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# Globalisation and National Environmental Policy: Update and Overview

# Frank Wijen, Kees Zoeteman, Jan Pieters, and Paul van Seters

# SUMMARY

After outlining recent developments and the scope, target audience, and structure of the book, we review the literature on globalisation and environmental policy, especially the impact of globalisation on the environment and changes in environmental governance in relation to increasingly global spheres of influence. This is followed by a succinct representation of the essential points of all contributions to this volume. While each chapter has its own distinct focus and perspective, we identify common themes in major outcomes and future directions: the delicate and multifaceted relation between economic globalisation and environmental protection, shifts in domestic environmental issues, evolving governance mechanisms, dealing with changed sovereignty, the promotion of selfenforcing mechanisms, prospects for existing and new policy instruments, and finding a new balance between globalisation and environmental policy.

# **INTRODUCTION**

Important developments have taken place since the contributions to the first edition of this book were written, some six years ago. Social media are the most recent manifestation of a booming internet, connecting billions of

people around the world. Globalisation's dark side manifested itself in 2007 and subsequent years when the financial crisis in the United States (US) spread over globally interrelated markets. The geo-economic landscape has changed significantly with the sustained high economic growth of a substantial number of emerging markets, resulting in an upsurge of the global demand for natural resources and sometimes dramatic forms of pollution, especially in production epicentres and large cities in emerging markets. The exacerbated strain of the natural environment has led to heightened awareness of the necessity to engage in more sustainable forms of development, both in developed and developing countries. The realm of national environmental policies has also witnessed significant changes, including the entry into force of the Kyoto Protocol, the launch of the European Union (EU)'s emissions trading market (both in 2005), the entry into force of the EU's REACH regulation of chemicals (in 2007), and the recent commitment (from 2007 onwards) of major emerging markets to more proactive policies (for example, in the fields of climate change mitigation and electronic waste management).

These developments reify the ongoing transformation of national environmental policies. While nation-states are still sovereign, they opt less for autonomously crafted and top-down imposed environmental policies. National governments realise that negotiating and collaborating with foreign governments and non-state actors – local and multinational companies, national and international non-governmental organisations (NGOs), social movements, civil-society groups, etc. – are more effective in a globalised world than traditional command-and-control approaches. Prominent supranational institutions at the public level include the World Trade Organization (WTO) and the EU, who seek to ensure a level playing field that enables firms to compete on an equal footing. Public-private partnerships and private-private partnerships for sustainable development have spawned, exemplifying the changed government-business-civil society relationships.

Globalisation – the increased interconnectedness of public and private actors worldwide – has created truly regional or global markets, calling for supranational institutions or, at least, collaborating national governments. Companies that are 'footloose' because of their presence in a multitude of countries – and whose turnover may exceed the gross product of national economies – may pressurise governments to obtain favourable treatment, while domestic firms may lobby their governments to avoid regulations with adverse international competitive effects. Withstanding these pressures requires nation-states to collaborate and live up to the rules they have set for themselves. On the other hand, governments may find themselves in a position in which they feel politically forced to impose foreign environmental standards on domestic companies when these standards are more effective than the nationally prevailing ones.

Moreover, through telecommunication, travelling, and imports, citizens and consumers have easy access to foreign cultures and their artefacts and

connect more easily with citizens abroad, especially through the internet. This more global citizen scope and the intensifying interference of supranational institutions with civic issues have widened the gap between citizens and ruling authorities in some instances and have closed it in others.

Globalisation is particularly apparent in the domain of environmental policy. For example, a large majority of national environmental regulations in the EU consists of implementing directives that are prepared by the European Commission but have to be approved by its member states and the European Parliament, offering nation-states the possibility to influence upcoming regulations. Nation-states have thus both lost and gained influence. Multinational companies and global production networks, driving and thriving on more global economic exchanges, may play different national governments off against one another to obtain lenient environmental regulations or, conversely, may push for a level playing field, while applying stringent environmental standards required for one market around the globe. The environmental conditions under which imported products have been produced are generally not transparent to consumers, hampering their wellinformed decision-making. And consumers and NGOs may boycott - or otherwise campaign against - foreign or multinational companies they perceive as 'dirty'. Arguably, various initiatives to promote corporate responsibility (such as the Global Compact and the OECD Guidelines on multinational enterprises and on bribery) have enhanced openness, transparency, and even accountability of international business.<sup>1</sup>

The arena in which national governments operate, therefore, has undergone important changes, which may have reduced the effectiveness of formerly well-functioning environmental policies. The increasingly global or regional spheres of influence may call for a reconsideration of policy instruments in order to be in a better position to meet the novel opportunities and constraints that national governments presently face. The central aim of this book is to improve our understanding of the impact of global spheres of influence on the scope of national environmental policies, and to explore effective policy responses to these new opportunities and threats. A better understanding of these interactions may lead to more enlightened visions and better management of power relations.

While many salient publications on the relations between national environmental policy and economic globalisation have appeared, their scope tends to be limited to specific aspects. Our purpose was to provide a comprehensive book on the interface of globalisation and national environmental policy, addressing the impact of the actors and factors shaping

<sup>&</sup>lt;sup>1</sup> A recent example is the allegations against Apple concerning labour conditions and environmental care in factories of its Chinese suppliers. Apple publicly responded to these critiques (Apple, 2011).

globalisation on the scope of action for national environmental policymakers. The book seeks to be broad in scope by covering all major aspects, multiple in level of analysis by incorporating macro-, meso-, and microlevels, heterogeneous in perspectives by representing diverging social viewpoints, and complementary as to disciplines by drawing on insights from economics, law, sociology, political science, public administration, and environmental sciences. We also aimed to obtain in-depth insights. We were interested both in conceptual contributions pushing back the theoretical frontier and in case studies providing detailed insights into specific issues. Leading experts from academia, supranational organisations, government, business, and NGOs were invited to write original contributions on relevant aspects.

Besides providing a comprehensive account of our subject, we were also interested in identifying the degree of commensurability between different levels of influence (global, regional, national, and local) as well as the synergies and tensions between different areas (economic development, jurisdictional competence, political discretion, and environmental protection). Finally, we wanted to shed some light on how different stakeholders behave in an era of globalisation: firms (either sheltered from or exposed to international competition), citizens (as consumers or NGO members or supporters), and governments (as nation-states or participants in supranational platforms), either operating by themselves or in interaction with others, including those from different 'blood groups' (for instance, globally operating NGOs 'tangoing' with multinational companies).

Clarifying the tensions between regional or global spheres of influence, on the one hand, and national or local forces, on the other, helps us to address the question of whether existing national environmental policies and instruments are commensurable with the opportunities and threats presented by globalisation. Teasing out the compatibility and prioritisation of economic and environmental imperatives against the backdrop of existing legal and political structures is also crucial to understanding what lies within and what lies beyond the bounds of the possible in environmental policies. National governments that wish to design effective environmental policies should consider the options and constraints of the different areas. The present book offers insights into actual and potential governance mechanisms and policy instruments in the environmental field that reflect the changes in the distribution of powers brought about by economic, political, and social globalisation.

While the book aims to provide the reader with both breadth and depth, it has been designed predominantly from the perspective of a medium-sized 'developed' country. As a result, all 41 authors originate from Europe and North America, and the setting of many case studies is European, with an

emphasis on the Netherlands. This has obviously led to a Western bias. The book's targeted audience is primarily academics and policy-makers. It may be useful for students and scholars, both newcomers who wish to obtain a comprehensive overview and those with advanced knowledge who wish to obtain a deeper understanding of specific issues. Policy-makers in international and supranational organisations, national and local governments, companies and trade associations, and NGOs may use it as a source of inspiration for future policies. The book obviously targets those interested in environmental problems, though there may be close parallels with social issues. While its scope is international, this book may also be relevant to readers concerned with domestic areas of interest such as spatial planning, as these are increasingly exposed to foreign influences.

Turning to the theoretical and empirical embedding of the book, we now review academic literature dealing with the key issues of globalisation, national environmental policies, and governance, including their interrelations. As these issues are addressed extensively throughout the book, the literature review is compact. We then outline the structure of the book and the main points of each individual chapter. Finally, we pull the diversity of insights together by identifying and discussing commonalities in the variety of contributions.

# THEORETICAL AND EMPIRICAL ISSUES

For centuries, the fates of many nation-states have been intertwined. Foreign military interventions, migration, and international trade have long histories.<sup>2</sup> The degree of interconnectedness has fluctuated over time, with eras of relative isolation and autarky altering with periods of more intensive international interactions.<sup>3</sup> Over the past few decades, political developments – including the collapse of communist regimes and the elimination of trade barriers – and technological innovations – especially in the fields of transport and communication – have paved the way for increased internationalisation of economic, political, and cultural activities, leading to the (perceived) compression of space and time and the emergence of relational networks at the global level.<sup>4</sup> Globalisation has many facets,<sup>5</sup> though the economic dimension has been discussed most often. During the 1990s, international

<sup>&</sup>lt;sup>2</sup> Hobsbawm, 1975; Landes, 1998; Lechner and Boli, 2000; McNeill and McNeill, 2003; Schaeffer, 2003.

<sup>&</sup>lt;sup>3</sup> Baker et al., 1998; Frankel, 2000; McNeill and McNeill, 2003; Reinicke, 1998; Scholte, 2000; Waters, 2001.

<sup>&</sup>lt;sup>4</sup> Anheier et al., 2001; Castells, 1996; Held, 2004; Inglehart, 1997; Lechner and Boli, 2000; OECD, 2010; Waters, 2001.

<sup>&</sup>lt;sup>5</sup> Schaeffer, 2003; Scholte, 2000; Turner, 2010; Waters, 2001.

economic transactions (in particular, international trade and foreign investment) rose exponentially,<sup>6</sup> though internationalisation is spread unevenly: many activities take place within or between regional clusters such as parts of Europe, North America, and Japan.<sup>7</sup> In the academic literature, the economic and political interdependence of states has long been recognised,<sup>8</sup> though literature on globalisation witnessed an upsurge in the 1990s.<sup>9</sup> Some authors highlight the amenities of economic globalisation, in terms of enhanced choice and lower prices of products as well as higher national incomes.<sup>10</sup> Others argue that globally unleashed market forces have caused or enhanced many social evils, such as increased income inequality, loss of social identity and infringement of sovereignty and democracy.<sup>11</sup> The 2007 financial crisis also showed how a local problem can turn into a global catastrophe when national economies are intertwined.<sup>12</sup>

The human impact on the natural environment rose dramatically with the expansion of economic activities,<sup>13</sup> though there are substantial differences between countries as to their claims on natural resources and pollution of the environment.<sup>14</sup> Sensitised by alarming publications about the depletion of natural resources and environmental degradation<sup>15</sup> and by popular concerns for the visible environmental consequences of industrialisation (such as air, water, and soil pollution), national governments in Western countries started developing environmental policies (i.e., strategic courses of action to solve or contain problems related to ecological resources and systems) from the 1970s onwards. Environmental policy issues appeared prominently on the academic agenda in the 1980s, and the field flourished from the 1990s onwards.<sup>16</sup> In the economics literature, environmental issues are classic examples of externalities because costs and benefits accrue to different parties.<sup>17</sup> Likewise, collective action is hampered because individual actors lack adequate information or do not have the incentives to protect common environmental

Esty and Gentry, 1997; Frankel and Rose, 2002; OECD, 2010.

Dunning, 2000; Ohmae, 1995; Rugman, 2001.

Hobsbawm, 1975; Keohane and Nye, 1977; Wallerstein, 1974, 1980.

For overviews, see: Lechner and Boli, 2000; Levy-Livermore, 1998; Michie, 2003.

<sup>&</sup>lt;sup>10</sup> Bhagwati, 2002; Moore, 2003; Norberg, 2003; Wolf, 2004.

<sup>&</sup>lt;sup>11</sup> Hertz, 2001; Klein, 2000; Landes, 1998; Mullard, 2004; Stiglitz, 2002; Turner, 2010; Van Seters et al., 2003. By contrast, Diamond (2005) describes cases of isolated human societies being vulnerable to environmental degradation due to their isolation from other human settlements. <sup>12</sup> OECD, 2010; Sinn, 2010.

<sup>&</sup>lt;sup>13</sup> EEA, 2003; Meadows et al., 2005; UNEP, 2003; Wackernagel and Rees, 1996.

<sup>&</sup>lt;sup>14</sup> World Economic Forum, 2002; OECD, 2008.

<sup>&</sup>lt;sup>15</sup> Carson, 1962; Colborn et al., 1996 ; Meadows et al., 1972.

<sup>&</sup>lt;sup>16</sup> For overviews, see: Bromley, 1995; Lesser et al., 1997; Mäler and Vincent, 2003; Sutherland, 2000; Tietenberg et al., 1999; Van den Bergh, 1999, 2002.

<sup>&</sup>lt;sup>17</sup> Lesser et al., 1997; Tietenberg, 2003.

goods.<sup>18</sup> The protection of natural resources also faces legal problems, especially in transboundary and international settings.<sup>19</sup>

Interactions between globalisation, on the one hand, and environmental issues and national policies, on the other, have also been widely documented. The impact of economic globalisation on the natural environment has been studied extensively.<sup>20</sup> Positive effects have been framed in terms of the use of environmentally less harmful products and processes, often associated with income rises and clean technology transfer as a consequence of international specialisation and trade. For instance, the export of solar and wind energy technologies have risen exponentially over the past decade, both among and between developed and developing countries.<sup>21</sup> Negative effects are primarily defined in terms of scale: the use of natural resources and pollution increase initially when economic activities expand without correction and when inputs and products are transported more frequently and over longer distances. The overall environmental impact may be positive or negative, depending on the prevailing circumstances.<sup>22</sup>

Likewise, there is a considerable body of research on the effect of the stringency of national policies on international competitiveness and investment decisions.<sup>23</sup> Those embracing the 'race to the bottom' hypothesis argue that international policy competition drives polluting economic activities to 'pollution havens' (i.e., countries with lax environmental regimes), leading to a policy competition in which countries structurally decrease their environmental standards to attract or keep business within their national borders. According to the 'regulatory chill' hypothesis, states refrain from adopting more stringent regulation in order not to deter actual and potential investors. By contrast, the 'race to the top' hypothesis holds that stringent product standards in certain countries are increasingly being exported, especially by multinational companies diffusing the company-wide enforcement of stringent standards in order to reap economies of scale or preserve a favourable corporate or brand image.

Another strand of research has focused on governance issues. Some argue that globalisation has eroded the formal power of national governments, not only in industrialised countries but also and especially in developing

<sup>&</sup>lt;sup>18</sup> Dietz et al., 2003; Hardin, 1968; Kaul et al., 1999; Kölliker, 2002; Tietenberg, 2003.

<sup>&</sup>lt;sup>19</sup> Birnie and Boyle, 2009; Bodanski et al., 2008.

<sup>&</sup>lt;sup>20</sup> Antweiler et al., 2001; Atkinson et al., 2007; Copeland and Taylor, 2003; Esty and Gentry, 1997; Frankel and Rose, 2002; IISD and UNEP, 2000; Nordström and Vaughan, 1999; OECD, 2001, 2008; Zarsky, 1999.

<sup>&</sup>lt;sup>21</sup> OECD, 2010.

<sup>&</sup>lt;sup>22</sup> Jenkins et al., 2003; Triebswetter, 2004.

 <sup>&</sup>lt;sup>23</sup> Boyce, 2004; Copeland and Taylor, 2004, 2003; Drezner, 2006; Esty and Geradin, 1998; Jaffe et al., 1995; Mabey and McNally, 1999; Mani and Wheeler, 1998; Mulatu, 2004; Mulatu et al., 2010; OECD, 1997, 2002; Triebswetter, 2004; Vogel, 1995, 1997.

countries.<sup>24</sup> In their view, power has shifted from states, which used to operate at the regulatory apex, to multinational companies, which now control a large share of global trade and which may be subject to privileged tax and regulation arrangements. Some have argued that private - profit or not-forprofit - organisations may assume, or have taken over, formerly public environmental roles. Under the banner of 'sustainable business' or 'corporate social responsibility', business organisations may take environmentally benign actions or engage in global self-regulation, for example, through sector-oriented codes of conduct and environmental-management standards such as ISO 14001.<sup>25</sup> Alternatively, civil society, often taking concerted action through NGOs and increasingly organised on a regional or global scale,<sup>26</sup> may take on a prominent role in 'civilising' globalisation, in order to make economic developments more compatible with social and environmental imperatives or even have them reinforce one another.<sup>27</sup> Hybrid forms here include governance modes such as 'voluntary agreements' between industry and government<sup>28</sup> and 'public-private partnerships' involving governments, companies, and NGOs, <sup>29</sup> which may be communicated to wider audiences through ecolabels.<sup>30</sup> The relative effectiveness of such 'soft law' versus 'hard' government regulation has also been studied.<sup>31</sup> Others advocate a global environmental government,<sup>32</sup> arguing that, since many environmental issues are transboundary or global in nature, only a global institute can coordinate national actions and internalise national externalities. Yet others recognise the need for global or regional action but argue that national governments will remain the governing institutions as they have a primary interest in serving their national goals. International environmental regimes of cooperating states may then be effective in solving global or regional collective action problems.<sup>34</sup>

<sup>&</sup>lt;sup>24</sup> Buckley and Ghauri, 2004; Held et al., 1999; Hertz, 2001; Nayyar, 2002; Ohmae, 1995; Opschoor et al., 1999; Sassen, 1996; Strange, 1996.

<sup>&</sup>lt;sup>25</sup> Brunsson and Jacobsson, 2000; Cooperrider and Dutton, 1999; Cutler et al., 1999; Holliday et al., 2002; King and Toffel, 2009; Powell and Clemens, 1998; Prakash and Potoski, 2006; Scherer and Palazzo, 2008; Winsemius and Guntram, 2002.

<sup>&</sup>lt;sup>26</sup> Anheier et al., 2001; Arts, 1998; Clark, 2008; Florini, 2000; Van Seters, 2008; Van Tulder and Van der Zwart, 2006.

Della Porta, 2008; Dunning, 2003; Etzioni, 1990; Florini, 2003; Giddens, 2001; Lyon, 2010; Sklair, 2002; Spaargaren et al., 2000; Van Seters et al., 2003.

<sup>&</sup>lt;sup>28</sup> Carraro and Lévêque, 1999; Khanna and Brouhle, 2009; Mol et al., 2000; OECD, 2003.

<sup>&</sup>lt;sup>29</sup> Glasbergen et al., 2007; Holliday et al., 2002; Osborne, 2000; Reinicke, 1998; Rischard, 2002; Warner and Sullivan, 2004.

<sup>&</sup>lt;sup>20</sup> Boström and Klintman, 2008; Delmas and Young, 2009; Van Tulder and Van der Zwart, 2006

<sup>&</sup>lt;sup>31</sup> Gunningham, 2008; Kagan et al., 2003.

<sup>&</sup>lt;sup>32</sup> Esty and Ivanova, 2002; Group of Lisbon, 1993; Sandel, 1996; UNDP, 1999.

<sup>&</sup>lt;sup>33</sup> Barrett, 2003; European Commission, 2004; Gray, 1999; Haas et al., 1993; Kaul et al., 2003; Young, 1994, 1999. <sup>34</sup> Barrett, 2007; Wijen and Ansari, 2007.

# STRUCTURE AND SYNOPSIS

Each of the four parts of this book deals with specific elements of the central topic. Part I offers a 'tour d'horizon', sketching broad developments at the interface of globalisation and national environmental policies in a variety of geographical and substantive settings. Next to introducing a number of key concepts, it provides an overview of empirical relations in the subfields of policy stringency, government-corporate relations in 'developed' countries, and environmental institutions in developing countries.

Part II adopts an 'outside-in' perspective, discussing how globalisation has impacted the opportunities and constraints of nation-states to develop domestic environmental policies. It discusses the incentives, barriers, options, and room to manoeuvre that national governments have against the backdrop of a globalised world with its scale economies, standardisation, and multilateral trade-rule setting.

Part III is complementary to the preceding part by analysing how national policies have contributed to globalisation. This 'inside-out' lens is reflected in national influence in, and cogovernance of, supranational and international forums such as the European Union and the OECD to circumvent globalisation's barriers and seize its novel opportunities.

While the first three parts have a predominantly public character, Part IV focuses on public-private interactions. It analyses how national governments are influenced by private actors, on the one hand, and collaborate with companies and NGOs to address global environmental challenges, on the other hand.

The different parts and chapters are self-contained. They can be understood independently without relying on preceding parts and chapters, though the reader may assimilate their contents more easily by adhering to the order of the book. It may be especially helpful to take in the broad picture presented in Part I before proceeding to other parts. For reasons of convenience, a short summary has been provided at the start of each chapter, allowing the reader to catch the chapter's essence at a glance. While all authors received the same guidelines pertaining to the structure and contents of their contributions,<sup>35</sup> the wide range of topics, levels, and perspectives has unavoidably led to a measure of heterogeneity in the form and substance of the different chapters.

<sup>&</sup>lt;sup>35</sup> Guidelines included: delimitation of topic, definition of key terms, description and analysis of the past (10-20 most recent years) and present situation, approach taken to cope with recent changes, and future developments.

Margarita Kalamova and Nick Johnstone kick off Part I with an analysis of the impact of regulatory stringency on foreign direct investments (Chapter 2). In this new contribution, Kalamova and Johnstone analyse whether more stringent environmental policies drive companies to invest in countries with laxer regulatory regimes. They conclude that while there is evidence of a weak pollution-haven effect, investors are deterred when environmental regimes are very lenient.

The contribution by Kees Zoeteman and Eric Harkink focuses on national and corporate sustainability attitudes (Chapter 3). Drawing on a study of several sectors, Zoeteman and Harkink point out salient parallels between the attitudes of multinational companies and their home countries.

The final contribution of this part (Chapter 4) deals with globalisation and environmental governance in developing countries. In this majorly revised chapter, Hans Opschoor discusses sustainable development, globalisation, institutions, and types of agents. Focusing on Africa, Opschoor argues that the lack of effective governance in developing countries can be compensated to some extent by an active role of civil society.

Part II starts with the important issue of national incentives for action, addressed by Alkuin Kölliker (Chapter 5). He identifies different types of environmental goods and different trade effects, and argues that their combined effect predicts governmental responses. New elements include Kölliker's exploration of the prospects of multilateral, plurilateral, and domestic environmental policies.

Marion Jansen and Alexander Keck discuss at length the crucial relationship between multinational trade regulations and the discretionary possibilities and constraints of national environmental policies (Chapter 6). Drawing on historical and recent developments, Jansen and Keck argue that environmental actions that distort free international trade are not necessarily illicit, though WTO jurisprudence leaves considerable uncertainty as to the acceptability of specific national measures.

René Kemp, Luc Soete, and Rifka Weehuizen discuss policies geared towards environmentally benign innovations (Chapter 7). Kemp, Soete, and Weehuizen describe national innovation-policy instruments and their context specificity and argue that globalisation has engendered a governance void, which should be filled by international NGOs.

Jan Pieters looks at globalisation from the perspective of the 'global factory', value chains that are scattered over the globe (Chapter 8). In this new chapter, Pieters argues that standards are the linking pins between firms and suggests that national environmental policies would be more efficient when crafted in terms of performance standards.

Joost van Kasteren points to the scale-up effects of globalisation, which has rendered the development and marketing of environmentally benign

pesticides for a small market such as the Netherlands no longer attractive (Chapter 9). Van Kasteren argues that while the Dutch government is facing not only these economic but also regulative restrictions at the supranational level (EU, WTO), several national policy options may render crop protection more environment-friendly.

The new chapter by Kees Zoeteman and Wouter Kersten discusses the evolving role of national governments (Chapter 10). Based on the perceived urgency and the degree of global cooperation, Zoeteman and Kersten develop four scenarios that predict how governments can deal with global challenges such as climate change. They highlight the importance of business and civil society, including philanthropic organisations.

National influence in supranational forums (Part III) starts with an analysis of the interaction between local and central levels of environmental decisionmaking (Chapter 11). In their majorly revised chapter, David Vogel, Michael Toffel, Diahanna Post, and Nazli Uludere Aragon compare regulative interactions in the EU and the United States (US) in three environmental areas. They conclude that national or state governments can play an important role when diffusing their stringent regimes through federal regulations.

Ludwig Krämer discusses the functioning, achievements, and shortcomings of the European Community's environmental policy (Chapter 12). Krämer argues that a more centralised system would not have led to improved environmental performance because – against the backdrop of national implementation differences – environmental results depend essentially on the political will to act.

Sietske Veenman and Duncan Liefferink analyse the influence of three proactive countries on EU climate policies (Chapter 13). Veenman and Liefferink conclude that these countries proceed differently in terms of the directness of their approach and the purposefulness of their influence and that they may combine different strategies.

The Organisation for Economic Co-operation and Development (OECD) has elaborated a joint system for testing and registering new chemicals (Chapter 14). Rob Visser argues that, when data obtained in one country are also recognised in other (OECD) countries, as occurs in the chemicals system, important advantages accrue to different societal strata. Visser concludes that globalisation has magnified both the advantages and drawbacks of this system.

Saskia Ozinga and Hannah Mowat argue that globalisation has aggravated the problem of illegal logging (Chapter 15). Exploring possible remedies, including recent national and multilateral initiatives, Ozinga and Mowat conclude that more targeted regulation and independent monitoring would help to reduce this important problem.

Pedro Conceição and Inge Kaul then focus on global public goods, whose collective availability and impact extend to the global level (Chapter 16). In their view, the nature of many public goods is not technically given but shaped by human perspectives and actions. Conceição and Kaul also discuss and contextualise different possibilities for financing global environmental actions, which differs fundamentally from providing financial aid.

According to Konrad von Moltke, economic globalisation and environmental globalisation, though both governed by different rules, are intertwined (Chapter 17). Von Moltke concludes that the challenge is to design international institutions that consider environmental and economic imperatives in a more integrated fashion.

The significantly revised contribution by Charlotte Streck and Eleni Dellas is devoted to the different types of international policy networks in which national governments are involved (Chapter 18). Analysing the opportunities and threats of global public-policy networks, Streck and Dellas argue that these may constitute an effective complementary governance mechanism.

Daniel Esty and Maria Ivanova address environmental stewardship from a global-governance perspective (Chapter 19). After discussing interactions between economic globalisation and environmental protection, Esty and Ivanova make a case for a global environmental mechanism: a light institutional superstructure drawing on public-policy networks and applying modern information technology.

The first chapter of Part IV, focusing on public-private interactions, is by Pieter Glasbergen. This new chapter discusses business-NGO partnerships, a governance form that has recently gained currency (Chapter 20). Glasbergen analyses the success factors, opportunities, and risks of two types of partnerships: market-oriented collaboration to make international supply chains more sustainable and policy-oriented partnerships to reinforce government policies.

Jonathan Verschuuren covers similar ground, though from a legal perspective, discussing ways to overcome limitations to environmental legislation (Chapter 21). In this novel contribution, Verschuuren elucidates the constraints of both national and international environmental law, and proposes an important role for environmental norms developed by companies and NGOs as a form of non-state law. Furthermore, he explores ways to improve the functioning of national law, including its application outside national boundaries.

Björn Stigson and Margaret Flaherty make a case for sustainable business (Chapter 22). After describing the role of the World Business Council for Sustainable Development (WBCSD) in this process, Stigson and Flaherty indicate how government and business can contribute to the realisation of sustainable development.

In order to defend environmental interests at the EU level, local NGOs have joined forces through the European Environmental Bureau (EEB, Chapter 23). John Hontelez explains the modus operandi of the EEB and describes the EEB's influence on recent EU regulation and institutions. Hontelez also pleads for better regulation and the enhanced involvement of civil society and progressive business.

Gert Spaargaren and Arthur Mol highlight the role of citizen-consumers in a globalised setting (Chapter 24). They review literature on ecological citizenship, sustainable consumption, and global civil society. Referring to lifestyle studies, Spaargaren and Mol argue that national environmental policies can be effective if different aspects of citizen-consumer behaviour are considered simultaneously.

Finally, Moritz von Unger and Thiago Chagas discuss carbon trading, an innovative instrument in environmental policy-making (Chapter 25). In this novel contribution, Von Unger and Chiagas portray the development of government-driven and voluntary carbon schemes in a variety of geographical settings, analysing both the chances and critiques of this cap-and-trade instrument. They conclude that carbon trading has the potential to efficiently allocate the massive private funds that are required for climate change mitigation.

# OUTCOMES AND FUTURE DIRECTIONS

While the richness and specificity of the different chapters does not allow for shorthand, facile conclusions, some connecting threads can be woven. Findings highlighted by several authors and complementarities between various contributions may be summarised under the following headings.<sup>36</sup>

# The Delicate, Multifaceted Relation between Ecology and the Economy

Generally speaking, there is, at best, weak statistical evidence of relations between the globalisation of economic activities and positive or negative environmental changes. While hard-and-fast statements should be avoided because causalities are very hard to establish, if only because of almost insurmountable data problems, the negative effects of international trade and foreign direct investment (FDI) on the natural environment have sometimes been overstressed, as has been the presumed negative impact of environmental measures on economic development.<sup>37</sup> Global economic

<sup>&</sup>lt;sup>36</sup> The references in this section concern arguments made by the contributors to this volume.

<sup>&</sup>lt;sup>37</sup> Kalamova and Johnstone; Pieters.

activities may adversely affect the environment,<sup>38</sup> but this may be outweighed by the regional or global diffusion of stringent local environmental regimes.<sup>39</sup> In any case, we need better assessment and communication of the impact of trade and investment on the environment, on the one hand, and of the competitive effects of national environmental regulations, on the other hand.<sup>40</sup> The relationship between environmental policy and FDI is rather complex. While there is some evidence that stringent environmental policies may deter certain investments, there seem to be more indications of 'a race to the top'.<sup>41</sup> Therefore, the pursuit of economic and environmental objectives does not necessarily involve trade-offs.

At the same time, though, the effect of more stringent standards may, at least partially, be crowded out by the upsurge of economic activities, especially in emerging markets. The additional demand for natural resources and the enhanced pollution from production and consumption often outweighs the preference of cleaner economic activities and products in these quickly expanding markets. In other words, the positive technique, income, and composition effects may be overtaken by negative scale effects.<sup>42</sup>

Economic globalisation and environmental protection can be made more compatible if a number of conditions are met, such as: $^{43}$ 

- Trade, FDI, and environmental policies pull in the same direction and create synergies, for example, by abolishing those subsidies that lead to trade distortion and environmental disruption, and by promoting the international trade of environment-friendly products.
- Technological development becomes more geared towards sustainability and its transfer is promoted.
- Environmental externalities are internalised, either through volume restrictions on inputs and emissions or through price-based instruments, so that the allocation of costs and benefits incorporates environmental concerns.
- Environmental policies are in place timely, implying that polluting now while generating growth and cleaning up later is not a sustainable strategy.

Yet, conflicts may arise between economic and environmental policies. Environmental regulations – particularly those developed by virtue of the subsidiarity principle (i.e., national discretion to regulate issues that do not necessarily call for supranational measures) – are often tailored to local circumstances and may clash with free-trade imperatives, which call for a

<sup>&</sup>lt;sup>38</sup> Ozinga and Mowat; Van Kasteren.

<sup>&</sup>lt;sup>39</sup> Pieters; Vogel et al.

<sup>&</sup>lt;sup>40</sup> Kalamova and Johnstone; Kölliker.

<sup>&</sup>lt;sup>41</sup> Pieters.

<sup>&</sup>lt;sup>42</sup> Esty and Ivanova.

<sup>&</sup>lt;sup>43</sup> Kölliker; Pieters; Stigson and Flaherty; Von Moltke; Von Unger and Chiagas.

uniform regulative framework.<sup>44</sup> Moreover, local differentiation of environmental standards results in a scattered market for environmental technologies, hence leads to few if any dedicated R&D activities.<sup>45</sup> As economic objectives often have high priority, it is important to design environmental policies that have minimal trade effects.<sup>46</sup> However, the fact that national environmental regulations affect international trade flows does not necessarily involve rejection of the environmental rules: if they serve environmental objectives that are important both ecologically and in relation to the economic costs incurred, and if there are no alternatives with less unfavourable economic effects, the WTO may authorise them.<sup>47</sup> The political preferences of national governments thus continue to play an important role.

Local or national environmental regimes may spill over to the federal level or to other countries. Evidence of both positive and negative effects is provided. Several authors show instances of a 'race to the bottom'.<sup>48</sup> In their views and studies, regionalisation or globalisation discourages stringent regulation and leads to unleashed market forces that do not allow for environmental considerations. As a result, the environment is harmed: more fossil fuels are being exploited, biodiversity is increasingly reduced, and the illegal logging of tropical forests is aggravated.

By contrast, there is also evidence of a 'race to the top' in the US and the EU.<sup>49</sup> Stringent local standards in proactive states spread to other states via the central level, especially in the EU. However, a further tightening of EU environmental regulations relies on the optimistic assumption that there is the political will to do so.<sup>50</sup> On the other hand, there is always technical change, which is stimulated by public pressure. Innovative technologies may spread, followed by formal regulations.<sup>51</sup> One way of raising environmental performance is to stimulate the diffusion of environment-friendly technologies, in which innovation-policy instruments should be tailored to the prevailing circumstances.<sup>52</sup> Stringent environmental standards may also spread through private actors: proactive multinational companies may set corporate standards that apply worldwide, for all their subsidiaries.<sup>53</sup>

<sup>&</sup>lt;sup>44</sup> Jansen and Keck; Krämer; Von Moltke.

<sup>&</sup>lt;sup>45</sup> Pieters; Visser.

<sup>&</sup>lt;sup>46</sup> Kölliker.

<sup>&</sup>lt;sup>47</sup> Jansen and Keck.

<sup>&</sup>lt;sup>48</sup> Kalamova and Johnstone; Ozinga and Mowat.

<sup>&</sup>lt;sup>49</sup> Krämer; Pieters; Vogel et al.

<sup>&</sup>lt;sup>50</sup> Krämer.

<sup>&</sup>lt;sup>51</sup> Pieters.

<sup>&</sup>lt;sup>52</sup> Kemp et al.

<sup>&</sup>lt;sup>53</sup> Stigson and Flaherty; Verschuuren; Zoeteman and Harkink; Zoeteman and Kersten.

These empirical findings and a literature review<sup>54</sup> lead us to conclude that national environmental standards tighten up if:

- There is the political will to protect the environment.
- Civil society, company head offices, and politicians expect or demand higher standards.
- Non-environmental aspects (such as access to inputs or markets and ease of governance) dominate over (the costs of) environmental standards in business location decisions.
- Market demands or government regulations induce global business to engage in technological innovation, which is subsequently applied worldwide to exploit economies of scale.
- NGOs pressurise private companies for example, by boycotting brands or companies in order to compensate for the relative absence of the state.

A systematic solution for the tension between trade liberalisation and environmental protection is proposed in two different directions. One possibility is to reform the WTO in such a way that environmental concerns are more fully integrated into economic decisions.<sup>55</sup> The other approach is to negotiate and facilitate environmental issues in a specialised World Environment Mechanism.<sup>56</sup> The former approach would seem to hold out better perspectives in the short term, although environmental problems are often more complex than trade issues. It is likely that a broadly perceived global environmental crisis is needed before nation-states are willing to give up part of their sovereignty to a World Environment Mechanism.<sup>57</sup>

#### **Changes in Domestic Environmental Issues**

Once industrialised countries have solved or contained their local problems such as soil pollution, the more persistent international environmental problems remain an item on the political agenda. While domestic problems with an international character (such as international waste transports, transboundary water pollution, and climate change) have been around for a long time, national governments are now facing new opportunities and constraints in solving them. For example, national governments can impact the EU agenda, thus 'exporting' national priorities; at the same time, they see their discretion reduced through imposed EU legislation.<sup>58</sup>

Collective action is difficult, especially at the international level. Yet, transboundary problems of a public or semi-public nature must be addressed

<sup>&</sup>lt;sup>54</sup> Kalamova and Johnstone.

<sup>&</sup>lt;sup>55</sup> Jansen and Keck; Von Moltke.

<sup>&</sup>lt;sup>56</sup> Esty and Ivanova.

<sup>&</sup>lt;sup>57</sup> Zoeteman and Harkink.

<sup>&</sup>lt;sup>58</sup> Veenman and Liefferink.

at the regional or global level,<sup>59</sup> in which it is important to note that the nature of environmental problems is amenable to human interpretation.<sup>60</sup> The propensity to engage in global collective action has recently risen with the widespread acceptance of the necessity to address climate change, although it may be argued that this collective cause is best served when a small group of major countries takes the lead.<sup>61</sup> Alternatively, large companies that – voluntarily or under regulative pressure – engage in carbon trading may garner a critical mass to mitigate climate change.<sup>62</sup>

Though some transboundary environmental problems can and should be solved differently in a globalised world, some domestic problems have been created or aggravated by globalisation. Free trade may lead to higher production and consumption levels, scaling-up, and the geographic reallocation of activities, which, in their turn, may affect the national environment. Moreover, globalisation has accelerated the exploitation of precious natural resources such as tropical forests and has hampered their environmentally sound management.<sup>63</sup> Furthermore, global suppliers may be discouraged from supplying environment-friendly products to small markets.<sup>64</sup> Problems that have been engendered or aggravated by globalisation are much more difficult to solve, especially when important economic forces are at work, as in the case of agriculture, natural resources, and chemicals. The global battle for access to natural resources has recently been intensified by the rapidly increasing demand of large Asian economies, which has led to (temporary) shortages of minerals (such as iron ore and phosphate) and other economically critical natural resources.

#### Shifts in Governance Mechanisms

The progressive specialisation of economic activities has led to a process of increased global supply chain disaggregation, whereby a product's value chain is scattered around the world.<sup>65</sup> As a result, domestic environmental policies cover only a part of the whole product chain. National government's loss of grip on economic activities is enhanced by the fact that multinational companies ever more operate in regional clusters and global alliances, implying that they are more exposed to foreign influences. The WBCSD is a

<sup>59</sup> Kölliker.

<sup>&</sup>lt;sup>60</sup> Conceição and Kaul.

<sup>61</sup> Kölliker.

<sup>&</sup>lt;sup>62</sup> Von Unger and Chiagas.

<sup>&</sup>lt;sup>63</sup> Ozinga and Mowat.

<sup>&</sup>lt;sup>64</sup> Pieters; Van Kasteren.

<sup>&</sup>lt;sup>65</sup> Pieters.

prominent example of a cooperative platform of environmentally proactive companies.66

Not only companies but also other private actors have widened their scopes beyond national boundaries. Local NGOs have joined forces in international networks, such as the EEB, in response to the shift of regulative power from local and national levels to the supranational level, such as the EU.<sup>67</sup> Other NGOs (such as WWF) are global players. They focus on global environmental problems, even if these often involve local action.<sup>68</sup> The behaviour of individual citizens is susceptible to global influences.<sup>69</sup> Citizens equally organise themselves increasingly on a global scale.<sup>70</sup> These civil networks are constructed with the aid of the internet and attract huge media attention. The negative publicity and boycotts engendered by (perceived) local environmental missteps have the potential to negatively affect the global corporate image and market performance of multinational companies.<sup>/1</sup> Several sector studies have shown that such inherent forces move multinational companies to perform better from a sustainability point of view.<sup>72</sup> Next to the creation or enhancement of purely business or civic networks, we have witnessed the mushrooming of international business-NGO networks in recent years.<sup>73</sup> These hybrid networks fill a governance void, combining the agility and resources of companies with the legitimacy and knowledge of NGOs.

The process in which many societal actors increasingly move to international arenas for information exchange, negotiation, policy-making, and enforcement - which are beyond direct national control - has put pressure on national governments to add a networking role to their traditional roles as regulators and supervisors. There is a multitude of formal and informal networks in which governments seek alliances for their specific interests and exert influence in the power centres of informal forums such as the G20 or supranational organisations such as the EU and the United Nations (UN).<sup>74</sup> The effectiveness of relational networks may benefit from a central organism that facilitates and coordinates actions outside extant power structures.75

<sup>&</sup>lt;sup>66</sup> Stigson and Flaherty.

<sup>67</sup> Hontelez.

<sup>&</sup>lt;sup>68</sup> Glasbergen; Verschuuren.

<sup>&</sup>lt;sup>69</sup> Spaargaren and Mol. <sup>70</sup> Zoeteman and Kersten.

<sup>&</sup>lt;sup>71</sup> Verschuuren.

<sup>&</sup>lt;sup>72</sup> Ozinga and Mowat; Zoeteman and Harkink.

<sup>&</sup>lt;sup>73</sup> Glasbergen; Verschuuren.

<sup>74</sup> Streck and Dellas.

<sup>&</sup>lt;sup>75</sup> Esty and Ivanova.

Apart from political interactions in the more classic 'public-public' policy networks,<sup>76</sup> governments increasingly participate in 'public-private' networks to exchange information, share facilities, and jointly manage products, processes, or regions.<sup>77</sup> Such platforms for governments, companies, and NGOs can be effective if they meet certain conditions for cooperation, including expected benefits for all parties involved, willingness to realise common goals, and readiness to make individual resources collectively available.<sup>78</sup>

### **Coping with Changed Sovereignty**

Increasing numbers of international and supranational directives, conventions, and related regulations impose more and more obligations on individual states and limit their sovereignty.<sup>79</sup> Furthermore, because ever more state and non-state actors are involved in consultation and decision-making, the impact of small and medium-sized individual states on the development of international policy is continuously dwindling.<sup>80</sup>

Hence, new strategies are needed for proactive governments to enhance the impact of their initiatives. Strategies to achieve good results include prioritisation and linkage of issues, coalition formation or partnerships with other groups of societal actors (especially progressive companies and NGOs), allowing more experimentation freedom to new and promising initiatives, and investment in scientific knowledge.<sup>81</sup> Furthermore, supranational arrangements may enable governments to upload national policies or policy objectives to a higher institutional level.<sup>82</sup> The reach of environmental policies whose scope was confined to national boundaries then becomes an internationally shared one, increasing its effectiveness considerably and collecting at the international level the best approaches developed by individual nations. Also, economy-environment compatibilities and trade-offs should be analysed in advance, and a sufficiently independent position of environmental interests should be aimed at in economy-driven international or supranational negotiations.<sup>83</sup>

The development of more international and supranational policies has led to important shifts in the use of domestic policy instruments. While national governments used to choose their national targets and implement the

<sup>&</sup>lt;sup>76</sup> Veenman and Liefferink; Vogel et al.

<sup>&</sup>lt;sup>77</sup> Glasbergen; Stigson and Flaherty; Von Unger and Chiagas.

<sup>&</sup>lt;sup>78</sup> Conceição and Kaul; Opschoor; Streck and Dellas; Visser; Zoeteman and Harkink.

<sup>&</sup>lt;sup>79</sup> Jansen and Keck; Krämer; Van Kasteren.

<sup>&</sup>lt;sup>80</sup> Hontelez.

<sup>&</sup>lt;sup>81</sup> Veenman and Liefferink; Zoeteman and Kersten.

<sup>&</sup>lt;sup>82</sup> Veenman and Liefferink; Vogel et al.

<sup>83</sup> Esty and Ivanova; Kölliker; Von Moltke.

instruments as they saw fit, these are now more the result of international negotiations. In this international arena, partners must have enough confidence in the chosen instruments at the national level that the targets are being met. Arguably, this promotes the use of environmental performance standards, since they offer more certainty that the internationally agreed objectives will be met than, for instance, taxes. At the same time, international agreements continue to be implemented through national judicial systems. Countries can often impose stricter standards than called for in the agreements, to the extent that the relation between domestic goals and (environmental and trade) effects stands to reason.<sup>84</sup> Although international agreements limit the choices governments have once the agreement has been struck, still there remains much freedom in implementing the agreement.<sup>85</sup> As a result, fairly large, self-inflicted differences continue to exist among EU member states.<sup>86</sup>

Another important route to enhancing the sustainability of economic activities through internationally concerted action is the development of soft law, like OECD guidelines, where countries adopt similar rules without proceeding to formal legislation.<sup>87</sup> Governments can equally develop joint initiatives with like-minded nations and global companies.<sup>88</sup> Such initiatives may include agreements on more sustainable performance in combination with export-credit guarantees, cofinancing, ecolabelling, and public-performance rating.<sup>89</sup> Grants to certified companies for managing global commons could also be part of new arrangements. The newly created Green Climate Fund and carbon markets are other options to engage in coalitions of the willing beyond national boundaries.<sup>90</sup>

#### **Promotion of Self-Enforcing mechanisms**

Many international agreements are not respected because the actors involved, or targets aimed at, do not face the appropriate incentives. This goes particularly for global public and common pool environmental resources.<sup>91</sup> In the absence of an effective world government, governments may then look for self-enforcing mechanisms. Market forces can sometimes be structured in ways that stimulate environment-friendly solutions. The proliferation of ecolabels and business-NGO partnerships suggest this is a viable option,

<sup>84</sup> Jansen and Keck.

<sup>&</sup>lt;sup>85</sup> Hontelez; Jansen and Keck; Krämer; Van Kasteren.

<sup>&</sup>lt;sup>86</sup> VROM Raad, 2008.

<sup>&</sup>lt;sup>87</sup> Verschuuren; Visser.

<sup>&</sup>lt;sup>88</sup> Zoeteman and Harkink.

<sup>&</sup>lt;sup>89</sup> Conceição and Kaul; Ozinga and Mowat.

<sup>&</sup>lt;sup>90</sup> Von Unger and Chiagas.

<sup>&</sup>lt;sup>91</sup> Conceição and Kaul; Kölliker.

whereby it is critical that such arrangements offer both economic and environmental advantages.<sup>92</sup> What is more, globalisation itself, leading to networks of collaborating firms, may lead to more technological change (including 'green technology') and the enhanced global diffusion of new (environmentally benign) technology, especially when large sales markets adopt relatively stringent environmental standards.<sup>93</sup>

If this is not the case, global public agreements should be conceived in such a way that it is in the nation-states' own interest to participate, for example, because participation provides access to restricted markets or proprietary technologies. If public goods can be turned into club goods that are non-rival in nature and available only to participants, collective action problems can be reduced or even solved.<sup>94</sup> A third course of action is to develop instruments that are applicable both domestically and internationally, and that allow for cost-effective solutions while achieving ambitious environmental objectives, for example, through internationally tradable carbon credits and permits as well as regional covenants.<sup>95</sup>

# **Prospects for Environmental Policy Instruments**

Conventional public-policy instruments are licences, standards, levies, subsidies, taxes, and tradable permits. To avoid competitive distortions for domestic industries and to avoid supranational sanctioning of unachieved targets, nations may choose, or be forced, to downgrade their ambition levels and use the conventional toolkit sparingly.<sup>96</sup> Yet, we have also witnessed the collective upgrading of many environmental standards in the EU and the US.<sup>97</sup> It is not certain that this ratcheting-up process will continue, although the mechanisms on which it is based (such as the California effect and popular pressure in heavily polluted areas) are still in place.

In these circumstances, proactive national governments can still take a number of actions:

- Avoid national participation in a race to the bottom, for example, by adhering to internationally agreed process and product standards.<sup>98</sup>
- Stimulate race-to-the-top effects by supporting regional or global product standards such as chemicals classifications and international ecolabelling systems.<sup>99</sup> Likewise, reward forerunners and penalise laggards.<sup>100</sup>

<sup>&</sup>lt;sup>92</sup> Glasbergen; Stigson and Flaherty; Verschuuren.

<sup>&</sup>lt;sup>93</sup> Kölliker; Pieters.

<sup>&</sup>lt;sup>94</sup> Conceição and Kaul; Kölliker.

<sup>&</sup>lt;sup>95</sup> Von Unger and Chiagas.

<sup>&</sup>lt;sup>96</sup> Kalamova and Johnstone; Kemp et al.; Ozinga and Mowat.

<sup>&</sup>lt;sup>97</sup> Krämer; Pieters; Vogel et al.

<sup>&</sup>lt;sup>98</sup> Kölliker; Pieters.

<sup>&</sup>lt;sup>99</sup> Ozinga and Mowat; Visser; Vogel et al.

- Foster the development of NGOs to expose environmental evils,<sup>101</sup> act as countervailing powers,<sup>102</sup> and/or fill a global governance void.<sup>103</sup> NGOs themselves should also be critically monitored to make sure that their actions are in the best interest of the environment.
- Create and foster informal networks and partnerships around 'coalitions of the willing', involving public and private actors at the local, national, regional, and global levels.<sup>104</sup>
- Promote voluntary codes of conduct by favouring or rewarding companies that have an environmental code certification and stimulate multinational companies whose headquarters are within the national territory to adopt universal environmental standards for all their subsidiaries.<sup>105</sup>
- Tailor 'green' innovation-policy instruments to the prevailing circumstances, anticipate economies of scale in technological innovations, and bridge the financial gap between present investments and future payoffs.<sup>106</sup>
- Sanction domestically registered companies for acts that are considered environmental offences under national law, also when committed in countries with lenient regulatory regimes.<sup>107</sup>

# **Balancing Globalisation and National Environmental Policy**

Globalisation has enhanced, if not created, an intertwining of issues, actors, and states. At the same time, the centres of gravity have shifted beyond national borders: environmental decisions are increasingly being taken by supranational institutions (such as the G20, EU, NAFTA, ASEAN, and WTO) and by large multinational companies. In order to develop and implement effective environmental policies and to maintain or restore legitimacy towards their citizens, governments need to take appropriate and concerted action, both domestically and internationally. In choosing the appropriate administrative level, governments should not think primarily in terms of the nature of a problem itself, for example, a global issue such as climate change, but rather in terms of the forum where solutions to this problem could be most effectively addressed, which might involve a regional regime or a small group of frontrunning countries.<sup>108</sup>

<sup>&</sup>lt;sup>100</sup> Pieters; Zoeteman and Harkink.

<sup>&</sup>lt;sup>101</sup> Hontelez; Kemp et al.; Ozinga and Mowat.

<sup>&</sup>lt;sup>102</sup> Opschoor.

<sup>&</sup>lt;sup>103</sup> Kemp et al.; Verschuuren.

<sup>&</sup>lt;sup>104</sup> Esty and Ivanova; Glasbergen; Streck and Dellas; Zoeteman and Harkink.

<sup>&</sup>lt;sup>105</sup> Stigson and Flaherty; Zoeteman and Harkink.

<sup>&</sup>lt;sup>106</sup> Kemp et al.; Kölliker.

<sup>&</sup>lt;sup>107</sup> Verschuuren.

<sup>&</sup>lt;sup>108</sup> Kölliker.

National governments are losing classic policy options: long-term targets are controversial in the international arena; subsidies may have to be restricted to avoid international trade distortions or because of budgetary limitations; levies and taxes are more difficult to effectuate; and national covenants may fit poorly with international accountability imperatives. While tradable permits or carbon certificates surely lend themselves easily for internationally addressing environmental issues, creating a trading system is a large and complicated undertaking that is only feasible if the damage caused by the pollutant is independent of the place of release. As a result, such schemes will be used in only few, albeit important instances.<sup>109</sup> There is also less room for new initiatives in areas that have already been regulated in an international framework. Yet, new partnerships may emerge, and innovative policy instruments can be developed. This requires an entrepreneurial role for public authorities to use the opportunities that globalisation offers.

Not all policy areas are equally vulnerable to loss of ambition. Special concern is needed for:

- Environmental issues lacking owners: global commons such as oceans, ice caps, climate, and the ozone layer.<sup>110</sup>
- Natural resources representing large economic interests, for example, the trade in rare species or tropical timber, which are reflected in international economic agreements that lack accompanying environmental measures.<sup>111</sup>
- Environmental problems causing local harm but requiring large-scale technological solutions, such as low-emission vehicles and crop protection.<sup>112</sup>
- Environmental issues requiring international enforcement of measures, for example, preventing waste exports and mitigating climate change.<sup>113</sup>
- Problems lacking environmental champions who implement local measures and push towards acceptance of progressive policies at the central level, such as Germany in the EU and California in the US.<sup>114</sup>
- Environmental issues sensitive to corruption, such as the exploitation of natural resources, especially in developing countries.<sup>115</sup>

Given these changes and the limited possibilities for national governments to resist the effects of globalisation, we need shifts towards instruments that can be used nationally. Such shifts may include:

• The reduced use of those levies and other instruments that distort international markets.<sup>116</sup>

<sup>&</sup>lt;sup>109</sup> Pieters.

<sup>&</sup>lt;sup>110</sup> Conceição and Kaul; Kölliker; Ozinga and Mowat.

<sup>&</sup>lt;sup>111</sup> Ozinga and Mowat.

<sup>&</sup>lt;sup>112</sup> Conceição and Kaul; Van Kasteren; Vogel et al.

<sup>&</sup>lt;sup>113</sup> Kölliker, Verschuuren.

<sup>&</sup>lt;sup>114</sup> Krämer; Veenman and Liefferink; Vogel et al.

<sup>&</sup>lt;sup>115</sup> Opschoor; Ozinga and Mowat.

- Increased cross-border cooperation with foreign governments, multinational companies, and global NGOs.<sup>117</sup>
- Exploration of and engagement in partnerships.<sup>118</sup>
- Increased use of higher-level (i.e., federal, regional, or global) standards instead of lower-level (i.e., national or local) standards.<sup>119</sup>
- Greater emphasis on the education of, and communication with, civil society.<sup>120</sup>
- Promotion of self-regulation and private initiatives with environmental robustness.<sup>121</sup>

In conclusion, the studies in this volume show that the impact of globalisation on national environmental policy is huge, but also that national governments have, in their turn, contributed to (further) globalisation. While some changes have occurred in a short period, many have taken place more progressively and may have remained unnoticed to many. Since this book's first edition, many of the phenomena described in the earlier edition have persisted. Also, many of the trends signalled by the different authors have materialised or intensified in the meantime. In the second edition, we have made every effort to keep abreast of new developments through significant revisions of existing chapters and the addition of six novel contributions. The result, we hope, is a comprehensive book that adequately represents the state of the art, describing and analysing opportunities and threats as well as actors, factors, and interactions at the interface of globalisation and national environmental policy.

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<sup>&</sup>lt;sup>116</sup> Jansen and Keck; Stigson and Flaherty.

<sup>&</sup>lt;sup>117</sup> Conceição and Kaul; Visser; Zoeteman and Harkink.

<sup>&</sup>lt;sup>118</sup> Glasbergen; Opschoor; Streck and Dellas; Verschuuren.

<sup>&</sup>lt;sup>119</sup> Pieters; Visser; Vogel et al.

<sup>&</sup>lt;sup>120</sup> Spaargaren and Mol; Zoeteman and Kersten.

<sup>&</sup>lt;sup>121</sup> Glasbergen; Stigson and Flaherty; Verschuuren; Zoeteman and Harkink.

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