

## Book Review Essay

# Energizing Comparative Environmental Politics and Comparative Political Economy

---

Stacy D. VanDeveer

Hochstetler, Kathryn. 2021. *Political Economies of Energy Transition: Wind and Solar Power in Brazil and South Africa*. Cambridge: Cambridge University Press.

Nahm, Jonas. 2021. *Collaborative Advantage: Forging Green Industries in the Global Economy*. Oxford: Oxford University Press.

Neville, Kate J. 2021. *Fueling Resistance: The Contentious Political Economy of Biofuels and Fracking*. Oxford: Oxford University Press.

Globally, the long, slow trickle of financial capital and human resources moving into more renewable energy sectors and projects for wind, solar, and biofuel energy sources increasingly looks like a flood. Talk of global and national energy transitions is seemingly everywhere. But, of course, this is all happening in parallel—and sometimes in competition—with continuing, massive investments in additional oil and gas extraction. As their titles suggest, the three books reviewed here are centrally about comparative and global political economy. They are also “environmental politics” books, although their intersections with global and comparative environmental politics scholarship—and the roles played by actors and institutions deploying explicitly environmental frames—differ quite a lot.

While comparative political economy has a longer tradition, the rapid growth in systematically comparative research around energy and environmental politics is more recent (Hancock and Allison 2021; Sowers et al., forthcoming; Steinberg and VanDeveer 2012). The three books reviewed here demonstrate the vast potential for the important, innovative, and influential research that can result by bringing these three areas of inquiry together. They illustrate and energize some positive trends in

comparative energy, environmental, and political economy research. One book develops a theoretical framework to study energy transitions via a comparison of two middle-income countries in the Global South (Brazil and South Africa). One outlines a framework to explain firms' cross-border collaboration and the substantial transnational and multinational innovation it induces in the contemporary global market, even as national competitiveness discourses reign supreme and distinct domestic political and economic institutions shape patterns and collaboration and the resultant innovation. And one offers a framework to explain why and how robust local resistance to energy projects and development may or may not emerge in seemingly quite different settings. Together, they also suggest that a long overdue critical reflection on the Global North–Global South dichotomization of comparative research is under way.

Kathy Hochstetler's *Political Economies of Energy Transition: Wind and Solar Power in Brazil and South Africa* demonstrates that theoretically and empirically rich comparative energy, environmental, and political economy scholarship no longer assumes that research about the Global South is framed as a "test" of frameworks originally developed to explain something in the Global North. The book asks questions like "What sources of energy do states prioritize?" and "When and how do states intervene to support low carbon transitions?" (7). To explore the answers to such questions, Hochstetler offers four political economies of wind and solar power that occur around four areas of policy: climate policy, industrial policy, social policy and service provision, and siting policy. In each political economy, she explores configurations of interests, coalitions, and institutions. She argues that outcomes of national energy transitions "derive from the intersection of [the] four quite different policy arenas" (15).

Her framework and the substantial body of empirical research in the project are designed to explain the known, current outcome. In short, wind and solar together account (in 2019) for less than 5 percent of electricity supply in South Africa, whereas in Brazil, wind alone has grown to over 9 percent of electricity supplied in only a handful of years. Hochstetler sets out to explain why and how these levels were achieved, as well as what limited their growth. Along the way, her work convincingly argues a point most comparative politics scholars would expect but many energy analysts (and some global environmental politics researchers and advocates) tend to ignore, namely, that the national-level politics of these transitions are likely to be quite different due to differences in a host of domestic institutional contexts, interests, and political and social coalitions.

Between the introductory and concluding chapters, the book is organized into four chapters, each of which covers both Brazil and South Africa as it focuses on one of Hochstetler's policy areas or political economies. The discussion of the climate policy domain demonstrates that both countries have robust climate policy debates and advocates inside and outside of the state. But South Africa's coal-dominated electricity system produces coalitional and institutional

impediments to any serious transition to wind and solar power. In Brazil, in contrast, climate debate has paid little attention to wind and solar—with most greenhouse gas emissions coming from deforestation—but the electricity sector planners and operators have steadily increased their support for wind power. A chapter on the industrial power domain explains that Brazil's preference for wind over solar energy is rooted in the belief that a domestic wind energy manufacturing sector can and is being built (in contrast to solar).

Her analysis of social, economic, and distributional costs argues that similar coalitions of anti-climate policy (and pro-fossil fuel) actors in South Africa kept renewable wind and solar at bay when the prices were consistently higher than coal-generated (and highly centralized) power. As prices have come down, there has been more room for limited amounts of such power, and some hope that communities still left off the grid might benefit. In Brazil, falling prices for wind and solar and the prospects for (and regulation changes to support) more distributed power for both remote and urban communities have added the growth of wind and solar in recent years. An examination of siting reveals substantial controversy and contention in the Brazilian case around wind, with much less related to solar. Community-based activism—sometimes resistance—related to Hochstetler's political economy of siting offers opportunities to compare contentious Brazilian wind power siting and costs with community resistance politics in Kate Neville's book about fracking and biofuels.

Hochstetler characterizes South African energy politics and multiple political economies as highly contentious, whereas Brazil's are often more bureaucratic and managerial in nature. In both cases, she is convincing that these countries do not have a single energy transition. Instead, these transition politics play out across her four realms, and the result of these multiple political economies is each country's contemporary energy mix and its progress, or lack thereof, toward a decarbonized electricity system.

Jonas Nahm's *Collaborative Advantage: Forging Green Industries in the New Global Economy*, like Hochstetler's book, focuses on the wind and solar industries. But in terms of his national cases and the rich transnational dynamics of industry actors operating in national and global political economies, his analytical focus is different. Nahm focuses our attention on technological and economic aspects of innovation in three countries—Germany, China, and the United States—convincingly arguing that there has been and must be considerably more collaboration among private wind and solar actors than is suggested by the endless rhetoric of national economic and geopolitical global competition. He also reminds us that industrial policy and mercantilist rhetoric are often deeply embedded in narratives about the urgent needs for innovation and global cooperation to meet the unfolding set of disasters we call climate change.

*Collaborative Advantage* opens with a vignette about one of Nahm's visits, during fieldwork, to a solar photovoltaic firm in the suburbs of Shanghai that

illustrates some central arguments in his impressively researched and convincing book. We learn that this firm is investing substantially in its own R&D and innovating with impressive results. Its globally competitive solar panels are destined for roofs in Europe and elsewhere. But Nahm also makes clear that such firms are collaborating to solve problems and achieve technological innovation via their partnerships with a diverse set of foreign firms, including California start-ups and a German company founded nearly 150 years ago. Through such collaboration, innovations are achieved via specific manufacturing equipment and expertise; newly developed individual components of final products; and jointly developed, commercially successful technologies. In highly competitive global markets within and around solar and wind energy technologies, we see some areas of local and national specialization that would make David Ricardo proud, the spirited price and product quality competition that capitalism's most optimistic advocates so often promise, and amazingly dynamic firm–firm and sectoral collaboration among firms based in countries we are so often told are competing with each to “win” the “race” to dominate new energy industries.

Nahm's “collaborative advantage” concept describes “the creative process through which firms insert themselves into globalized production systems” (4). The term captures the continuing importance of specialization in the contemporary global economy, even as it positions “collaboration as central to the shaping of the international division of labor ... [and] changes how firms respond to the policies and institutions of the state” (7). Nahm reminds us that states and scholars have been interested in technological and economically beneficial innovation for much of the post–World War II era. Like national economic competition rhetoric, much innovation literature has focused on or been framed around being an innovative nation or state. But *Collaborative Advantage* convincingly demonstrates that contemporary global integration and competition offer firms enormously important opportunities to cooperate across borders. The fascinating entry point for comparative political economy in Nahm's research is his argument that much of this collaboration reflects and reinforces national-level specialization—and that this specialization has historically institutionalized roots. So, for example, the United States much envied “start-up” culture (supported by particular public- and private-sector institutions) helps position US start-ups as excellent global partners in the highly globalized sectors. Meanwhile, German strength in adaptable and specialized equipment design and manufacturing is also reflected in its firms' competitive positions as collaborative partners.

The book rests in part on Nahm's extensive review and use of social science literatures on innovation and industrial policy—and recent work on green industrial policy. The result is a well-supported argument that shows that national-scale industrial policy and existing areas of national economic strength do not alone determine innovation within a country or national economy. Rather, innovation processes and outcomes “from the lab to

market" (47) now cross both national boundaries and the boundaries of the collaborating firms. States and other actors may be singing mercantilist tunes about the need for their countries to win races to dominate wind and solar markets, but firms often collaborate across borders even as they compete with firms in their own countries. Importantly, however, this does not lead Nahm to make arguments about global and cross-national convergence. Rather, Nahm's analysis shows that cross-national differences in domestic institutions persist—for example, around innovation and production systems, financing, and human resource training and education. This persistent divergence shapes persistent specialization and opportunities for firm-to-firm cross-border collaboration. The important place of industrial policy in both Hochstetler's and Nahm's books offers both interesting points of comparison and a gentle reminder to environmental politics researchers that a great deal of environmental politics happens in spaces they too often ignore.

*Collaborative Advantage* concludes with a set of fascinating thoughts about the implications of this work for industries emerging more recently, after substantial reorganization of the global economy, and for older industries (like the automobile sector). His country case chapters and the conclusion also suggest some important policy implications for his three states, and for many others. Frankly, I share his expressed concern that states and national publics remain far more attached to national competitiveness rhetoric and mercantilist policy initiatives than they are to the urgently needed global energy transition—and that this poses a potential threat to that transition. The global prices for wind and solar energy have fallen faster than most expected, and these sectors have produced truly epic levels of innovation. If the antiglobalization policy makers get their way in Europe, North America, China, and elsewhere as they push for more mercantilist outcomes, should we expect to achieve the global energy transition needed over the next twenty-five to thirty years?

Kate Neville's *Fueling Resistance: The Contentious Political Economy of Biofuels and Fracking* is, like the other two, an excellent book. Its combination of work rooted in political economy, comparative environmental politics, and social mobilization—applied to local and regional cases in Kenya and Canada—makes it a model for impressive and politically important social science research. From its introduction to its conclusion, Neville's monograph demonstrates that innovative, insightful, and well-designed research can and should be done across the North–South dichotomy, which too often inhibits more comparative research than it facilitates.

Neville's command of both political economy and mobilization literatures is clear throughout the book, as is the value of her careful fieldwork in Kenya's Tana Delta and Canada's Yukon. Her conceptual and theoretical framework is not simple, but it is clear. And her focus on political contestation—or contention—as a result of the interaction of characteristics of political economy and community identity is both extremely interesting and

deployable by future scholars in other cases. Especially notable is the importance, in understanding and engendering particular kinds of resistant mobilization, of community expectations that extraction from their communities and meaningful places would primarily provide energy (and profit) for corporate actors and geographically distant communities. These kinds of dynamics of global extraction from local places may well help us better understand the growth in resistance around mineral mining, energy extraction, and agricultural community production in thousands of communities around the world—as the realization grows that myriad local costs of extraction may well overshadow promised material benefits. One is hard-pressed to list a better synthesis of mobilization and political economy literatures than that in her framework chapter, “Catalyzing Local Contention.”

Most of Neville’s substantial empirical material is focused on controversies, contention, and resistance to biofuel projects in Kenya’s Tana Delta and attempts to expand fracking in the Yukon. In both case areas—across a host of local places and communities—she explores grievances, disparate visions, and values and the intersections of national and global political economy with local access and control of resources. All these factors intersect with community identity, she argues. Clashes emerge at these intersections, as do a host of connections with local debates about justice and injustice.

Kate Neville is an exceptionally talented, evocative, and skilled writer. Not only does she demonstrate her commitment to excellent, theoretically driven empirical research throughout the book but, she communicates her passion for the unique places about which she writes and her deeply felt and abiding commitment to represent the voices of the peoples and communities in those places. These commitments are not side notes. They connect directly to her argument that identity matters if we are to understand how social and political mobilizations interact with “classic” political economy factors like ownership, finance, and trade.

Back in 2007, Hochstetler and Keck’s *Greening Brazil* was among a set of important works that effectively challenged two oft-seen assumptions in a lot of earlier environmental politics research: first, that environmentalism or environmental politics only comes to countries in the Global South from abroad and, second, that environmental politics is usually some rather small and siloed area of national politics and state–society relations. *Greening Brazil* demonstrated that environmental politics can in fact shape and reshape states, nations, societies, and the nature of national governance. While Hochstetler’s new book on Brazil and South Africa also demonstrates that such assumptions are false, its argument goes further. She demonstrates that the comparative study of politics in the Global South can produce theoretical frameworks that can be applied in and to many other contexts in the North and the South. Hochstetler’s new book—indeed, her body of scholarship—shows us all that what we mean by phrases like “comparative political economy,”

“comparative environmental politics,” or “comparative energy politics” can and should be determined as much by research in the Global South as it is by research about the Global North. As she has recently written elsewhere, “we impoverish our understanding of all the components of comparative environmental politics—comparative, environmental and politics—when we are too quick to narrow our sights to particular topics or a subset of states” (Hochstetler, forthcoming).

Nahm’s and Neville’s works both chart paths toward well-theorized, conceptualized, and empirically rich research that spans the aging North–South dichotomy in comparative politics (environmental and otherwise). Although, of course, we must continue to learn from research done exclusively in states and societies in what we call the Global North and the Global South, all three of these books demonstrate that such categories cannot be allowed to constrain our theorizing, our empirical research design, or our intellectual imagination.

In terms of theoretical and conceptual frameworks, one would not call any of these books “simple.” The literatures on which each author draws, and the ways in which causal models are deployed and concepts are used, are complex, contextualized, and innovative. Any students and scholars interested in energy transitions, comparative environmental and energy politics, or comparative political economy would do well to read these three books posthaste—perhaps alongside Peter Newell’s (2021) *Power Shift*, to augment the excellent comparative research with Newell’s global political economy focus.

**Stacy D. VanDeveer** is a professor of global governance and human security and chair of the Department of Conflict Resolution, Human Security, and Global Governance in the John C. McCormack Graduate School of Policy and Global Studies at the University of Massachusetts Boston. His research interests include EU environmental and energy politics, global environmental policy making and institutions, comparative environmental politics, connections between environmental and security issues, and the global politics of resources and consumption. In addition to authoring and coauthoring more than one hundred articles, book chapters, working papers, and reports, he has coedited or coauthored ten books, including *Routledge Handbook of the Resource Nexus* (2018), *The European Union and the Environment* (2015), *Waste, Want or War?* (2015), *Transnational Climate Change Governance* (2014), and *Comparative Environmental Politics* (2012).

## References

- Hancock, Kathleen J., and Juliann Emmons Allison, editors. 2021. *Oxford Handbook of Energy Politics*. Oxford, UK: Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780190861360.001.0001>
- Hochstetler, Kathryn. Forthcoming. Environmental and Development: Crossing the Divide Between Global South and Global North. In *Oxford Handbook of*

*Comparative Environmental Politics*, edited by Jeannie Sowers, Stacy D. VanDeveer, and Erika Weinthal. Oxford, UK: Oxford University Press.

Hochstetler, Kathryn, and Margaret E. Keck. 2007. *Greening Brazil: Environmental Activism in State and Society*. Durham, NC: Duke University Press. <https://doi.org/10.1515/9780822390596>

Newell, Peter. 2021. *Power Shift: The Global Political Economy of Energy Transitions*. Cambridge, UK: Cambridge University Press. <https://doi.org/10.1017/9781108966184>

Sowers, Jeannie, Stacy D. VanDeveer, and Erika Weinthal, editors. Forthcoming. *Oxford Handbook of Comparative Environmental Politics*. Oxford, UK: Oxford University Press.

Steinberg, Paul F., and Stacy D. VanDeveer, editors. 2012. *Comparative Environmental Politics: Theory, Practice and Prospects*. Cambridge, MA: MIT Press.