

Book Reviews

Huda, Mirza Sadaqat. 2020. *Energy Cooperation in South Asia: Utilising Natural Resources for Peace and Sustainable Development*. New York, NY: Routledge.

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Mirza Sadaqat Huda addresses the “energy, environment, and growth nexus” that is among the central concerns of contemporary global environmental politics (GEP). Huda recognizes that energy shortages are due to the widening gap between increasing demand for energy in the region and lagging supply. He argues that while regional demand for energy is due to economic growth, large and urbanizing economies and technical inefficiencies, domestic political conflicts, ineffective economic policies, and bureaucratic delays all contribute to insufficient energy supplies. These shortages impede education, health care, income, gender equity, and other social policy goals. The socioeconomic consequences for South Asian peoples render energy insecurity in the region a major nontraditional (human) security risk. Huda identifies regional energy cooperation as essential to the provision of adequate and affordable energy to communities throughout South Asia without undue environmental harm or social injustice.

The book responds directly to a relatively sparse literature on energy in South Asia that remains dominated by security-centric analyses. Huda argues that because the foundation of energy politics in Southern Asia lies in the region’s rapid economic development, maldistribution of economic and political power, territorial disputes, separatist movements and insurgencies, varied political systems and cultures, and weak economic and security integration, it is essential to incorporate environmental and social, as well as security, aspects of energy. This approach is consistent with the broader literature on regional governance of energy resources. This analysis is premised on the greater efficiency of regional, as opposed to national or bilateral, energy—that is, electricity and oil and gas pipeline—transmission infrastructures; regional energy market integration; and the regional impacts of air and water pollution and other environmental externalities associated with energy production, transmission, and local distribution. It also reflects the South Asian Association for Regional Cooperation’s own recognition of the significance of energy among the organization’s other concerns, which include poverty alleviation, broader economic cooperation, and common security threats. These theoretical and practical concerns contextualize Huda’s effort to explain why, despite extensive and ongoing economic and technical cooperation and market-based initiatives, not one cooperative energy project has been completed in South Asia.

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Huda argues that the political and security challenges to South Asian energy cooperation identified by GEP scholars and regional actors alike have not been thoroughly analyzed. The conventional geopolitical view fails to adequately incorporate nonstate and extraregional stakeholders, climate change and other environmental concerns related to ensuring energy security, and social justice. In response to this considerable lacuna, Huda develops a constructivist theoretical framework to guide a multimethod analysis of four cooperative energy projects in South Asia: the failure of the Myanmar–Bangladesh–India (MBI) gas pipeline; the Turkmenistan–Afghanistan–Pakistan–India (TAPI or “Trans-Afghanistan” gas pipeline) to begin construction in 2021; the proposed Tipaimukh Dam; and subregional, Bangladesh–Bhutan–India–Nepal (BBIN), cooperative hydroelectric power initiatives. Constructivism provides a “conceptual umbrella” (37) for Huda’s use of subsidiary theories—stakeholder analysis, energy diplomacy, environmental peacebuilding, and cooperative security—to analyze these case studies of regional cooperation on gas pipelines and hydroelectric power generation. Together, these analyses illuminate multiple and varied obstacles to energy cooperation in South Asia that Huda argues might be mitigated by more effective and inclusive leadership and planning.

Energy Cooperation in South Asia succeeds in providing a comprehensive overview of the history and current state of energy cooperation in South Asia. Detailed case studies illuminate the ways that apparently extraneous issues—for example, hostility around historically normalized India–Bangladesh border crossings in the MBI pipeline case and food and human security risks associated with Tipaimukh Dam—have complicated and forestalled energy cooperation regarded as essential for meeting current and future demands for conventional fuels and electrical power in the region. Such deep and compelling substantive insights come at high theoretical price. Huda’s effective integration and evaluation of multiple international and subnational processes (stakeholder analysis and methods of reducing tensions to facilitate cooperation), tools (diplomacy to manage the transition to lower carbon energy sources), and strategies (environmental cooperation to build peace) demonstrate the value of constructivist analyses for understanding individual cases. This assessment substantiates Huda’s claim that weak systems of governance in South Asia undermine the capacity of any single, Western theoretical framework premised on the sovereign nation-state to account for lagging energy cooperation in the region. Yet it is easy to feel let down by the monograph’s failure to, at least, suggest a compelling regionally specific alternative.

Overall, the book provides a clear, concise history and analysis of energy cooperation in South Asia, featuring in-depth analyses of key cases that will be useful for researchers and practitioners concerned with regional governance of energy resources. The region’s political leaders and policy makers are likely to find Huda’s articulation of specific recommendations for improving leadership and planning to support successful energy cooperation in South Asia particularly important. South Asian specialists and GEP scholars will appreciate Huda’s critique of facile applications of realist and liberal theories to energy governance in South Asia and elsewhere, as well as his use of constructivism to elucidate pathways to energy cooperation in the region.

Barandiarán, Javiera. 2018. *Science and Environment in Chile: The Politics of Expert Advice in a Neoliberal Democracy*. Cambridge, MA: The MIT Press.

*Reviewed by Casey Stevens
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Javiera Barandiarán's *Science and Environment in Chile* presents an empirically rich analysis of conflicts related to environmental impact assessments (EIAs) in Chile. Investigating "what kinds of democratic states [are] produced alongside EIAs" (25), the book engages in a thorough investigation of four case studies in Chile, each of which explores the politics of neoliberal environmental policy making. The book adds to existing literatures about the politics of scientific expertise with an exploration of a country case that exemplifies the separate pulls of neoliberalism and democratic demands for accountable governance. The central insight of the book's four case studies—dealing with salmon farming, a paper and pulp mill, a gold mine, and a dam project—is that environmental policy making in neoliberalism is defined by tensions that rarely increase and often pull away from "the kind of institutionalized, reflexive, and critical intellectual capacities needed for long-term environmental protections" (30).

The book methodically examines two key themes throughout the case studies: the construction of scientific expertise and the "umpire state." The book builds from the science and technology studies (STS) perspective in exploring boundary work and the relationship between scientific expertise and other social actors like the private sector and activist networks. It argues that Chile, as a democratizing state that embraced neoliberal policy positions, is an ideal case for using this approach. While many institutions, such as the National Commission for the Environment, play a central role in the story, they operate differently than the adversarial administrative proceedings or advisory committees that other studies have emphasized. Barandiarán shows that choices about legitimation strategies matter in the Chilean context. One example, highlighted in the case study about the Valdivia Paper and Pulp Mill, is in the choice of scientific experts from Chile or from outside the country. Foreign scientists are preferred because they lack local conflicts of interest, but the result is further weakening of domestic environmental science capacity. In other instances, scientists demonstrate their independence by highlighting results that go against funders' preferences, which only reinforces the view that scientific work is largely directed by funders in the first place. The empirical work reveals the variety of tensions that occurs with the construction of scientific expertise.

The second focus is on the role of state institutions through this process, conceptualizing an umpire state as one "that sees itself as a broker between competing parties that produce their own knowledge claims" (6). The concept is exemplified clearly with the example of maps provided for an EIA related to the construction of five dams in the Aysén province. The massive EIA undertaken by Endesa, the company that owned the dam project, was undermined by the submission of illegible maps. When the legibility was addressed, the resulting

downloadable file was an unsearchable PDF that caused computers to overheat. In contrast to an “empire” conception of the state, where effective maps are seen as a tool of state control, the umpire state sees “mapmaking ... [as] a privatized formality—another box to check on the long list of requirements” (168). The idea of the umpire state is demonstrated in other case studies as well. In the example of salmon aquaculture, “state officials have to make decisions using data they are skeptical of and are also limited in how to change the conditions that underpin their distrust” (90). The umpire state is an excellent conceptualization of state action that highlights the complexities of the cases studied but also has comparative significance for scholarship on state power, sustainability, and scientific expertise.

The strength of the book is its empirically detailed case studies, but one weakness is that the theoretical contributions are limited in comparison. For example, the case study of the Pascua Lama Gold Mine finds that scientization, the practice of science-based claims crowding out other types of knowledge claims, does not explain the findings; the study instead contends that “scientific and non-scientific claims coexisted” (155). An alternative lens would emphasize the normative content of the scientific expertise that created the opportunity for space to be opened for nonscientific claims. Similarly, the HydroAysén case concludes by arguing that there may be an upward limit to the umpire state where it cannot remain a neutral referee due to social pressure. Where this upward limit is, how it manifests, and how the state, scientists, and other actors understand it are not analyzed in depth. Comparative work concerned with the construction of science or the neoliberal state and environmental policy making can nevertheless extend the concepts and explore new terrain.

Barandiarán’s careful empirical unpacking opens space for deeper reflections on the interrelationship between a neoliberal state and politics of science legitimation. It is an insightful and important read that takes existing concepts in studies of neoliberal states and STS and develops them methodically and carefully. The preface begins by seeking an intervention into the politics of “alternative facts” that many right-wing populist movements have brought to the fore; on those terms, the book achieves its goal with careful exploration but its analysis also provides tools for moving past those politics.

Bryant, Gareth. 2019. *Carbon Markets in a Climate-Changing Capitalism*. Cambridge: Cambridge University Press.

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The world is likely not on track to achieve the considerable carbon emissions reductions required to avoid the worst impacts of climate change. Carbon markets, imposing a price on the carbon content of fossil fuels, are feasible and durable tools to control carbon emissions, despite political challenges (Rabe 2018). Through carbon markets,

such as carbon taxation or cap-and-trade programs, policy makers aim to internalize the negative externalities of fossil fuel usage and to redistribute revenues to low-carbon innovation and communities that have been impacted by climate change.

Carbon Markets in a Climate-Changing Capitalism argues that the fossil fuel industry has exercised excessive influence over the European Union Emissions Trading System (EU ETS); this influence inhibits the beneficial role of the world's largest carbon market in addressing the climate crisis. Carbon emissions in the EU during the last decade showed a decline, but the environmental benefit of the EU ETS should have been higher and more dispersed than now, according to Bryant. He argues that adequate regulatory intervention by governments over carbon emissions and fossil fuel industries is needed to maximize the effectiveness of carbon market policy. This complementary measure is expected to mitigate the limitation of the EU ETS, obsessively relying on dominant economic discourses.

The book contextualizes the relationship between capitalism and climate change. Capitalism—a political-economic system characterized by capitalization, property rights, and voluntary exchange—has resulted in a drastic change in climate and environment beyond nature's resilience capacity. Simultaneously, a changing climate has enabled capitalism to respond to global warming and social pressures on the industry. This response can be made by altering its value chain to be climate-friendly or by bolstering capitalism's dependence on fossil fuels and creating additional damages to nature.

Bryant's concept of "climate-changing capitalism" may help researchers better understand and evaluate competing climate policies. Using this lens, the book suggests three contradictions and tensions embedded in the EU ETS. First, capitalism produces climate change unevenly. Though a small number of companies and governments contributed to a large proportion of emissions (the twenty biggest emitters contributed half of emissions in the EU ETS during 2005–2012), the responsibility for reducing emissions was distributed across many other actors of the EU ETS (including more than 3,500 companies). Carbon commodification that separates emissions from installations led heavy emitters to internalize emission inequalities.

Second, carbon markets depend on fossil fuel use. From a financial sector standpoint, market viability and interest hinge on stringent emission caps and high carbon prices. However, governance issues (e.g., the inflow of international carbon credits, an oversupply of carbon allowances) and once-low European carbon prices (less than €10 per metric ton of CO₂ emissions between November 2011 and February 2018) promoted the exit of financial investors from the market.

Third, capitalism constrains climate change responses. Owing to the inertia of policy implementation and limited resources, EU governments and related stakeholders tend to privilege a carbon market-based approach over climate policy alternatives because there is an existing, legitimate institution. Instead of transformative climate policies, the EU ETS members have preferred to reform the system itself (via, e.g., market stability reserve and revised free allocation rules) while undermining the diverse debate on climate policy.

A weakness of Bryant's book lies in its focus on the fossil fuel industry, demonstrating a slight anti-industry bias. Bryant firmly criticizes some heavy emitters for lobbying the EU, seeking favorable treatment, and trading carbon allowances and offset credits. Furthermore, he claims that those emitters were reluctant to expand renewable energy supplies by exploiting the EU ETS, delaying the transition to a low-carbon economy. These arguments warrant further investigation and updated evidence. For instance, while Bryant used 2015 data in judging practices of RWE, the company reduced its emissions by one-third from 2012 to 2018, and even declared in 2019 its intention to achieve carbon neutrality by 2040 (RWE AG 2019). Another company, E.ON, also provided 100 percent renewable electricity supply to its residential customers in the United Kingdom in 2019 (E.ON SE 2019). Corroborating evidence demonstrates the fossil fuel industry undergoing a structural change with reduced emissions, while the industry optimizes its management strategy for given conditions and closely collaborates with the public and civil sectors. The book also lacks a detailed discussion of the impact of the EU ETS on low-carbon technology advancement. Whether and how the EU ETS encourages research and development of low-carbon technologies are essential for appreciating capitalism's role in carbon markets.

The EU ETS is a fundamental component of the EU's roadmap to a low-carbon economy by 2050. Recognizing the importance of the system designed to incentivize emission reductions while making the emitters pay for their social costs, this book raises awareness of the system's socioecological, economic, and political problems in its current form. Bryant's arguments reflect the theoretical and empirical developments on carbon markets. As the fourth trading period of the EU ETS started in 2021, the book may help strengthen the main instrument of European climate policy by revealing implementation issues in the context of a climate-changing capitalism. Additionally, considering the relatively long history of the EU ETS, the book may provide insights to other carbon markets worldwide by delineating the contradictions of carbon markets.

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