



## Introduction

### *International Organizations and Environmental Protection in the Global Twentieth Century*

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Carbon dioxide emissions contribute to rising average surface temperatures and the melting of arctic sea ice as well as ocean acidification, threatening precious natural habitats like coral reefs. In 2014, the Intergovernmental Panel on Climate Change (IPCC) predicted with 'high confidence' in its fifth assessment report that, even in the case of moderate global warming, many regions in the world would experience more extreme weather events in the future. Moreover, a rise in the average global temperature of around three per cent would lead to 'extensive biodiversity loss'.<sup>1</sup> The report outlined two extreme scenarios: one, a 'low-emission mitigation scenario', in which states worldwide reduce their emissions substantially and take coordinated systematic action to control their impact, limiting the rise in temperature to 2.6 degrees centigrade during the period from 2081 to 2100 (compared to the mean temperature between 1986 and 2005); and, two, a catastrophic 'high-emission scenario' with a temperature rise of 8.5 degrees centigrade in the same period.<sup>2</sup>

The fifth IPCC assessment report resulted from a global effort since 2008 to collate and interpret scientific data on climate change. A total of 259 authors from thirty-nine countries debated the physical science base of climate change, receiving 54,677 comments in the process. A total of 309 authors from seventy countries analysed issues regarding the impact of climate change, adaptation to its consequences and the vulnerability of different human societies, considering 50,444 comments in the course of their work. Finally, 235 authors from 57 countries devoted themselves to identifying ways to mitigate climate change, incorporating 38,315 comments.<sup>3</sup>

The scale and character of the IPCC's recent globally cooperative work aptly illustrates many of the key issues covered in this book about the role of international organizations (IOs) in addressing environmental problems in the global twentieth century. First, it highlights the growing role of scientific experts and their networks in drawing attention to and assessing environmental hazards and advocating policy solutions at both the international and national levels. Secondly, it points to the high level of insecurity not only about the quality and validity of this data, but also their interpretation and resulting predictions for the future. Ideological preferences and economic and political interests, as well as different scientific concepts, methods and data interpretations, influence the results eventually presented to policy makers and the public. Thirdly, the IPCC work demonstrates the role of IOs in structuring global cooperation on environmental protection, shaping debates and advocating policy solutions. Fourthly, it shows the ambiguous, dual role of IOs such as the IPCC as both political institutions and expert bodies.<sup>4</sup> Finally, it becomes clear that multiple actors are involved in these debates. IOs create platforms for cooperation and contestation, not just among diplomats from national governments – as 'realist' and 'neorealist' models of international relations suggest<sup>5</sup> – but also by scientific experts, international non-governmental organizations (INGOs) and journalists who can influence these debates through their media reporting.<sup>6</sup> It is this multifarious character of IOs and of their work on environmental protection that this book seeks to explore and better understand.

The modern notion of the 'environment' alerts us to humanity's increasingly problematic relationship with nature. It emphasizes nature's widespread degradation due to human interference and suggests that nature must be protected from humankind. The environment is a political concept that encompasses many different dimensions, from air and water pollution to the loss of habitats and biodiversity, for example, and conceives of the problem as global in scope.<sup>7</sup> However, such a broad notion – inspired by the postwar rise of ecology and the popularization of ecological thinking – has only existed since the late 1960s, as Jan-Henrik Meyer shows in his first chapter in this book. Until then, the media and public across the Global North discussed different phenomena of environmental degradation separately, without yet fully grasping their interrelated character that seems so obvious today. The preservation of natural habitats and the creation of national parks had been a concern since the late nineteenth century. Air and water pollution was initially seen as a hygiene and health issue before its wider impact (such as

through so-called acid rain) on plants, natural habitats and biodiversity became more obvious.

This fragmentation of environmental issues was reflected in the bureaucratic organization of governments, ministries and their agencies. In a first wave between 1970 and 1973, Australia, Austria, Canada, Denmark, East Germany, France, Italy, Norway and the United Kingdom established environmental ministries. Other countries, such as the West German Federal Republic of Germany, concentrated responsibilities for (almost) all environmental issues within one ministry. Yet another form of institutionalizing environmental policy was to create separate environmental protection agencies, with often wide-ranging competences, such as the pioneering Swedish *Naturvårdsverket*, which dates back to 1967, the Environmental Protection Agency (EPA) in the United States, founded in 1970, and the Environmental Agency in Japan, established in 1971. Almost a decade later, in a second wave between 1982 and 1988, Brazil, Finland, the Netherlands, Sweden, Switzerland and West Germany, among others, followed and set up environmental ministries.<sup>8</sup> The progressive transformation of the environment into a distinct policy field reflected its rise on the political agenda. At the same time, this process may well have made its much-discussed ‘mainstreaming’ – namely, the systematic incorporation of environmental concerns in the work of all ministries – more difficult.<sup>9</sup>

Environmental degradation is frequently transnational in character. This is what citizens and policy makers became increasingly aware of during the postwar period. Protecting elephants, lions and cheetahs in one colonial territory in Africa was of limited use if they were shot in another territory after crossing the border, as Bernhard Grzimek forcefully demonstrated to Western audiences in his 1959 documentary *Serengeti Shall Not Die*, for instance.<sup>10</sup> Controlling the release of chemicals used in industrial production into rivers could improve the quality of drinking water and protect species. However, it was of limited use if another country upstream increased its own water pollution through the development of new industrial sites without imposing stricter laws. The policy of building tall chimneys as an attempt to solve air pollution problems in countries like the United Kingdom and West Germany perhaps limited its impact there. However, the generally prevailing westerly winds in the Northern Hemisphere made sure that acid rain would come down on trees and lakes in Scandinavia, for example, and destroy forests and fish there – something that encouraged Sweden to place the environment on the international agenda in the late 1960s.<sup>11</sup>

As a result, environmental problems have induced bilateral, transnational and international cooperation for a long time, as Jan-Henrik Meyer explains in greater detail in the first chapter of this book. From the outset of the twentieth century, colonial officials worried about African wildlife across colonies ruled by different European states – although mostly out of concern for game hunting. In 1900, European governments with a stake in Africa agreed upon the Convention for the Preservation of Wild Animals, Birds and Fish in Africa (London Convention), which, however, never entered into force due to a lack of ratification. In 1933, it was replaced by the London Convention Relative to the Preservation of Fauna and Flora in Their Natural State. The meeting in London subsequently led to the establishment of the International Office for the Protection of Nature, the predecessor of the International Union for the Protection of Nature (IUPN), in 1934.<sup>12</sup> At the same time, unintended consequences of global trade for human health were addressed by establishing the International Office of Epizootics (now the World Organisation for Animal Health) in Paris in 1924. Its role was to control and prevent the spread of animal diseases.<sup>13</sup> As humans developed technologies of industrial-style exploitation during the twentieth century, the management of global commons such as oceanic fish resources and marine wildlife, notably whales, equally called for international regulation by conventions. These conventions often established IOs, such as the International Whaling Commission created in 1946. Such regulation was routinely resented and actively undermined or disregarded outright by hunters, whalers and fishermen alike as it limited access to what they and others had long considered boundless and inexhaustible resources.<sup>14</sup>

Early warnings about the capacity of humankind to destroy on a global scale the very resources on which it depended, notably by excessive population growth, date back to the late 1940s. Under the impression of Hiroshima and the destruction wrought by the Second World War, Fairfield Osborn's *Our Plundered Planet* or William Vogt's *Road to Survival* painted the future in black in 1948.<sup>15</sup> However, it was only in the 1960s that an entire wave of much-translated bestselling books highlighted the transnational and global character of what they saw as an unprecedented environmental crisis.<sup>16</sup> The most influential of these books was arguably *Silent Spring* by the American biologist Rachel Carson in 1962. In it she condemned the apparently reckless use of pesticides, notably DDT, and the resulting lasting chemical contamination of the environment on a global scale.<sup>17</sup> Her analysis and

those of other authors such as Paul Ehrlich's *Population Bomb*, Garrett Hardin's *Tragedy of the Commons* or ecologist Barry Commoner's *The Closing Circle*<sup>18</sup> often led them to make gloomy if not apocalyptic prophecies about the state of the global environment. These culminated in the Club of Rome's 1972 report *Limits to Growth*.

*Limits to Growth* presented different future scenarios of global environmental development similar to what the IPCC produces today. At the time, however, such computer-calculated global models were unprecedented. This clearly contributed to the impact they had on the public. These scenarios aimed at assessing and making predictions about the development of food and other resources and the accumulation of waste on a global scale, under varying conditions such as different levels of population growth and economic expansion. Highlighting the potentially disastrous consequences of continuing the prevalent resource-intensive way of life, the authors advocated a policy change to overcome the self-defeating logic of 'exponential growth'. Their goal was for humanity to arrive at a 'global equilibrium' to avoid cataclysm. They actually made very concrete proposals, such as the development of more efficient technology, including recycling and waste avoidance through durable and easy-to-repair consumer goods, the use of solar energy, natural pest control, better medical provision and contraception.<sup>19</sup> The study – and in particular the gloomy prospects it implied – made a huge impression on Western publics and a number of contemporary policy makers, such as European Commission President Sicco Mansholt.<sup>20</sup> At the same time, the book was quickly caricatured and dismissed by its critics as exaggerating the nature and consequences of environmental destruction.<sup>21</sup>

Against this backdrop, the United Nation's (UN) 1972 Conference on the Human Environment (also referred to as the Stockholm Conference in this book) created a focal point for these debates about planetary limits and the carrying capacity of the globe. Initiated in 1968, it activated natural and social scientists as formal advisors or activists working with INGOs – notably Barbara Ward and René Dubois, who published an 'unofficial report' for the conference called *Only One Earth*<sup>22</sup> – and brought together member state governments with the aim of coordinated global action for environmental protection. Some of the newly established environmentalist INGOs like fledgling Greenpeace and Friends of the Earth also used the Stockholm Conference to stage so-called counterconferences. They called for more radical action, attacking the prevailing economic systems and connected cultures of

consumption for their responsibility for environmental degradation. They also criticized governments on very concrete contemporary global issues, such as whaling or nuclear weapons testing in the Pacific.<sup>23</sup>

The conference highlighted the fragmentation of the international system at the time. Soviet Bloc countries refused to participate, ostensibly in protest against the continued non-admittance of East Germany to the UN. Governments from the Global South argued that the developed countries wanted to impose on the poor countries the costs of dealing with the environmental destruction they had wrought since industrialization in order to retain an economic edge over them, as Stephen Macekura discusses in his chapter. This fragmentation continues to characterize global environmental politics under different auspices until the present day, as the pronounced reluctance of countries like China to commit to binding limits on CO<sub>2</sub> emissions illustrates.<sup>24</sup> It remains to be seen whether the 2015 21st Conference of the Parties (COP21) Paris Agreement on limiting climate change will fundamentally transform this longstanding conflict in terms of its actual implementation on the ground.<sup>25</sup>

In spite of these difficulties, the Stockholm Conference brought about the formation of the United Nations Environmental Programme (UNEP) as a UN agency, with its seat in Nairobi and directed for the first three years by the Canadian Maurice Strong, the conference's secretary-general. Its creation marked a considerable shift towards the globalization of coordinated (albeit limited and only partly successful) action to protect the environment. UNEP became a focal point for global environmental politics and policies at a time when many other IOs also developed a stronger interest in this emerging policy field. In 1970, for example, the Organisation for Economic Co-operation and Development (OECD), created in this form in 1961, was the first IO to institutionalize a directorate and committee for the new policy field.<sup>26</sup> From then onwards, IOs, including regional integration organizations like the present-day European Union (EU), became active players in environmental politics. The origins of the EU's supranational environmental policy, which came under the qualified majority voting procedure with the Maastricht Treaty in 1993, date back to the 1970s. Without a treaty competence, the then European Communities instigated two environmental action programmes in 1973 and 1977 and passed the Birds Directive for protecting endangered avian species in 1978/79.<sup>27</sup>

These IOs drew on the evident functional need for transnational and global coordination, which was one of their traditional tasks. They

linked a variety of actors with an interest in environmental problems; collated, analysed and disseminated data and knowledge about environmental hazards and degradation; developed agendas and recommended policy solutions; fostered greater global institutionalization of environmental politics; and advocated and drafted international protocols and conventions, inducing member states to support and sign them. This in turn required domestic legislative and administrative changes to comply with new rules and regulations. In short, IOs mattered for environmental protection in the global twentieth century.

In this book we explore how they mattered. We enquire, to begin with, about who became involved in global environmental politics and how. We consider a wide range of actors from expert scientists to INGOs in a policy field that cannot be properly understood with sole reference to the bargaining of member states about their ‘interests,’ even though national governments played a crucial role in shaping new institutions and taking binding decisions. Thus, IOs and INGOs as well as (usually a number of) governments frequently worked closely together, for instance, to propagate strict limits on whaling, which became severely curtailed, although not outlawed completely.

We also wish to explore how IOs helped to shape ways of thinking and talking about environmental issues and necessary global protective measures, or what political scientists call agenda setting.<sup>28</sup> IOs established links with scientists and fostered the formation of their international networks. The politics–science nexus provided IOs with scientific capital in the form of expertise and knowledge, but also with policy ideas and legitimacy for demanding internationally coordinated action for environmental protection. Although not free of friction, cooperation with INGOs, too, helped IOs shape transnational and global debates. These INGOs often saw IOs as natural partners in their attempt to overcome national resistance to substantive legislative and financial commitments. After all, IOs could suggest action, but such action largely had to be implemented and paid for at the national level.

We are further interested in how existing IOs responded to the new policy challenges and how new organizations were formed to meet them. To begin with, IOs transformed their own internal organizations for discussing environmental matters. However, bureaucratic patterns sometimes persisted across organizational changes. Thus, the new OECD directorate was initially staffed with economists from elsewhere in the organization so that economic perspectives continued to dominate its main institutional mission. They were applied to this new policy field,

too. But new organizations like UNEP and specialized agencies like the IPCC were also set up and created new path dependencies.<sup>29</sup> Initial decisions covering, for example, the organization's mission, the location of its headquarters or the appointment of its secretary general often had a long-term impact on its environmental work.

Finally, we enquire into temporal change in the way in which IOs have addressed environmental concerns in the global twentieth century, with particular emphasis on the period since the 1960s. The time around the Stockholm Conference from the late 1960s well into the 1970s appears as a kind of *Sattelzeit*, or 'saddle period', a term originally coined by the German historian of concepts Reinhart Koselleck to denote the transition from the early modern to the modern period, which involved the invention of new political concepts and the greater politicization of societies.<sup>30</sup>

The new postwar saddle period brought about crucial transformations, especially new political concepts of the environment and its protection, and a more decisive globalization of debates about the environmental crisis. Arguably, it also substantially enhanced the role of IOs in the search for solutions and internationally coordinated action.<sup>31</sup> At the same time, only one year after the Stockholm Conference, the first oil crisis ended nearly thirty years of growth in the Western world after the Second World War.<sup>32</sup> In the light of rising unemployment and budget and state deficits, governments became much more preoccupied with economic policy issues again and sometimes less able and willing politically to bear the short- and medium-term costs of more far-reaching environmental protection policies.<sup>33</sup> To what extent discursive shifts at the international level towards new environmentalist rhetoric were actually followed up by concrete policy changes at the national and subnational levels remains an important issue for empirical research. However, such comparative research on the implementation of agreed environmental norms and regulations is only in its infancy, even in political science,<sup>34</sup> and is beyond the scope of this book.

Thus, our book mainly relates and contributes to four sets of literature. One of these is the transnational, international and global history of the twentieth century. This has become much more open, compared to the older diplomatic history, towards considering the role of actors other than national governments and motivations other than the rational calculation of mostly material interests.<sup>35</sup> Transnational history focuses on crossborder issues and action by people, networks and institutions. It has recently improved our understanding of regional integration as a

special case of IO involvement.<sup>36</sup> It emphasizes, for instance, that the present-day EU led to the formation of a transnational society and polity of sorts, that is, far more than an intergovernmental setting for the bargaining of interests by member state governments.<sup>37</sup> Our book shows how such transnational networks and cooperation stretched not just across countries, but also continents, and how they helped shape IO approaches to global environmental politics.

The IOs themselves have increasingly become the focus of international history, forming a second set of more specialized literature. Mark Mazower and Akira Iriye have argued their importance in literature-based overviews of the global twentieth century.<sup>38</sup> Several studies based on archival research have focused on single IOs, such as the League of Nations, the OECD, the North Atlantic Treaty Organization (NATO) and others.<sup>39</sup> Due to its quasi-federal character with many state-like features, much has been written about the history of the present-day EU.<sup>40</sup> With the exception of the EU, much of this emerging literature on IOs focuses on their internal institutional dynamics. However, a few more recent studies have zoomed in on the role of IOs and experts in transnational policy making and regulation, and on transfers of ideas between IOs and INGOs.<sup>41</sup> Our book seeks to make a major contribution to understanding how IOs mattered for particular policy fields and political and legislative decision making globally, at different levels of government and governance. With this approach we hope to break the mould of the older literature with its heavily formal-institutional research design and focus.

With this perspective we hope, thirdly, to provide empirical insights for the ongoing debate in International Relations about the nature of the international system and global politics and policy making, and the links and multiple connections between IOs and other actors.<sup>42</sup> Our findings demonstrate the limited usefulness of notions of international politics as a 'two-level game'<sup>43</sup> of interaction among domestic politics and intergovernmental negotiations within IOs or regional integration organizations like the EU. Experts and INGOs in particular have mattered a great deal in global environmental politics. Moreover, in contrast with the notion of 'epistemic communities' of experts driven by a shared understanding of the scientific issue at hand,<sup>44</sup> the chapters in this book illustrate the strong normative commitments of many experts in this particular field, the heavy political contestation of their expertise and advice, and its use by actors like national governments and INGOs, for their own political agendas.

Finally, the book seeks to contribute to the study of environmental history. Environmental history first developed in the United States in the early 1970s in the context of the growing political concern about environmental degradation.<sup>45</sup> At the time, researchers aimed at analysing human relations with the environment in historical perspective. Two research strands emerged: one focused on changing perceptions of nature from a history of ideas perspective;<sup>46</sup> and another on the actual impact of humans on the environment, such as through colonization.<sup>47</sup> Such studies sought to trace ‘the historical origins of our ecological crisis’, as historian of science Lynn White phrased it in the journal *Science* as early as 1967.<sup>48</sup> In Europe, despite pioneering publications such as an *Annales* special issue published in 1974 under the immediate influence of the new environmental discourse, environmental history as a field emerged much more slowly.<sup>49</sup> Current environmental problems called for historical perspectives, so that, notably in Germany, many researchers focused on the history of pollution, offering an alternative perspective on the conventional story of industrial progress.<sup>50</sup> National histories prevailed,<sup>51</sup> with occasional comparative perspectives.<sup>52</sup> Although environmental movements and states addressed transnational issues and environmental historians became increasingly more connected across borders, researchers continued to focus mainly on their countries of origin or residence.

More recently, a trend has emerged towards international and global perspectives – notably in textbooks and historical overviews.<sup>53</sup> Some historians have begun to explore transnational links and interaction.<sup>54</sup> In contrast, international organizations have only recently received greater attention from environmental historians.<sup>55</sup> However, to understand their role in global environmental politics becomes more crucial than ever as a contribution to making sense historically of ongoing processes of globalization. Moreover, postcolonial theories and calls for decentring Europe (and ‘provincializing’ the EU)<sup>56</sup> equally impel historians towards pursuing global perspectives. A prominent example is the study of the institutionalization and spread of national parks, in which international bodies such as the International Union for the Conservation of Nature (IUCN, formerly the IUPN) played an important role.<sup>57</sup>

Against this background, our book analyses for the first time how IOs have influenced environmental politics in the global twentieth century. In his introductory chapter, Jan-Henrik Meyer provides a historical overview of the role of IOs in this policy field from the origins of bilateral and transnational action to combat environmental degradation before

the First World War until the 1960s by sketching the origins of the Stockholm Conference. The chapter traces how existing international bodies and newly created IOs addressed various aspects of what we now consider environmental concerns. It highlights how conceptions of nature changed at the international level, and examines change and continuity in how IOs framed issues and set agendas.

The remaining nine chapters, which are all based on fresh archival research and, in some cases, interviews, fall into two categories. Three chapters focus on a variety of actors and their role in the preparation of, and negotiations during, the Stockholm Conference: from scientific experts and development economists to the Vatican and the Global South. The six subsequent chapters explore the Stockholm Conference's impact and limits and the role of a variety of IOs in environmental politics until roughly 1992. In this year, the UN Conference on the Environment and Development in Rio de Janeiro resulted in the Framework Convention on Climate Change.

In her chapter Enora Javaudin discusses the crucial role of scientific experts and expertise in propagating and preparing the Stockholm Conference. Transnational voluntary organizations and IOs had involved technology and science experts for a long time, such as in global meteorological cooperation. In the 1960s, however, many scientific experts intervened more forcefully in public debates and became activists of environmental protection. Yet, while scientists sought to develop a sound scientific basis for collating and analysing data and recommending policy solutions, they held diverging views on the nature of the crisis and necessary policy priorities. Some worked for IOs like the UN, while others cooperated with INGOs and participated in their counterconferences at Stockholm.

Development economists constituted another influential group in the preparation of the Stockholm Conference. In his chapter Michael W. Manulak identifies three different approaches to the environment–development nexus that clashed prior to the Stockholm Conference. Eventually, however, a small group of interventionist economists came to dominate the Founex seminar and its report in 1971, which influenced the Stockholm Conference process, its agenda and outcomes. These economists favoured robust government intervention and saw environmental policies primarily as an instrument for limiting environmental disruption and improving human living conditions. Drawing on an influential social science concept, Manulak characterizes this small group as an ‘epistemic community’<sup>758</sup> whose members shared

a similar professional background, academic viewpoint and objectives for global environmental politics.

The preparation for the Stockholm Conference also activated participants who had not previously taken any interest in the environment as a distinctive issue. The Vatican, with its hybrid identity, is a case in point. A microstate and formal participant in the negotiations, the Vatican was at the same time a global religious organization. As Luigi Piccioni shows in his chapter, the Holy See only developed an interest in environmental issues as a result of the UN initiative. It pleaded for environmental protection in line with the 'progressive' Atlantic position of states like Sweden and Canada. At the same time, it sided with the countries from the Global South – some of them predominantly Catholic, such as Brazil – in defending their interest in development, which these countries perceived as the only route to combat poverty. To complicate matters further, the Vatican was largely isolated in the debate over population control, which many scientists and governments advocated as a strategy for limiting environmental degradation,<sup>59</sup> but which the Holy See rejected outright on doctrinal grounds.

Several countries from the Global South actually considered a boycott of the Stockholm Conference, though they eventually participated. Some of these countries defended their development agenda especially vigorously in the face of the challenge of the environmental issue. Thus, Brazil, whose dictatorship gained much of its legitimacy from its policy of accelerated economic development, became the leader of a coalition that sought to water down what they considered the excessive environmentalist fervour of the Northern countries. They sought to ensure continued support at the international level for traditional growth-oriented policies – as a means to overcome poverty and 'underdevelopment'. From this perspective, pollution almost seemed desirable rather than a problem.

Starting the second section on IO activities in environmental politics, Wolfram Kaiser discusses the case of the steel industry from the 1950s to the late 1980s, one of the leading air polluting sectors. IOs dealing with or regulating (in the case of the present-day EU) the steel sector were primarily concerned with reducing the industry's energy consumption to save costs. New process technologies, introduced from the 1950s onwards, reduced consumption and, as a result, emissions. Demand for steel stagnated or fell during the steel crisis in Europe and North America after 1974, which further limited emissions there, but new production facilities and air pollution grew rapidly in developing

countries, especially in Asia. However, IOs like the OECD remained focused on the economic and social costs associated with the sector's crisis, transformation and globalization. They concentrated on studies of new technologies and energy reduction, but as an economic rather than an environmental concern – something that highlights the limited 'mainstreaming' of the environmental protection agenda.

In his chapter, Jan-Henrik Meyer explores the role that competition among IOs as well as transfers of concepts played when the European Communities first set up an environmental policy in the context and wake of the Stockholm Conference in the 1970s. Drawing on the example of the polluter pays principle, he traces how the EC transferred and assimilated this concept and how it became established (in the non-binding legal form of a recommendation) and adapted to the needs of its common market.

Iris Borowy discusses the role of the OECD in global environmental politics. She traces the origins of the organization's commitment to embedded liberalism and free trade policies in the Western world and the shift towards greater attention to the apparent conflict between its agenda for economic growth and the increasing environmental degradation, which resulted from such growth. In 1971, the OECD created a separate environmental division and committee. As Borowy shows, the organization had (and still has) few means of tangible policy influence. Its main role is that of a think tank drawing on internal and external expertise in formalized and informal relationships. In this way, it has been able to significantly influence political agendas, not least by contributing to the development of the concept of 'sustainable development' as an attempt to harmonize its economic growth and development priority with global environmental protection.

The promise of 'sustainable development' is also at the heart of Stephen Macekura's analysis of the origins of the World Conservation Strategy (WCS). As he shows in his chapter, the WCS resulted from close cooperation between two INGOs, the International Union for the Conservation of Nature and the World Wildlife Fund, and UNEP. Much of this cooperation took place in informal networks where environmentalists and development experts sought to integrate environmental protection and economic development needs. While these networks helped shape the meaning of the term 'sustainable development', they did not succeed in inducing national governments to comply with the associated objectives more fully. Limited funds meant that the WCS was never properly implemented on a global scale.

As Alessandro Antonello demonstrates in his chapter on the Southern Ocean ecosystem, not every environmental protection measure necessarily reflects, in the first instance, concerns about the environment. The 1959 Antarctic Treaty created important path dependencies for negotiations about the preservation of this ecosystem with its immense importance for individual species like whales and oceanic life more generally. Antonello shows how the original signatories were initially interested in protecting their own privileges through preserving the existing institutional setup. However, they, and a variety of IOs, disagreed over the actual approach to Antarctica. States like the Soviet Union and Japan were keener on its exploitation – especially for krill as a food resource – while other signatories led by the US prevailed in the end with their agenda of prioritising its conservation.

In the last chapter, David G. Hirst delves into the most prominent issue of international environmental politics of the past three decades. He explores the global politics of climate change, tracing the origins of global action from the 1985 Villach Conference on the ‘Assessment of the Role of Carbon Dioxide and of Other Greenhouse Gases in Climate Variations and Associated Impacts’ to the creation of the IPCC by the World Meteorological Association and UNEP in 1988. He argues that a group of scientists initially favoured what he calls a ‘scientized’ approach to climate change. However, instead of this rather technocratic approach, the United States in particular favoured and secured an intergovernmental assessment mechanism, which effectively politicized the global politics of climate change and subjected it to the traditional diplomatic logic of intergovernmental bargaining.

Not just climate change but also many other transnational environmental issues remain high on the agenda of IOs well into the twenty-first century. IOs continue to cooperate with scientists, INGOs and other actors, influence debates and agendas, and provide a platform for the contestation over environmental problems and solutions. This transnational and global contestation remains driven by fear over the future of humankind, prevailing societal norms as well as short-term financial cost-benefit calculations in times of global economic competition – and the resulting individual and collective preferences that are deeply linked to the functioning of consumer societies and our way of life. To understand the history of this contestation and deep ambiguity, the role of IOs in global environmental protection can provide us with insights that may well be useful for addressing environmental problems in the future.

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### Notes

1. For a critical view on the emergence of biodiversity as a central environmental concept, see: Libby Robin, 'The Rise of the Idea of Biodiversity: Crises, Responses and Expertise', *Quaderni. Communication, technologies, pouvoir* 76: 3 (2011): 25–37; Timothy J. Farnham, *Saving Nature's Legacy: The Origins of the Idea of Biodiversity* (New Haven: Yale University Press, 2007).
2. IPCC, 'Summary for Policymakers', in *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, C.B. Field et al. (eds) (Cambridge: Cambridge University Press, 2014), 1–32.
3. IPCC, Fifth Assessment Report (AR5), 2014, <http://www.ipcc.ch/report/ar5/index.shtml>, accessed 28 May 2016.
4. It is particularly this dual – and seemingly contradictory – role that has been attacked by the so-called climate sceptics who argue that the IPCC compromises its scientific credibility by engaging in diplomatic consensus seeking. Achim Brunnengraber, 'Klimaskeptiker in Deutschland und ihr Kampf gegen die Energiewende', *FFU-Report*, 03 (2013), [http://edocs.fu-berlin.de/docs/receive/FUDOCs\\_document\\_000000017134](http://edocs.fu-berlin.de/docs/receive/FUDOCs_document_000000017134), accessed 28 May 2016, 23; Riley E. Dunlap and Aaron M. McCright, 'Organized Climate Change Denial', in *Oxford Handbook of Climate Change and Society*, John S. Dryzek, Richard B. Norgaard and David Schlosberg (eds) (Oxford: Oxford University Press, 2013), 144–60.
5. See e.g. Hans J. Morgenthau, *Politics among Nations: The Struggle for Power and Peace* (New York: Knopf, 1948); Kenneth N. Waltz, *Theory of International Politics* (Reading, MA: Addison-Wesley, 1979).
6. For an earlier example in the field of health policy, see Norman Howard-Jones, 'The Scientific Background of the International Sanitary Conferences 1851–1938', 1975, World Health Organization, [http://apps.who.int/iris/bitstream/10665/62873/1/14549\\_eng.pdf?ua=1](http://apps.who.int/iris/bitstream/10665/62873/1/14549_eng.pdf?ua=1), accessed 28 May 2016.
7. Jens Ivo Engels, 'Modern Environmentalism', in *The Turning Points of Environmental History*, Frank Uekötter (ed.) (Pittsburgh: University of Pittsburgh Press, 2010), 119–31.
8. Luigi Piccioni, 'Un punto d'arrivo, un punto di partenza. Discutendo di Paesaggio Costituzione cemento (di Salvatore Setti)', *Storia* 18(52) (2012): 87–

- 114, 111. See also Michael Bess, *The Light Green Society: Ecology and Technological Modernity in France, 1960–2000* (Chicago: University of Chicago Press, 2003), 83; John McCormick, *British Politics and the Environment* (London: Earthscan, 1991), 16 f.; Frank Uekötter, *The Greenest Nation? A New History of German Environmentalism* (Cambridge, MA: MIT Press, 2014), 88.
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