

Book Reviews

Vandenbergh, Michael P., and Jonathan M. Gilligan. 2017. *Beyond Politics: The Private Governance Response to Climate Change*. Cambridge, England: Cambridge University Press.

Reviewed by Noriko Kusumi

In the age of globalization, marketization, and decentralization of environmental governance, scholarship on private environmental regimes has proliferated over the past decades and greatly influenced the discourse in international environmental politics. This book aims to argue for the benefits of private governance on climate change. As expressed in the title of the book—*Beyond Politics*—the authors emphasize the emerging conceptual shift of global climate governance, from the traditionally dominant government policy to a new form of governance by the private sector, including corporations, nongovernmental organizations (NGOs), and individuals (both households and consumers). This work adds to the growing awareness of the role of private environmental governance by demonstrating numerous examples of private climate governance and developing a theory to explain the growing demand of this new type of regime.

This extraordinarily ambitious book starts with a comprehensive description of climate change science and social impacts, followed by the history of action and inaction due to various political, social, and psychological barriers. It presents an extensive number of scholarly perspectives on governance challenge, along with numerous cases of private voluntary activities by corporations, NGOs, and individuals. The authors' work will be useful in advancing environmental governance studies both theoretically and practically. The book, therefore, should be read not only by scholars from various fields (such as political science, law, economics, and psychology) but also by businesspeople in various industrial sectors and, needless to say, environmental activists and students.

Throughout their discussion, Vandenbergh and Gilligan evaluate opportunities and benefits of private governance from the perspective of (1) how much emission reduction would be possible if all household and corporate behavior change were to occur ("technical potential"), (2) how much behavioral change can be expected ("behavioral plasticity"), and (3) to what extent private voluntary initiatives are accepted and implemented ("initiative feasibility"). They argue that voluntary initiatives based on corporations, NGOs, and individuals' motivation, together with carefully designed private initiatives and continuously developed new technologies, make private climate governance "promising" for

problem mitigation, even when it is missing the coercive power and resources of government. Whereas a public governance approach is often inflexible, bureaucratic, and slow in implementation, and frequently restricts business and consumer activities by command-and-control regulatory framework, private governance is economically and politically more feasible, promotes environmental innovation, and is fast and flexible in its creation. Moreover, private governance can leverage the international trade system to expand pressure for climate mitigation across borders where national governments are out of reach for regulating economic actors.

Indeed, hundreds of initiatives, standards, and codes of conduct are collectively pressuring global business activities and creating new social values, as the authors discuss. An additional research agenda would nevertheless help further inspire the climate policy engagement of readers. First, even though the data and cases about voluntary practices by the private sector provided in the book (between chapters 4 and 7) are numerous, they are somewhat anecdotal, and the entire picture of the proliferation of private regimes and their efficacy can be difficult to deduce. An expanded sector-based analysis could help clear potential selection bias in the theoretical generalization; the environmental impact of business activities tremendously varies based on industry—from IT, services, and manufacturing to infrastructure and extractive industries.

Second, more extensive analysis of the risk and limitation of private governance would make the roadmap presented more promising. Fixing market failures—such as negative externalities, information asymmetry, monopolistic competition, and moral hazard—by using the same market system that created them is challenging. Private actors, especially corporations and consumers, are at the same time both contributors and troublemakers with respect to creating a sustainable world. While they provide innovation and ideas for efficient resource use, they are the very cause of pollution and overconsumption. Similarly, increasingly freer global trade, which can be effective for promoting higher environmental standards in global product chains, is also the very system that proliferated race-to-the-bottom problems in every corner of global society and ecosystems.

Finally, analysis of the correlation between public and private governance, rather than disconnecting the two, may be more of an inspiration. A small government approach is not necessarily faster or more efficient, and a large government approach need not always restrict corporate and household activities. National governments fund environmental infrastructure and promote technological and economic innovation, such as upgrading energy grids to lower energy costs and incentivizing fuel-efficient automobile manufacturers and buyers by reducing taxes and regularizing priority traffic lanes. Intergovernmental organizations can also have a normative influence on corporate and consumers' ecological decision-making. The value of private actors is inevitably embedded in the political and social system, and those two should not be disconnected from each other.

Wettestad, Jørgen, and Lars H. Gulbrandsen, eds. 2018. *The Evolution of Carbon Markets: Design and Diffusion*. New York, NY: Routledge.

Reviewed by Siddhartha Dabhi

The Evolution of Carbon Markets is a collection of nine case studies from various countries around the world: the United States, China, Australia, New Zealand, South Korea, Japan, and Kazakhstan, as well as the European Union (EU). The volume analyzes the evolution of carbon emissions trading systems (ETS) in these locations, as a process of policy/mechanism diffusion across countries.

The editors of the book set out to answer three broad research questions. First, what are the similarities and differences in ETS systems across the globe? Second, how can policy diffusion explain these similarities and differences? Third, what is the role of domestic politics in shaping the diffusion and the design outcomes? The editors use “structured, focused comparison” (p. 25) as a research design, and compare a wide range of case studies from across the globe of countries whose programs are at different stages of maturity, to understand the process and outcomes of policy diffusion.

The first three case studies from the EU and the United States (the Regional Greenhouse Gas Initiative [RGGI] and California) explain the conditions that led to the uptake of ETS by the global first movers. Lack of political consensus over regulatory measures like a carbon tax (in the case of the EU and United States) and the absence of a national policy to address climate change (in the case of the United States) have been the main reasons for adoption of ETS in these locations. In these three cases, we see a case of mutual learning. The EU developed ETS based in part on lessons from the United States’ sulfur dioxide emissions trading program, and RGGI and California developed their ETS based on lessons from the EU. While the EU ETS inspired RGGI and California’s ETS, regional political and economic considerations have led to significant divergence across programs.

Japan and South Korea are two fascinating case studies from East Asia. Japan has a mandatory subnational ETS, covering emissions from large commercial buildings in Tokyo. The program emerged from the absence of a national mandatory ETS combined with a local environmentally proactive government. South Korea was the pioneer of ETS in East Asia, pressured internationally by the EU for trade reasons when its increased greenhouse gas emissions put it in the category of significant emitter. While both these programs were inspired by, and modeled after, EU and US programs, specifications are based on local political and economic conditions.

A similar story can be told about New Zealand and Australia, with EU influence but local variation in the character of the programs created. In the case of New Zealand, there is no national cap on emissions because of the country’s heavy dependence on agriculture, forestry, and agriculture-based exports. In Australia, regional industries dependent on fossil fuels for production and export led to a patchy and contested ETS.

The ex-Soviet state Kazakhstan implemented an ETS quickly, pushed by international pressure because of its unusual position within the Kyoto Protocol. Under the agreement, it was categorized as a developed country but had no emissions reductions obligations and was thus not able to participate in the flexibility mechanisms (including international emissions trading) the Protocol outlined.

China is one of the most important case studies in the book because once its ETS is implemented nationally, it will be the world's largest ETS. Though China still does not want to accept a formal cap on its national emissions, it is open to experimenting with ETS as one of the mechanisms to mitigate climate change. In addition to policy diffusion from the EU ETS, the Chinese case shows domestic learning from participation in the Clean Development Mechanism.

This book makes an excellent and easy-to-read text for students and researchers wanting to understand the polycentric evolution of carbon markets. The findings from the various case studies presented in the book are nevertheless fairly intuitive. The use of the concept of "diffusion" does not communicate anything nuanced about the evolution and spread of carbon markets. While the book mentions various ways in which carbon markets have diffused across countries, it does not address the broader neoliberal environment and the transnational intellectuals (both individuals and organizations) responsible for the push for market mechanisms. Also, while the book points out various local politicoeconomic reasons for particular design elements, it does not shed light on environmental and social movements that have played an essential role in the design, mainly relating to the use of offsets in ETS. Ultimately, the studies presented here point out that the hope for a global emissions market is a far-fetched dream and—at best—regional linkages between markets can be achieved.

Wadhams, Peter. 2017. *A Farewell to Ice: A Report from the Arctic*. Oxford, England: Oxford University Press.

Reviewed by Eleni Kavvatha

A Farewell to Ice is a fascinating book that addresses the issue of the retreat of the Arctic ice and its implications for our planet in a way that is engaging, scientific, and yet easy to follow and understand. Peter Wadhams is not only an experienced Arctic researcher but also an excellent storyteller who manages to shed light on ice's role in Earth's past, present, and future, while presenting the problem of sea ice retreat in its true dimensions.

Wadhams uses a historical review of the formation and evolution of ice on Earth to argue that not only is the ice melting rapidly but also that it is imperative for people to take measures to address this problem without further delay. The Arctic is his main focus; the fate of the ice in the region is vital for the

world's climate and consequently for humanity. Each of the fourteen chapters of the book follows a different issue with the same purpose: to persuade the reader that it is essential that we take action at every possible level to address the climate crisis we have put ourselves in.

The book begins with a thorough analysis of the process by which sea ice is formed, a discussion of the importance of summer melt in the Arctic, and an overview of the properties of sea ice. Its retreat is both due to and a cause of climate impacts. Though Wadhams documents his arguments with all kinds of scientific data, he manages to keep the nonscientific reader engaged by using simple examples, such as ice skating over a lake, to explain complex concepts. He also engagingly reflects on his personal experiences, including memories of Arctic expeditions, such as a captivating narrative of an incident in one of his transarctic voyages in a submarine. These elements transmit to the reader almost the whole spectrum of emotions a researcher can feel when working in extreme circumstances in the Arctic.

The book answers such questions as why we have witnessed the effects of human-induced climate change in such an apparent way in the twentieth century and not earlier, and why these human-driven effects are accelerating much faster than ever in the past. Halfway through the book, Wadhams argues that, due to Arctic amplification, Arctic Sea ice is decreasing so rapidly that soon humanity will be left with a mainly open ocean. He then describes the serious consequences ice retreat is having for global processes, including for navigation in the Arctic, and oil and seabed exploitation (as well as population growth, food availability, and broader societal change), looking not only at polar issues but also at the planet as a whole.

A Farewell to Ice is a bold book, and Peter Wadhams is a bold and excellent writer. Not only does he support his views; he also criticizes and contradicts those who deny the seriousness of the situation, mentioning them by name and indicating why they are wrong. He further argues that many scientists, policy makers, and researchers choose to consciously ignore the observational data "in favor of accepting models that have already shown themselves to be wrong" (p. 88). He urges more research not only on reducing carbon emissions but also on removing carbon dioxide from the atmosphere, and he calls on young scientists, policy makers, and citizens to act in any possible way to prevent major disruption to the planet.