explanation: a "dynamic process of competitive multi-level reinforcement among the different EU political poles within a context of decentralized [i.e. multi-level] governance" has continually pushed up standards and, by implication, the EU's role in setting them.13 This process has emerged in the slightly paradoxical situation in which the EU seeks to lead by example but is itself a relatively leaderless system of governance. Thus far, this multi-level dynamic had, they contended, managed to overcome the many obstacles that at one time had frustrated policy change. These included inter alia: the multitude of actors and levels of governance; the EU's weak legal competences over key policy areas such as energy and taxation; and the perceived economic risks of moving quicker and further than other large emitters.<sup>14</sup> In the mid to late 1990s EU climate policy began to take off. Changing constellations of national interests (specifically the desire of certain states to push the EU to a higher level of ambition),<sup>15</sup> EU-level interests (the European Commission's desire to use climate policy as a means to deepen European political integration),

- 7. European Commission 2008.
- 8. van Schaik 2010.
- 9. Wettestad 2005.
- 10. Jachtenfuchs and Huber 1993; Skjærseth 1994; and O'Riordan and Jäger 1996.
- 11. Schreurs and Tiberghien 2007, 24. Interestingly, they do not define what they mean by policy innovation (i.e. in relation to what?).
- 12. Schreurs and Tiberghien 2007, 24.
- 13. Schreurs and Tiberghien 2007, 22.
- 14. Schreurs and Tiberghien 2007, 21.
- 15. Kelemen 2010.

and ideas (notably in relation to green growth or ecological modernization) were undoubtedly important enabling factors, but according to Schreurs and Tiberghien, what really facilitated policy innovation was the EU's relatively open and pluralistic governance structure. This "enabled a dynamic of competitive leadership reinforcement to take place," which endured for most of the 2000s.<sup>16</sup>

This article starts from the same premise as Schreurs and Tiberghien-that there is a lot to be gained by considering EU climate governance in the round. It also "brackets off" international-level dynamics and influences and investigates what goes on inside the EU. Although external factors are hugely important (and are mentioned in the analysis below), sensibly Schreurs and Tiberghien opted to lay them to one side in the interest of parsimony. However, in contrast to their analysis, this article identifies and explores three additional features of climate governance. First, it extends the timeframe by looking at the full sweep of time from the origins of the policy area in the late 1970s to the signing of the Copenhagen Accord in late 2009. Second, it looks across the increasingly interrelated challenges of mitigation and adaptation. And third, it extends their thinking by distinguishing not one but five paradoxical features of EU climate governance. The Oxford English dictionary defines a paradox as something which is "apparently inconsistent with itself or with reason, though is in fact true." The rest of this paper develops the notion of paradoxical features in an attempt to deepen our collective understanding of policy innovation in general and EU climate governance in particular.

Having identified the main aims of this article, the remainder unfolds as follows. Section two provides a brief re-statement of Schreurs and Tiberghien's arguments. Section three provides a brief description of the evolution of EU climate policy with a view to assessing how much can be accounted for in terms of continuous "multi-level reinforcement." Section four unpacks the five paradoxical features of EU climate governance and shows how they have played out in relation to policy development since the late 1970s. Section five looks forward, assessing how far they are likely to enable and/or constrain the future development of EU policy. Finally, section six draws together some broad conclusions and identifies new research challenges.

# EU Climate Policy: A Case of Multi-level Reinforcement?

The EU is not the only actor in international climate politics,<sup>17</sup> but for several reasons Schreurs and Tiberghien were right to subject it to detailed analysis. First, the EU is interesting because it has adopted commitments that are much more ambitious than other large parties. Although not the largest emitter of greenhouse gases, it is nonetheless expected to have an important bearing on

<sup>16.</sup> Schreurs and Tiberghien 2007, 26.

<sup>17.</sup> For a review of others, see Harrison and Sundstrom 2010.

the world's efforts to avoid dangerous climate change. Second, its efforts offer governance theorists a range of insights into whether ambitious policies can be produced in multi-leveled political systems. Generally, the assumption is that the more levels (and hence veto points) there are, the more likely policies are to be blocked or watered down, thereby resulting in what EU scholars have termed "joint decision traps"<sup>18</sup> culminating in "policy gridlock."<sup>19</sup> At present, US climate policy at the federal level appears to be snared in just such a trap,<sup>20</sup> whereas Schreurs and Tiberghien implied that the EU has not succumbed to this; on the contrary, its policies seem to have flourished. Finally, scholars of domestic politics in Europe are drawn to the EU because what happens at the EU level can deeply affect national and local political life across Europe, through processes of emulation and, above all, Europeanization.<sup>21</sup>

If there was an analytical core to Schreurs and Tiberghien's thoughtful and wide-ranging argument, it was that the EU's structure—comprising nonstate actors such as the European Parliament and the Commission; the constant sharing out of steering roles such as the Presidency; and numerous entry points for nonstate actors—has more than compensated for the proliferation of potential veto points that could in theory have gridlocked policy. In order to move beyond thick description, they borrowed an insight from Zito, who argued that depending on circumstances (changing actor preferences for example), decision points are not necessarily veto points—they can also be "leadership points."<sup>22</sup> Thus, in the area of climate change, different actors operating at different levels of governance have become very adept at "passing the baton" of leadership from one to the other.

Schreurs and Tiberghien's analysis serves to remind us of an important paradox that has always underlain the EU's approach to governing lots of things, not just climate change. While the EU, as a whole, regularly expresses a collective desire to lead, it remains a relatively *leaderless* system of governance,<sup>23</sup> without a single point of governing (or "government"). This state of affairs did not arise by chance: by aiming for polycentric governance, the EU's 'founding fathers' deliberately set out to prevent power from accumulating in ways that had dragged Europe into two world wars.<sup>24</sup> Branches of governance theory tell us that in such settings, leadership (as well as policy coordination more broadly) is likely to be immensely challenging,<sup>25</sup> although there may be associated benefits in terms of greater flexibility and responsiveness.<sup>26</sup> Be that as it may, their main

- 18. Peters 1997; and Scharpf 2006.
- 19. Zito 2000.
- 20. Selin and VanDeveer 2009.
- 21. Jordan and Liefferink 2004.
- 22. Schreurs and Tiberghien 2007, 25.
- 23. Sbragia 1993; Hayward 2008; and Wurzel and Connelly 2010.
- 24. What Hayward (2008, 2) refers to as "uninhibited leadership."
- 25. Sbragia 2000.
- 26. Skelcher 2005, 89; and Ostrom 2010.

point still stands—leadership has been bountiful despite the (paradoxical) absence of a single point of governing.

To be fair, Schreurs and Tiberghien's basic claim is not especially novel,<sup>27</sup> but they were the first to abstract it from the general field of EU analysis and apply it to the issue of climate change. They did not root it in (or seek to test) particular theories of the EU, and they did not seek to systematically compare the level of policy innovation in the EU with that occurring in comparable multilevel settings such as the United States. Consequently, it remains a partial account. Indeed, they concentrated on only one paradoxical feature-the plentiful supply of leadership in a leaderless system of governance—when arguably there are, as will be made clear, several more. Importantly, this one feature was presented in a somewhat static and isolated fashion; they did not investigate the EU's ongoing response to them all. This omission could have arisen because policy-makers in the EU came to realize that they did not have to directly alter the first paradoxical situation, for example by systematically centralizing leadership functions.<sup>28</sup> On the contrary, leaderlessness seemed to enable policy innovation. The remainder of this article seeks to refine and also greatly extend Schreurs and Tiberghien's thinking by investigating how the EU has responded not just to the one paradoxical feature, but also to four other, interlinked features. Rather than seeking to develop and/or test a specific theory of EU governance,<sup>29</sup> the analysis proceeds at the same general level as theirs.

# **EU Climate Policy**

#### A Brief Historical Overview

EU climate policy has been well over thirty years in the making. In the late 1970s, it was one small aspect of the EU's research policy. Its aim was to investigate the underlying scientific issues associated with climate change rather than exploring questions relating to its governance. It was not until some eight years later that the Commission issued a communication on climate change.<sup>30</sup> Although climate change-related policies were starting to be put in place around this time (particularly at Member State level), their primary motivations were environmental and energy-related, not climate change. The only other EU institution to show any interest was the European Parliament, but it was far too weak to do any more than offer opinions. There was certainly little evidence of "multi-level reinforcement" before 1988.

After 1988, this initial phase of agenda setting gave way to a period of more determined policy initiation, again dominated by Member States. In

<sup>27.</sup> See for example, Jordan 1999, Weale et al. 2000; Zito 2000; and Börzel 2005.

<sup>28.</sup> Schreurs and Tiberghien 2007.

<sup>29.</sup> Were such a thing even to exist. See Wiener and Diez 2009.

<sup>30.</sup> European Commission 1988.

the Council, the desire for common emission reduction policies grew, particularly amongst greener states such as Denmark, the Netherlands and Germany. Although the EU played a significant part in securing the adoption of the 1992 Framework Convention on Climate Change (UNFCCC), its own policies remained largely symbolic in nature. So long as its "1990 by 2000" stabilization target could mostly be achieved through existing (i.e. national level) commitments, there was actually no need for EU-wide policies or burden sharing agreements. As the political mood at the national level changed (essentially favoring more national control and greater economic growth), the Commission had to watch as the Council systematically stripped its climate proposals of substantive content after 1992. Most notably, the Council blocked its 1991 proposal for an EU-wide carbon/energy tax.<sup>31</sup> Again, "multi-level reinforcement" fails to capture the slow and incremental manner in which EU level policies were accumulating during this period.

That the various parts of the EU were able to summon any collective enthusiasm for the post-UNFCCC negotiations was largely due to the fact that greenhouse gas emissions were declining relative to their 1990 levels, albeit for entirely unrelated reasons (namely economic and energy market restructuring in Germany and the UK). These trends allowed the EU to remain united in terms of long-term goals (principally in the form of the two degree target, facilitated by an informal burden sharing agreement in 1996). It signed the Kyoto Protocol as a single bloc in late 1997. Yet, this masked a great deal of internal disagreement on many detailed matters; and crucially, Member States continued to operate on the basis of their own national targets and policies. Yet again, multi-level reinforcement was conspicuous by its absence.

Nevertheless, the policy status quo had to change, because it was deemed insufficient to deliver the EU's newly adopted Kyoto target. As part of a package of measures to address rising emissions from the transport sector, a series of voluntary agreements were reached with car manufacturers. Other new EU-level policies were also adopted, but often in areas where the reduction of greenhouse gas emissions was a secondary consideration or a "co-benefit" (e.g. the landfilling of waste). The EU mainly concentrated on what it was best at, namely agreeing technical standards covering traded products like washing machines and boilers. There was, in other words, a steady trend towards "multilevel reinforcement" but it hardly amounted to significant "policy innovation," defined as policies that deviated significantly from the status quo.

Behind the scenes, though, the Commission opened up discussions with a wide array of stakeholders on more innovative policy options, in a forum known as the European Climate Change Programme. This proved to be an effective incubator for many of the policy proposals that emerged in the more active and dynamic period of EU policy-making covered by Schreurs and Tiberghien (essentially after 2000). In this period, many more of the Commission's proposals were adopted, driven along by more alarming scientific warnings from the

Intergovernmental Panel on Climate Change and buoyed by a surge of public interest and leadership from politicians at the national level (such as Tony Blair). An important policy change around this time was the EU's sudden volteface on emissions trading. This was partly driven by the perceived need to save the Kyoto Protocol following the US' withdrawal in 2001, and partly by the activities of policy entrepreneurs in the Commission who were pushing hard to extend the EU's tool box to include market-based instruments.<sup>32</sup> The transformation in this period was all the more remarkable because it took place against the backdrop of the EU's largest ever enlargement in 2004, when it absorbed ten new and relatively poor states from Central and Eastern Europe, and a renewed focus on economic renewal, powerfully set out in the 2000 Lisbon Strategy.<sup>33</sup> Leading on climate change also happened to fit nicely with the EU's wider geopolitical strategy, formalized in the 1993 Maastricht Treaty, of developing a more coherent foreign policy to project its "normative power" globally. It also allowed politicians in the EU to differentiate their position from the more unilateralist position adopted by the Bush administration.<sup>34</sup> In all these respects, climate policy started to emerge as a handy political rationale for people like the Commission President Barroso to push for deeper European integration, especially after the demise, in 2005, of the EU's previous plan—a single European constitution.35

Therefore, after twenty years of slow growth, EU climate policy eventually began to reinforce itself in the multi-level manner described by Schreurs and Tiberghien. After 2005, the EU focused its energies on complying with the Kyoto Protocol (lest failure undermine its claims to lead), developing internal policies for the period after 2012, and preparing the ground for what it hoped would be a successor agreement. The key internal policy development in this period was the adoption of the climate and energy package noted above. This highly complex combination of policies aimed to reduce emissions by 20 percent and boost the share of renewable energy to 20 percent by 2020.<sup>36</sup> However, as EU leaders stepped up their rhetorical commitment to climate policy, so the political limits to continual multi-level reinforcement started to appear. For example, after the start of the global financial crisis in 2007 (which, incidentally, was when Schreurs and Tiberghien's analysis ended), extensive concessions had to be made, for example to secure the support of poorer EU states. In the run up to Copenhagen, while the more eager states pushed for an even higher (30 percent) target linked to offers of fast track financial assistance to induce developing country support, the poorer states adopted a more cautious line. According to some observers, Copenhagen marked a political "watershed"<sup>37</sup> in the EU's appetite for, and ability to adopt, ever stronger and more innovative climate poli-

- 33. Oberthür and Roche Kelly 2008, 12-13.
- 34. Schreurs and Tiberghien 2007, 41.
- 35. Benson and Jordan 2008.
- 36. European Commission 2008.
- 37. Haug and Berkhout 2010, 26.

<sup>32.</sup> van Asselt 2010.

cies tied to a 30 percent emissions reduction target. In the run up to the 2011 meeting in Durban, the EU adopted a somewhat tougher stance: it would only commit to a second commitment period (and thus more than a 20 percent reduction) under the Kyoto Protocol if all countries adopted a roadmap and timetable for a legally binding agreement that would include mitigation commitments for all major economies.<sup>38</sup>

## Emerging Patterns of Climate Governance

In comparison with the more straightforwardly environmental areas of EU policy,<sup>39</sup> such as water, waste or biodiversity, climate policy has therefore emerged in a much slower and more stepwise fashion than implied by Schreurs and Tiberghien. Indeed for very long periods of time, EU climate policy remained little more than an empty shell—some eye-catching common targets underpinned by a rough amalgam of national policies. From about 2000, things did, however, change relatively quickly as multi-level reinforcement kicked in. In 2008, the European Environment Agency estimated that around 80 percent of the climate policies and measures implemented at Member State level were either introduced in response to EU policies or had been reinforced by them.<sup>40</sup> But prior to 2000, it is wrong to argue that there was a gradual, inexorable progress towards increasingly strong policies at EU level.

In addition to policy development being more stepwise than Schreurs and Tiberghien originally suggested, EU climate policy is also much more variegated than the term "multi-level reinforcement" would seem to allow for. It is variegated in the sense that it is heavily reliant on a small sub-set of policy instrument types (see Table 1). There has certainly been no steady accumulation ("reinforcement") of all the types at EU level. In terms of the number of instruments used by type, the EU steadfastly remains a "regulatory state."<sup>41</sup>

And although one single market-based instrument (emissions trading) now encompasses over 50 percent of total EU carbon dioxide emissions, even this comprises hierarchical elements. Moreover, most of the EU's regulatory instruments govern a relatively small subset of activities (i.e. the trade in energy-using products such as cars and white goods). For various reasons, voluntary agreements remain relatively under-utilized,<sup>42</sup> while the Commission's one and only attempt to adopt EU-level taxes ran into concerted opposition. Thus, this "liberal" system of governance is left in the paradoxical situation of having to rely heavily on the "illiberal instrument" of regulation.<sup>43</sup>

If one turns to look at policy on adaptation to the effects of climate

- 39. Jordan 2005.
- 40. EEA 2009a, 44.
- 41. Majone 1994.
- 42. Jordan et al. 2005.
- 43. Weale et al. 2000, 453; 458-460.

<sup>38.</sup> ENDS Europe 2011.

| Ed Chinate Foney. Frincipal Foney Installents 1552 2005 |  |
|---|--|
| Regulatory  | 1992 Monitoring CO <sub>2</sub> emissions  |
| instruments   | 2001 Electricity from renewable energy sources   |
|   | 2002 Energy performance of buildings   |
|   | 2003 Biofuels for transport  |
|   | 2004 Promotion of combined heat and power  |
|   | 2005 Ecodesign of energy using products  |
|   | 2006 Energy end use efficiency and energy services   |
|   | <ul><li>2009 Climate and energy package (covering: effort sharing; emissions trading; renewable energy; carbon capture and storage).</li><li>2009 CO<sub>2</sub> emissions from cars</li></ul> |
| Market-based<br>instruments                             | 2003 Upper and lower limit for national fuel taxes<br>2003 Emissions trading (amended in 2004 and 2009)  |
| Informational instruments                               | 1992 Energy labeling of appliances (+ daughter directives)<br>1992 Eco-label<br>1993 Eco-management and Audit Scheme   |
| 17.1  | 0  |
| Voluntary<br>instruments                                | 1998/1999 Car emissions (supplanted by 2009 Regulation—<br>see above)  |

 Table 1

 EU Climate Policy: Principal Policy Instruments 1992–2009<sup>a</sup>

a. Based on Jordan 2011, 2012.

change—an aspect neglected by Schreurs and Tiberghien—there are still no dedicated measures with legislative force at EU level.<sup>44</sup> Attempts to locate and exploit synergies between mitigation and adaptation policies are still few and far between, even at the national level.<sup>45</sup> In short, there seems very little prospect of adaptation policy reinforcing in a multi-leveled manner.

#### Multi-level Governing: From Paradox to Paradoxes

So while the term "multi-level reinforcement" seems to have a general applicability, it does not account for the totality of EU governing. Some aspects (such as the ability to set targets and adopt certain kinds of regulatory instruments) have steadily accumulated at EU level, but others (for example, the ability to represent Member States in international discussions, to select from the full repertoire of policy instruments, or shape European adaptation policies) have not.

Moreover, the quest for leadership in a governance system that is leader-

<sup>44.</sup> An asymmetry is also apparent at the national level: by 2008, only seven Member States had adopted national adaptation strategies. See EEA, JRC and WHO 2008.

<sup>45.</sup> Swart and Raes 2007.

less is only one of a number of paradoxical features of governing in the EU. On the basis of the foregoing discussion, there appear to be at least four others:

- *External "actorness" and internal diversity.* Although the EU seeks to participate and remain fully united in international level discussions, it constantly struggles to act in a united manner because Member States persistently value their sovereign independence, particularly when important governing choices have to be made and the stakes in international negotiations are high.<sup>46</sup>
- *Policy harmonization and differentiated burden sharing.* While it is true that different parts of the EU have pursued an increasingly common policy approach both externally (i.e. collective targets) and internally (common, EU-level policies), it routinely falls back on differentiated forms of internal governance, typified by the practice of internal "burden-sharing."
- Ambitious targets but constrained policy instrument choices. Although the EU has adopted relatively ambitious policy targets, it relies heavily on a narrow sub-set of policy modes and instruments (chiefly regulation) to achieve them.<sup>47</sup>
- *Escalating ambition but constrained implementation capacities.* The EU exhibits a well-known mismatch between ambitious policy intentions and weak implementing capacities.<sup>48</sup>

The next section investigates how the EU has responded to all five paradoxes, both singly and in combination, starting with the one originally identified by Schreurs and Tiberghien.

# The Paradoxes of Multi-level Governing

# Leadership and Leaderlessness

In the EU, leadership has two sides.<sup>49</sup> On the one hand, some actors (principally the Commission, the Parliament and the greener states) have tried to shape common EU-level policies by taking the lead. On the other hand, the EU as a whole has a long-standing ambition to play a leading role as a "global actor" in international politics.<sup>50</sup> Yet, without a central point of steering—both inward and outward—leadership has had to originate from many places to avoid the kind of "policy gridlock" that is such a feature of US climate policy.<sup>51</sup> In the first few phases of policy development, there were not enough leaders and too

- 46. Bretherton and Vogler 2006.
- 47. Jordan et al. 2005.
- 48. Jordan 1999.
- 49. Schreurs and Tiberghien 2007.
- 50. Bretherton and Vogler 2006
- 51. Hix 2008.

many laggards and EU policy struggled to advance, as evidenced by the failed carbon/energy tax proposal. But as domestic preferences in some Member States changed and the Commission as a whole started to view climate change in more positive terms, new leaders came to the fore.

The key analytical issue at stake here is not *why* these preferences changed,<sup>52</sup> but how they fed through key decision points and affected EU-level policies—i.e., how the absence of a single point of central leadership became an enabling rather than constraining factor. The answer lies in the fact that institutional structures that concentrate leadership are more prone to the vicissitudes of the issue-attention cycle.<sup>53</sup> By contrast, when there are many actors working at many different levels, there is more likely to be a coalition with sufficient motivation (and opportunities) to drive the rest towards a higher level of ambition.

The potentially liberating effect of distributed or polycentric governance is a significant feature of Schreurs and Tiberghien's argument.<sup>54</sup> For instance, the emergence of emissions trading at the international and national (the UK and Denmark) levels has influenced the development of the EU system.<sup>55</sup> Overall, this particular feature has not been nearly as constraining as some versions of governance theory would lead us to expect. For at least ten years, polycentricism has, as predicted by Ostrom,<sup>56</sup> facilitated an escalation in policy ambition, even if the resulting policy outputs have been more variegated than Schreurs and Tiberghien originally claimed. For their argument to have general validity, there must have been "baton passing" not just in relation to overall targets, but also in particular sub-areas of policy and in terms of specific policy instruments. Clearly, this is inconsistent with the empirical record outlined above.

## External "Actorness" and Internal Diversity

The EU tries very hard to be an internally united "actor" in its dealings with other actors.<sup>57</sup> Finding and holding to common positions gives it a sense of purpose and, it believes, greater negotiating power, which in turn feeds through to more purposeful internal policy development. But during the early phases of climate policy it struggled to achieve this, spending a great deal of time "negotiating with itself."<sup>58</sup> One of the main reasons for this was that Member States were strongly of the view that *they* should determine the pace of internal policy development and that consequently climate change should remain an issue of "mixed competence." In other words, they have never been willing to vest the Commission with the power to negotiate on their behalf in international dis-

- 54. Schreurs and Tiberghien 2007, 25.
- 55. Skjærseth and Wettestad 2008.

- 57. Bretherton and Vogler 2006.
- 58. Haug and Berkhout 2010, 26.

<sup>52.</sup> This is, as noted above, discussed by Schreurs and Tiberghien 2007.

<sup>53.</sup> Jones and Baumgartner 2005; and Baumgartner et al. 2006.

<sup>56.</sup> Ostrom 2010.

cussions, and thus make the EU more "actor-like." As such, there has been no systematic multi-level reinforcement in the EU's external negotiating powers.

There is of course an important downside to this, which is that it leaves the EU at risk of dissolving into competing factions when the political heat is on, potentially imperiling the course of an entire international negotiation. In spite of all the various changes that have been made to reinforce the EU's actorness, the risk of internal division remains ever-present. Shortly after Copenhagen, Connie Hedegaard, who presided over that meeting before becoming the EU's first Climate Change Commissioner, claimed that:

[i]n the last hours, China, India, Russia, the US and Japan each spoke with one voice while Europe spoke with many different voices. . . . Sometimes we're almost unable to negotiate because we spend so much time talking to each other.<sup>59</sup>

The institutions of the EU have, however, taken a series of incremental steps to address this particular feature. The political shock of the failed Conference of the Parties at The Hague in 2000 (when large Member States openly worked against one another) forced them all to seek much greater actorness; the Commission was thus formally brought into the "troika" arrangement (in which the Presidency of the Council works closely with the previous and future incumbents of that position). After 2004, further adjustments were made to create a system of "issue leaders" and "lead negotiators" through which national and Commission officials work together in mixed teams.<sup>60</sup> Further changes are being made in the wake of the 2009 Lisbon Treaty.<sup>61</sup> However, the Commission's attempts to represent the EU at all international meetings have been continually blocked by states.

To conclude, the EU as a whole has taken active steps to address this particular paradoxical feature. These have had to be carefully (re)negotiated because they impinge on the states' sovereign power to negotiate independently in international affairs.<sup>62</sup> But in doing so, the EU as a whole has realized that while actorness is politically challenging to attain, the benefits of internal diversity are not overwhelming either. To understand this, one need only look at a fullyfledged federation such as the US, in which the federal government (i.e. the functional equivalent of the EU) defines the national "common" position, without having to negotiate so intensively with lower levels. Common positions ("actorness") take time to reach in the EU, but when the EU eventually signs an international agreement, it delivers 27 signatures and—thus far in climate policy—an equivalent number of ratifications. By contrast, the US must still overcome the ratification hurdle, as witnessed by the US administration's con-

- 61. For details, see Benson and Jordan 2008.
- 62. Sbragia and Damro 1999.

<sup>59.</sup> ENDS Europe 2010b.

<sup>60.</sup> van Schaik 2010.

tinuing failure to secure the Congress' support for the Kyoto Protocol. In other words, "the very characteristic that makes the EU so problematic for traditional global negotiations—an uncertain, or mixed identity—becomes a strength when it comes to the ratification and implementation stages."<sup>63</sup>

## Policy Harmonization and Differentiated Burden Sharing

The third paradox is strongly related to the previous one. The EU's overriding mission is to secure trade liberalization, which in part it does by promoting policy harmonization. One could even decode its preferred approach to international climate governance (binding "targets and timetables") as a partially successful attempt to "upload" this approach to the UN level.<sup>64</sup> But having fought for such an approach at the international level as well as special provisions for the EU to participate in UN treaties, the EU has continually adopted internal burden sharing agreements whereby each Member State is allocated a slightly different target. This is about something entirely different: *differentiated* governance.<sup>65</sup>

Critics maintain that burden sharing is a rather hypocritical and self-indulgent exercise in internal governance, which has had to be painstakingly embedded in the legal architecture of the UNFCCC. But once a burden sharing agreement has been struck, it has arguably held the EU together more tightly than would otherwise have been the case, preventing long and potentially debilitating prisoners' dilemmas.<sup>66</sup> Moreover, by acting together, Member States have arguably increased their bargaining power in international discussions. As noted above, the internal and external dimensions are in a sense two sides of one coin.

To conclude, the EU has perceived this paradox to be potentially constraining of policy innovation and thus has sought to confront it. For example, it has revised the internal arrangements used to share the burden of collective emissions targets amongst Member States (whose number has grown from 9 in 1980 to 27 from 2005). Indeed, recent policies (e.g. the 2009 Renewable Energy Directive) go one step further in this respect by enshrining national-level targets to support a common EU-wide policy. Moreover, as more emissions are brought within the ambit of the ETS, the whole approach to burden (or "effort" as the Commission now prefers to term it) sharing,<sup>67</sup> will gradually become more market-oriented and less open to interstate bargaining.

<sup>63.</sup> Sbragia and Damro 1999, 67.

<sup>64.</sup> It is only partially successful in that the Kyoto Protocol embodies a differentiated approach to target setting. Furthermore, the Copenhagen Accord does not include any binding targets.

<sup>65.</sup> Haug and Jordan 2010.

<sup>66.</sup> Victor 2004, 128.

<sup>67.</sup> Haug and Jordan 2010.

## Ambitious Targets but Constrained Instrument Choices

Schreurs and Tiberghien documented the EU's proven ability to adopt eyecatching targets,<sup>68</sup> but they overlooked the fact that its choice amongst the main policy instruments has always been rather more constrained than at the national level. Given their inability to raise and spend large amounts of new money, EU climate policy-makers have instead learned to rely on regulation in order to govern, the costs of which are borne by Member States and private actors. However, policy theory<sup>69</sup> reminds us that regulatory instruments tend to generate benefits that are diffuse but costs that are concentrated on particular actors; in other words, precisely the conditions in which target groups are likely to mobilize against policy-making.

The EU has recognized and actively tried to confront this paradoxical feature by moving beyond regulation. There have, as we have noted, been some well-known failures (taxation for example, where the EU still cannot agree upon minimum levels of taxation for energy-saving products), but also some unexpected successes: the EU ETS represents a clear case of rapid policy innovation. Adaptation too is slowly emerging as a test-bed for softer, non-regulatory forms of governance such as policy mainstreaming.<sup>70</sup> But in other respects, this paradoxical feature has turned out to be not quite as constraining as was originally feared. Unlike states (which are often tied up in the highly divisive politics of raising and spending public money), the reliance on regulation has arguably encouraged the EU to concentrate on what it does best—governing technocratically through a myriad of humdrum regulatory decisions. Some claim it has even given the EU a basic "clarity of purpose,"<sup>71</sup> which has been highly liberating when problems are, like climate change, extremely complicated.<sup>72</sup>

#### Escalating Ambition and Constrained Delivery Mechanisms

The fifth paradoxical feature relates to the perceived mismatch between ambition and reality. The EU's inability to turn "lofty" ambitions into concrete change was not lost on Schreurs and Tiberghien,<sup>73</sup> but its long-term importance was rather glossed over. Problematic implementation is not simply an internal matter: critics seize on it to cast doubt on the EU's sincerity and capability as a credible negotiating partner. Until now, though, the EU has evaded the potentially constraining effect of this feature by adopting targets that were either effectively self-implementing or could be achieved at relatively low economic cost. Thus, it easily met its initial stabilization target (emissions in fact fell

- 68. Schreurs and Tiberghien 2007.
- 69. Anderson 1984.
- 70. Schout et al. 2010.
- 71. Sbragia 2000, 233.
- 72. Jordan et al. 2011; 2012.
- 73. Schreurs and Tiberghien 2007, 42.

3.5 percent).<sup>74</sup> The indications are that it will fulfill its Kyoto target (see below), but again only by relying heavily on "gratis" reductions made by the largest states,<sup>75</sup> or via the flexibility mechanisms that it fiercely resisted when the US government initially proposed them in the UNFCCC process.

Nonetheless, the failure in the past to achieve more specific targets in relation to the use of renewable energy sources or energy efficiency indicates the presence of underlying implementation problems that will not easily go away. To the extent that the issue has been confronted, it has been in a rather roundabout manner: the EU meets its policy targets but for reasons that are not directly to do with its policies.

# Multi-level Governing: Looking to the Future

#### Immediate Challenges

Looking forward, there are a number of immediate challenges, which could well provide a much sterner test of the EU's ability to govern in a multi-reinforcing manner.<sup>76</sup> In the short term, the most obvious (but easiest) challenge will be to ensure that it fulfills its Kyoto commitments. Until quite recently, there were grave fears that it would not. These were addressed by the wave of new policies that appeared post-2000. Any remaining doubts have again been greatly allayed by "non-policy" effects including the global recession and higher energy prices.<sup>77</sup>

The second immediate challenge—delivering the 20 percent target by 2020—was also thought to present a serious test of the EU's governing ambitions. However, the European Environment Agency's most recent estimates suggested that the EU-27 is making such good progress that it may eventually reach the target with several years to spare.<sup>78</sup> Nonetheless, the EU remains very wary of proceeding to a unilateral cut of 30 percent. One reason is to secure bargaining power in international discussions (as occurred at Durban), but another is to ensure that escalating policy ambition is not undermined by constrained implementation (the fifth paradoxical feature). Some Member States are already well on the way to meeting such a target and are keen to take the risk, but others are not, lest it put their industries at greater risk of carbon leakage.<sup>79</sup> More internal debates in relation to the simultaneous desire for policy harmonization and differentiated burden sharing (the third paradoxical feature) can thus be expected in the period to 2020.

- 74. European Commission 2002.
- 75. EEA 2008; EEA 2009a, 29.
- 76. Schreurs and Tiberghien 2007; and Oberthür and Roche Kelly 2008.
- 77. EEA 2009b.
- 78. EEA 2010.
- 79. ENDS Europe 2010a.

Aside from the risk of carbon leakage, interim targets beyond 2020 (but prior to 2050) are proving challenging to agree within Europe because the associated reductions will have to be made in areas that hitherto have been relatively untouched by EU policy, particularly transport, which remains the fastest growing source of greenhouse gas emissions, and agriculture.<sup>80</sup> These two policy areas go to the very heart of the European integration project. Agriculture is one of the oldest areas of EU policy-making and has generally been resistant to radical reform. And as an inherently trade liberalizing institution concerned with facilitating the mobility of people and goods, the EU has found it very hard to attenuate the rising demand for travel. In the meantime, much will depend on a single policy instrument—the EU ETS—and the dampening effect of the recession. Although the EU ETS has generated some emission reductions (the exact figures are contested),<sup>81</sup> it will need to do a great deal more to decarbonize the EU.

Then, of course, there is adaptation.<sup>82</sup> Much rests on how well the EU can negotiate its way to a post-2013 budget that re-allocates resources away from investments and spending—particularly in agriculture and regional infrastructure that increase vulnerability, towards new patterns that reduce it. Here, the politics are not as immediately amenable to the multi-level reinforcement dynamics described by Schreurs and Tiberghien. While the Commission, supported by the Parliament, may wish to see a progressive "greening" of the structural funds, this will require the agreement of a Council in which new Member States, keen to follow traditional patterns of development, are strongly represented (note the presence of the third paradoxical feature). The fourth paradoxical feature, related to policy instruments, could also play out rather differently in the area of adaptation, which comprises a much more local set of issues that are unlikely to be amenable to the "one size fits all" regulatory approach followed for mitigation.

At the same time as it is grappling with these internal challenges, the EU will have to engage with the international community across a wide array of related issues. When the EU's climate policies were still in their infancy, the Commission had to devote more of its energies to engendering multi-level reinforcement. After Copenhagen, it has to find new ways to confront the second paradoxical feature (actorness-diversity), in order to foster more developing country support. Developing countries have made it abundantly clear since Copenhagen that they will only accept limitations on their emissions and systems of monitoring and verification if richer countries provide new and additional sources of finance. It is by no means clear where all this money will come from, particularly when the Eurozone is experiencing its worst ever recession and the richer states (especially Germany) are very reluctant to open up the vexed issue of internal financial burden sharing (thus extending the third paradoxical fea-

<sup>80.</sup> EEA 2009b, 13.

<sup>81.</sup> Ellerman and Buchner 2008; and Kettner et al. 2008.

<sup>82.</sup> European Commission 2009.

ture). Although the US administration's struggles to upgrade its domestic climate governance system could open up a leadership opportunity for the EU to exploit, it may just as easily be seized by rapidly emerging economies like China, Brazil and India, who seem to prefer a more open "pledge and review" type approach. In order to realize its leadership ambitions the EU may be forced to return again and again to the second paradoxical feature—the combination of external actorness and internal diversity—until, perhaps, the Commission is made the sole negotiator, as it is in international trade negotiations.

#### Longer-term Challenges

In addition, there are challenges not just of a longer term but possibly also more existential nature. At present, EU policy is very heavily focused on mitigation, powerfully expressed by its almost totemic 2°C target. After 2000, the nexus between mitigation and energy security emerged as a powerful facilitator of multilevel reinforcement, culminating in the climate and energy package. By contrast, the Member States' adaptation policies are still relatively inchoate and, lacking an equivalent driver, the EU's is barely even in existence. Therefore, the EU needs to decide what its mid- to long-term focus is going to be. From a scientific perspective, the advice is by no means clear. The 2°C target is not only seen as being more difficult to achieve, especially after the Copenhagen conference,<sup>83</sup> but also increasingly as insufficient to fulfill the UNFCCC's ultimate objectivethat of preventing "dangerous" climate change.<sup>84</sup> Were it to be attempted, accelerated mitigation ambitions would also likely run up against the fifth paradoxical feature—constrained implementation. In this situation, calls have grown for policies that not only aim to mitigate for at least 2°C but also enable adaptation to potentially much greater rates of warming such as 3 or even 4°C.85

The intense scientific debates around these issues have not yet led to similarly intense discussions of the implications for governance. The implications of shifting the emphasis from mitigation to adaptation are potentially very challenging because the 2 °C target has: provided a framing of the problem that diverse leaders have found acceptable (a means of handling the first paradox); provided the EU with an important 'identity' in global negotiations (related to the second paradox); and has implicitly been regarded as broadly achievable with the existing forms of burden sharing (paradox three). Significantly, it has also provided a signal to investors (and third countries) that the EU is strongly committed to mitigation. But preparing for a world that is more than 2°C warmer is likely to require a much greater focus on adaptation, not just in Europe but internationally. In turn, this will alter the way in which the paradoxical features appear. For example, which actors will lead the EU in such a world (the

<sup>83.</sup> Rogelj et al. 2010.

<sup>84.</sup> Hence the discussion at Copenhagen of more radical mitigation pathways aimed at 1.5 °C.

<sup>85.</sup> Anderson and Bows 2008; and Parry et al. 2009.

first paradoxical feature)? Vulnerable regions and sectors within and outside Europe will almost inevitably demand financial transfers to cope with the predicted impacts, raising the issue of adaptation burden sharing (i.e. a profound change in the third paradoxical feature). Moreover, producing stronger adaptation policies which do not undermine those addressing mitigation is unlikely to be straightforward either, requiring not simply policy innovation but something more difficult still—multi-level policy coordination.<sup>86</sup> In principle it should be possible to promote synergies—or at least avoid conflicts—between mitigation and adaptation policies.<sup>87</sup> But if the stalled adoption of the Soils Directive is anything to go by, these may be more difficult to secure agreement on than when climate policy was much more mitigation focused.

This takes us to the second existential challenge, which is how to ensure that the EU itself remains democratically robust enough to address any changes in the paradoxical features. In recent years, the EU's mitigation policies benefitted as much as other policy areas from the permissive social consensus in favor of deeper European integration. In a political world short of "Europe-wide policy discourses,"<sup>88</sup> climate change presented the EU with a golden opportunity to demonstrate its political relevance by generating more and more policy outputs. As has so often been the case, politicians relied strongly on generating policy outputs to secure the EU's legitimacy, and rather neglected the input side of politics: public participation, deliberation and open contestation. It is striking that many of the key decisions on issues like burden sharing and standards for traded products were made in highly technocratic fora such as the EU's labyrinthine comitology committees. However, the permissive consensus has been badly dented in recent years by a series of referendum defeats, declining turnouts in European elections and the rise of anti-EU parties in various Member States. This has turned it into something different—a "constraining dissensus."89

Where this leaves EU climate policy is far from clear. As the impacts of climate change become more pronounced and the financial cost of mitigation and adaptation stack up, the politics of governing show every sign of becoming *more*, not less difficult: the old canards (produce more policy by engaging in "multi-level reinforcement") no longer seem as uniformly relevant. If, for example, the EU moves from 20 percent to a 30 percent target and then, as envisaged, onto something like an 80 percent reduction by 2050, will European citizens really be as ready to accept "Brussels" intruding into their everyday choices? Will national politicians be as willing to pool parliamentary sovereignty on such a strategically important issue in the EU? Either way, national governments may find that they have to work a lot harder to carry their citizens along with them.

- 87. Swart and Raes 2007; Rayner and Jordan 2012.
- 88. Scharpf 1999.
- 89. Hooghe and Marks 2008.

<sup>86.</sup> Jordan and Schout 2006.

# Conclusion

EU climate policy has emerged as an important focus of research amongst EU scholars as well as those seeking to understand climate governance. Although the early literature took a holistic approach, many of the more recent contributions have adopted a more disaggregated focus. We are indebted to Schreurs and Tiberghien for trying to arrange these snapshots into a broader picture. Their concept of "multi-level reinforcement" does help to make sense of the whole. However, their analysis suffers from some important shortcomings. First of all, it relies on a picture of EU policy that is empirically incomplete (i.e. missing the period prior to the 1990s). As a consequence, it presents the development of climate policy in rather too linear a manner, whereas others have emphasized the slower and more circuitous nature of policy development, especially in the longue durée from the late 1970s through to circa 2000.90 It also overlooks the lopsided nature of EU climate policy, particularly the heavy emphasis on mitigation as opposed to adaptation, and fails to account for the continuing reliance on a small sub-set of policy instruments. Consequently, one is left wondering whether "multi-level reinforcement" is likely to persist, or was only a feature of one particularly dynamic but ultimately short-lived era of governing in the EU.<sup>91</sup> There is plenty of scope for fresh theoretically informed work on policy innovation that compares the EU with other multi-leveled/polycentric governance systems.

This article has sought to maintain the same broad level focus as theirs. In doing so, a series of paradoxical features were identified and explored. They provide an important part of a wider explanation for the EU's behavior at the international level—i.e., the kinds of policies, targets and instruments it pushes for and the way it conducts itself in international negotiations. Crucially, these will help to shape the opportunities for and the obstacles to sustained policy innovation ("leadership") in the future. Key actors (principally states) will doubtless continue to confront the tensions that arise from the simultaneous desire for greater international actorness and internal diversity—the second paradoxical feature. The Lisbon Treaty introduced another set of institutional changes that once again confronted this tension,<sup>92</sup> including a new diplomatic service that pools the resources of the Council and the Commission, but the debate is far from resolved. Either way, having a strongly coordinated position is important, but only if other negotiating parties are willing to engage with it. At Copenhagen, they were not.

Meanwhile, the EU continues to deal with the tension between its desire for policy harmonization and differentiated burden sharing—the third para-

92. Benson and Jordan 2008.

<sup>90.</sup> Oberthür and Roche Kelly 2008.

<sup>91.</sup> Although to be fair, they do admit that it will be "harder, but not impossible . . . to sustain" in the future. Schreurs and Tiberghien 2007, 42.

doxical feature. With the steady expansion and tightening of the EU ETS, the EU's governance of burden sharing is expected to move in a more market-oriented direction. Nonetheless, there are other looming challenges, namely adaptation burden sharing, which the EU has barely started to discuss, let alone actively confront.

With respect to the fourth feature—the desire for ambitious targets but a constrained set of policy instrument choices—the EU has exploited opportunities to move beyond traditional regulation—the emissions trading system being a case in point. Regulatory approaches have undoubtedly served the EU well in the last years, but policy theory tells us that they have a tendency to generate concentrated costs and diffuse benefits. Whether and for how long the EU can continue to rely so heavily on regulation to govern climate change, remains a very moot point.

Finally, until now, the EU has confronted the tension between high policy ambition and constrained implementation mechanisms—the fifth paradoxical feature—very indirectly by relying heavily on non-policy effects. In time, it may be forced to confront it more directly, for example by building in stronger implementation powers to ensure the policy innovations deliver the outcomes expected of them.

To conclude, Schreurs and Tiberghien have successfully demonstrated that there is a lot to be gained by investigating EU climate governance in broad terms. If there is one thing that such a perspective reveals, it is how much reliance has been placed on tweaking the existing governance system in order to exploit the more positive aspects of its paradoxical features. Time after time, more radical changes proved rather unnecessary, because some of the features enabled as well as constrained multi-level reinforcement. Should we therefore declare EU's approach to governing a success? In terms of setting ambitious targets and adopting common policies and measures, the answer is probably yes. But if we examine policy outcomes-i.e. what governance has actually delivered in terms of emissions reduced and adaptations secured-the overall verdict has to be less positive, although the counterfactual can never be fully known.93 If governing is really about the active steering of society, then the most charitable thing that can be deduced is that the EU has successfully established a highly sophisticated governance framework, whose effectiveness has not yet been systematically tested.

# References

Anderson, James. 1984. Public Policy-Making. New York: CBS College Publishing.

Anderson, Kevin, and Alice Bows. 2008. Reframing the Climate Change Challenge in Light of Post-2000 Emission Trends. *Philosophical Transactions of the Royal Society A* 366 (1882): 3863–3882.

93. But see Haug et al. 2010.

- Baumgartner, Frank, Christoffer Green-Pedersen, and Bryan Jones. 2006. Comparative Studies of Policy Agendas. *Journal of European Public Policy* 13 (7): 959–974.
- Benson, David R., and Andrew Jordan. 2008. A Grand Bargain or an 'Incomplete Contract'? EU Environmental Policy after the Lisbon Treaty. European Energy and Environmental Law Report 17 (5): 280–290.
- Börzel, Tanja. 2005. Pace-Setting, Foot-Dragging, and Fence-Sitting: Member State Responses to Europeanization. In *Environmental Policy in the European Union*, edited by Andrew J. Jordan, 162–180. London: Earthscan.
- Bretherton, Charlotte, and John Vogler. 2006. *The European Union as a Global Actor*. London: Routledge.
- EEA (European Environment Agency). 2008. Annual EC Greenhouse Gas Inventory 1990– 2006 and Inventory Report 2008. EEA Technical Report 6/2008. Copenhagen: EEA.
  - ——. 2009a. Greenhouse Gas Emission Trends and Projections in Europe 2009. Tracking Process towards Kyoto Targets. EEA Report 9/2009. Copenhagen: EEA.
- —— EEA. 2009b. Annual European Community Greenhouse Gas Emission Inventory 1990– 2007 and Inventory Report 2009. EEA Technical Report 4/2009. Copenhagen: EEA.
- ———. 2010. Recession Accelerates the Decline in EU Greenhouse Gas Emissions. Available at http://www.eea.europa.eu/highlights/recession-accelerates-the-decline-in, accessed 3 November 2010.
- EEA (European Environment Agency), JRC (Joint Research Centre of the European Commission) and WHO (World Health Organization). 2008. Impacts of Europe's Changing Climate—2008 Indicator-Based Assessment. EEA Report 4/2008. Copenhagen: EEA.
- Ellerman, A. Denny, and Barbara K. Buchner. 2008. Over-allocation or Abatement? A Preliminary Analysis of the EU ETS based on the 2005–06 Emissions Data. *Environmental and Resource Economics* 41 (2): 267–287.
- ENDS Europe. 2010a. 30% Carbon Cut Gets Further Ministerial Backing. *ENDS Europe*, 14 June 2010.
- ———. 2010b. EU May Set National Targets in Climate Accord. ENDS Europe, 15 January 2010.
- ——. 2011. EU Sets Conditions for Staying in Kyoto Treaty. *ENDS Europe*, 10 October 2011.
- European Commission. 1988. The Greenhouse Effect and the Community. COM (88) 656 Final. Brussels: European Commission.
  - 2002. Report from the Commission under Council Decision 93/389/EEC as Amended by Decision 99/296/EC for a Monitoring Mechanism of Community Greenhouse Gas Emissions. COM (2002) 702 Final. Brussels: European Commission.
- ———. 2008. 20, 20 by 2020—Europe's Climate Change Opportunity COM (2008) 30 final. Brussels: European Commission.
- ——. 2009. Adapting to Climate Change in Europe: Towards a European Framework for Action. COM (2009) 147 Final. Brussels: European Commission.
- Gupta, Joyeeta, and Michael Grubb, eds. 2000. *Climate Change and European Leadership: A Sustainable Role for Europe*? Amsterdam: Elsevier.
- Harrison, Kathryn, and Lisa McIntosh Sundstrom, eds. 2010. *Global Commons, Domestic Decisions: The Comparative Politics of Climate Change.* Cambridge, MA: MIT Press.
- Haug, Constanze, and Andrew Jordan. 2010. Burden Sharing: Distributing Burdens or Sharing Efforts? In Climate Change Policy in the European Union: Confronting the Dilemmas of Mitigation and Adaptation?, edited by Andrew Jordan, Dave Huitema,

Harro van Asselt, Frans Berkhout, and Tim Rayner, 83–102. Cambridge, UK: Cambridge University Press.

- Haug, Constanze, and Frans Berkhout. 2010. Learning the Hard Way: European Climate Policy after Copenhagen. *Environment* 52 (3): 20–27.
- Haug, Constanze, Tim Rayner, Andrew Jordan, Roger Hildingsson, Johannes Stripple, Suvi Monni, Dave Huitema, Eric Massey, Harro van Asselt, and Frans Berkhout.
  2010. Navigating the Dilemmas of Climate Policy in Europe. *Climatic Change* 101 (3–4): 427–445.
- Hayward, Jack, ed. 2008. Leaderless Europe. Oxford, UK: Oxford University Press.
- Hix, Simon. 2008. What's Wrong with the European Union and How to Fix it. Cambridge, UK: Polity.
- Hooghe, Liesbet, and Gary Marks. 2008. A Postfunctionalist Theory of European Integration. British Journal of Political Science 39 (1): 1–23.
- Jachtenfuchs, Markus, and Michael Huber. 1993. Institutional Learning in the European Community: the Response to the Greenhouse Effect. In *European Integration and Environmental Policy*, edited by J. Duncan Liefferink, Philip D. Lowe, and Arthur P. J. Mol, 36–58. Chichester, UK: John Wiley and Son.
- Jones, Bryan, and Frank Baumgartner. 2005. *The Politics of Attention: How Government Prioritizes Problems*. Chicago, IL: The University of Chicago Press.
- Jordan, Andrew J. 1999. The Implementation of EU Environmental Policy: A Policy Problem without a Political Solution? *Environment and Planning C* 17 (1): 69–90.
- Jordan, Andrew J., ed. 2005. Environmental Policy in the European Union. London: Earthscan.
- Jordan, Andrew J., and Adriaan Schout. 2006. *The Coordination of the European Union*. Oxford, UK: Oxford University Press.
- Jordan, Andrew J., and Duncan Liefferink, eds. 2004. *Environmental Policy in Europe*. London: Routledge.
- Jordan, Andrew J., David Benson, Rüdiger Wurzel, and Anthony R. Zito. 2011. Policy Instruments in Practice. In *The Oxford Handbook of Climate Change and Society*, edited by John S. Dryzek, Richard B. Norgaard, and David Schlosberg, 536–49. Oxford, UK: Oxford University Press.
- ------. 2012. Environmental Policy: Governing by Multiple Instruments? In *Constructing a Policy State*?, edited by Jeremy Richardson. Oxford, UK: Oxford University Press.
- Jordan, Andrew J., Rüdiger Wurzel, and Anthony Zito. 2005. The Rise of 'New' Policy Instruments in Comparative Perspective. *Political Studies* 53 (3): 477–496.
- Kelemen, R. Daniel. 2010. Globalizing European Union Environmental Policy. Journal of European Public Policy 17 (3): 335–349.
- Kettner, Claudia, Angela Köppl, Stefan Schleicher, and Gregor Thenius. 2008. Stringency and Distribution in the EU ETS: First Evidence. *Climate Policy* 8 (1): 41–61.
- Majone, Giandomenico. 1994. The Rise of the Regulatory State. West European Politics 17 (3): 77–101.
- Oberthür, Sebastian, and Claire Roche Kelly. 2008. EU Leadership in International Climate Policy: Achievements and Challenges. *The International Spectator* 43 (3): 35– 50.
- O'Riordan Tim, and Jill Jäger, eds. 1996. *Politics of Climate Change: a European Perspective.* London: Routledge.
- Ostrom, Elinor 2010. Polycentric Systems for Coping with Collective Action and Global Environmental Change. *Global Environmental Change* 20 (4): 550–557.

- Parker, Charles, and Christer Karlsson. 2010. Climate Change and the European Union's Leadership Moment: An Inconvenient Truth? *Journal of Common Market Studies* 48 (4): 923–943.
- Parry, Martin, Jason Lowe, and Clair Hanson. 2009. Overshoot, Adapt, Recover. *Nature* 458 (30): 1102–1103.
- Peters, B. Guy. 1997. Escaping the Joint Decision Trap. West European Politics 20 (2): 22–36.
- Rayner, Tim, and Andrew Jordan. 2012. Governing Climate Change: The Challenge of Mitigating *and* Adapting in a Warming World. In: *The International Handbook of Global Environmental Politics (2e)*, edited by Peter Dauvergne. Cheltenham: Edward Elgar.
- Rogelj, Joeri, Julia Nabel, Claudine Chen, William Hare, Kathleen Markmann, Malte Meinshausen, Michiel Schaeffer, Kirsten Macey, and Niklas Höhne. 2010. Copenhagen Accord Pledges are Paltry. *Nature* 464: 1126–1128.
- Sbragia, Alberta 1993. The European Community: A Balancing Act? *Publius* 23 (2): 23–38.

— 2000. The European Union as Coxswain: Governance by Steering. In *Debating Governance*, edited by Jon Pierre, 219–240. Oxford, UK: Oxford University Press.

- Sbragia, Alberta, and Chad Damro. 1999. The Changing Role of the European Union in International Environmental Politics: Institution Building and the Politics of Climate Change. *Environment and Planning C* 17 (1): 53–68.
- Scharpf, Fritz W. 1999. *Governing in Europe: Effective and Democratic?* Oxford, UK: Oxford University Press.
- ———. 2006. The Joint Decision Trap Revisited. Journal of Common Market Studies 44 (4): 845–64.
- Schout, Adriaan, Andrew J. Jordan, and Michelle Twena. 2010. The Diagnostic Deficit: From Old to New Governance in the European Union. West European Politics 33 (1): 154–170.
- Schreurs, Miranda, and Yves Tiberghien. 2007. Multi-level Reinforcement: Explaining European Union Leadership in Climate Change Mitigation. *Global Environmental Politics* 7 (4): 19–46.
- Selin, Henrik, and Stacy VanDeveer, eds. 2009. *Changing Climates: North American Politics: Institutions, Policymaking and Multilevel Governance.* Cambridge, MA: MIT Press.
- Skelcher, Chris. 2005. Jurisdictional Integrity, Polycentrism and the Design of Democratic Governance. *Governance* 18 (1): 89–110.
- Skjærseth, Jon Birger. 1994. The Climate Policy of the EC: Too Hot to Handle? *Journal of Common Market Studies* 32 (1): 25–45.
- Skjærseth, Jon Birger, and Jørgen Wettestad. 2008. EU Emissions Trading: Initiation, Decision-making and Implementation. Aldershot, UK: Ashgate.
- Swart, Rob, and Frank Raes. 2007. Making Integration of Adaptation and Mitigation Work: Mainstreaming into Sustainable Development Policies? *Climate Policy* 7 (4): 288–303.
- van Asselt, Harro. 2010. Emissions Trading: The Enthusiastic Adoption of an Alien Instrument? In *Climate Change Policy in the European Union*, edited by Andrew Jordan, Dave Huitema, Harro van Asselt, Tim Rayner and Frans Berkhout, 125–144. Cambridge, UK: Cambridge University Press.
- van Schaik, Louise. 2010. The Sustainability of the EU's Model for Climate Diplomacy. In

*The New Climate Policies of the European Union*, edited by Sebastian Oberthür and Marc Pallemaerts, 251–280. Brussels: VUB Press.

- Victor, David G. 2004. *The Collapse of the Kyoto Protocol.* Princeton, NJ: Princeton University Press.
- Weale, Albert, Geoffrey Pridham, Michelle Cini, Dimitrios Konstadakopulos, Martin Porter, and Brendan Flynn. 2000. European Environmental Governance: An Ever Closer Ecological Union? Oxford: Oxford University Press.
- Wettestad, Jørgen. 2005. The Making of the 2003 EU Emissions Trading Directive: an Ultra-quick Process due to Entrepreneurial Proficiency? *Global Environmental Politics* 5 (1): 1–23.
- Wiener, Antje, and Thomas Diez. 2009. *European Integration Theory*. Oxford: Oxford University Press.
- Wurzel, Rüdiger, and James Connelly. 2010. *The European Union as a Leader in International Climate Change Politics*. London: Routledge.
- Zito, Anthony R. 2000. *Creating Environmental Policy in the European Union*. Basingstoke: Palgrave.