



ENERGY IN THE AMERICAS: CRITICAL REFLECTIONS ON ENERGY AND HISTORY

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"When Will We See the Pendulum Effect?" Critical Reflections on Energy and History in the Americas

Amelia M. Kiddle

One of the most notable features of any survey of the history of energy regimes in the Americas over the past century is the "pendulum effect." Anecdotal though the observation may be, it is clear that despite the broad and incremental transformational changes that have occurred in the global energy landscape over time, individual countries have undergone wild swings in the way they have met these changes. Like the workings of a grandfather clock in the front hall of some stately home, there is a seeming inevitability to these alternations between market orientation and a more interventionist approach, and while time advances hour by hour in a forward motion, this momentum is always underpinned by the movement of the pendulum.

In her chapter in this volume on the Mexican oil industry, Linda B. Hall quotes one opponent of the country's 2014 energy reform, who asked in *La Jornada*, "When will we see the pendulum effect? How can we go back?" This individual might have been surprised to learn that in four years' time one of the principal opponents of the project, Andrés Manuel López Obrador, would be elected president. The pendulum has swung again in Mexico, just as it has done throughout Latin America over the decades, as successive governments have oscillated between market-based energy policies and state control. By contrast, the energy policies of the United States and Canada have appeared relatively consistent over time. And yet, as the contributors to this volume show, these policies have also varied greatly depending on the energy source and the region in which it is produced. Analysts who focus on Latin America alone tend to naturalize market-based energy regimes and blame the "resource curse" for Latin America's seemingly mercurial policies.¹ However, critical reflection shows this to be an incomplete picture.

This volume adds to an emerging body of literature on the role of energy and extractive industries in various societies by bringing the diverse energy histories of American nations into conversation with each other.² It emerged from a conference held at the University of Calgary in 2014 titled "Energy in the Americas: Critical Reflections on Energy and History." The majority of the participants (and therefore most of the contributors to this volume) were historians, people whose stock in trade is change over time. Allied social sciences can provide tools, as they do here, with which we can bolster the analytical precision of our accounts, but one of our chief concerns as historians is the dynamics of social change. By comparing energy histories from both North and South America, this volume seeks to better understand both the history of energy and the history of the Americas. Although not all countries were represented at the conference, or in this volume, it is our contention that it is analytically useful to examine the energy history of the Americas as a whole. Despite the apparent differences between countries, including them in the same analytical frame allows us to break down many of the assumptions that implicitly underlie most studies that examine the North or the South in isolation.

When we met in Calgary in October of 2014, we had little inkling that the bottom was about to drop out of the global price of oil. We spoke of the shale revolution, the Alberta oil sands, and deep-water drilling as certainties propelled by technological advances and the lure of profits and royalties. Although we discussed the significance of climate change and Indigenous rights to free prior and informed consent, the pace of development at the time was such that neither seemed likely to hinder continued production. Venezuela's Hugo Chávez had recently died, but the political project he began, underpinned by high oil prices, seemed destined to continue under his successor, Nicolás Maduro. The Alberta Progressive Conservative Party had been in power for forty-four years, rivalling Mexico's Partido Revolucionario Institucional (PRI)—which had also been buoyed by oil rents—for North America's longest unbroken electoral run. Returned to the presidency in 2012, the PRI under Enrique Peña Nieto was confident that international investment would pour into Mexico following changes to the Constitution. Optimism of a different kind also reigned in Argentina, where YPF (Yacimientos Petrolíferos Fiscales) had been renationalized in 2012, and where little thought was being given to the environmental effects of shale production in the Vaca Muerta. And although Operation Car Wash had begun to delve into Brazil's culture of political corruption in 2014, Petrobras's development of ultra-deepwater reserves in the pre-salt basin seemed assured.

The landscape has since changed considerably. Although prices have recovered slightly, the political fallout from the drop in global oil prices has been far-reaching throughout the Americas. In Brazil, President Dilma Rousseff was impeached, her predecessor Luiz Inácio Lula da Silva was imprisoned, and the ultra-right Jair Bolsonaro was elected president. Bolsonaro's ideological cousin, Donald J. Trump, became president of the United States—although the fact that he did not win re-election in 2020 suggests that the US electorate became disenchanted with this particular form of bravado. Several of the governments that favoured resource nationalism in 2014, as part of the so-called Pink Tide in Latin America, have fallen apart or tempered their radicalism. Ecuadorean president Lenín Moreno withdrew his country from ALBA (Alianza Bolivariana para los Pueblos de Nuestra América, or Bolivarian Alliance for the Peoples of Our America), the regional organization founded by Venezuela, which no longer has the wherewithal to lead it since its economic collapse under Maduro. Likewise, several market-oriented regimes are undergoing change, including Peru, which during the short-lived presidency of Martín Vizcarra (who took up the presidency after the resignation of Pedro Pablo Kuczynski only to be overthrown two years later) introduced South America's first climate change law. Under the leadership of the New Democratic Party, the Canadian province of Alberta introduced a far-reaching Climate Leadership Plan-while also supporting the construction of pipelines to carry Alberta's oil to market-but in yet another swing of the pendulum, the subsequently elected United Conservative

Party was determined to reverse course. Some countries have maintained a steady trajectory: since the introduction of association contracts in 1974, Colombia has been perhaps the strongest proponent of market-based policies in Latin America, and the government of Iván Duque Márquez has doubled down on oil exploration and foreign investment. But in most cases, the pendulum has swung.

The remarkable changes of the last few years have cast the contributions to this volume in a new light. In the middle decades of the twentieth century, an extraordinary degree of consensus reigned in the Americas, and around the world, which held that governments had a role to play in providing consumers with access to energy products that provided them with a better quality of life. To this end, many countries created national energy companies; some, like Petro-Canada, were relatively short-lived, while others, such as Uruguay's ANCAP (Administración Nacional de Combustibles, Alcoholes y Portland, or National Administration of Combustibles, Alcohols and Portland), founded in 1931, have endured. In countries where energy products were produced in abundance, these industries were organized so as to enable citizens to benefit from the country's resources, according to the economic thinking prevalent in each country. However, with the rise of neoliberalism, governments throughout the region have struggled to determine the appropriate role of the state. Although the broad trend has been toward market orientation, fundamental ideological disagreement has led to an astounding level of vacillation in energy policies, as it has in social and economic policies. This is because of what is perceived to be at stake. The links between energy production and consumption, and between modernization and national identity, have been particularly fraught in the history of the Americas. The questions raised by energy regimes and energy transitions within any country go to the very core of the conception of the rights and obligations of the state and its citizens. Rather than E. A. Wrigley's typology of organic and mineral energy regimes, I refer here to the political and economic structures that frame policy decisions, investment, and environmental regulations, and the incentives and disincentives that businesses and consumers face in making decisions about their energy use.³ The construction of the rights and obligations that govern energy use is an inherently political process, and this is particularly true given that these conceptions are shaped by

unequal power relations between and among peoples and countries in this hemisphere, which for much of the twentieth century has been home to the world's largest superpower. The chapters in this volume demonstrate that these issues are still very much up for debate in most of the Americas.

In their comprehensive analysis of energy policies and their relationship to populism in Latin America, Rubén Berríos, Andrae Marak, and Scott Morgenstern conclude that resource nationalism-the idea that resource wealth should be used for the benefit of the nation-cannot be solely attributed to populist ideology, as is commonly assumed.⁴ Individual cases, such as Bolivia, suggest a much more complex relationship between domestic politics, international constraints, and energy policy.5 The nationalization of the Bolivian oil industry in 1937 was followed by the opening of the hydrocarbon sector to private investment after the Bolivian Revolution of 1952, and its renationalization by a nationalist military regime in 1969. President Evo Morales's use of natural gas royalties to underwrite Bolivian development (and prolong his political career—that is, before the 2019 election that saw his removal from office) might seem to confirm the association between resource nationalism and populism, but such an interpretation would ignore a century of struggle over Bolivia's hydrocarbon regime and the appropriate role of energy in society.6 Berríos, Marak, and Morgenstern suggest that political leaders, regardless of ideology, have a strong preference for maintaining the status quo, and while that is certainly true in the large number of cases they analyze, neither the pendulum effect, nor incremental change over time, are explained by this observation.⁷

In his analysis of the technological imperative that has driven Petrobras's advances in offshore exploration, Tyler Priest suggests that one important consideration is the context surrounding the formation of national oil companies. Mexico's and Venezuela's state oil companies emerged during domestic oil booms that commenced under international oil companies, which were subsequently nationalized. In contrast, Argentina's and Brazil's energy giants emerged in a situation of scarcity that propelled the search for energy resources.⁸ Both Petrobras and YPF were founded by governments intent on finding oil and using it to propel their development, both in terms of industrialization and social welfare.⁹ Canada's high-modernist hydroelectricity projects follow these examples.¹⁰ Priest relates this to the role of business and technological innovation, but the observation nevertheless suggests a compelling historical explanation for the divergence of state energy policies and the changes they have undergone over time. Does the starting point—the historical construction of energy's place in each society—and not merely the status quo ante, shape the array of energy policies adopted in each country?¹¹

A second historical explanation, which Paul Chastko outlines in this volume in his chapter on Alberta's oil industry, is the extent of economic diversification in a given economy. Whereas the economic engine of Canadian development throughout the twentieth century was the manufacturing sector in Ontario—which relied upon hydroelectric power—Alberta's oil boom was only ever secondary to the creation of the levels of economic growth that could provide federal governments with the resources to create the kind of society that they envisioned. Although oil became central to regional identity in the Prairie West, hydro played a more important role in the construction of Central Canadian identity, as Daniel Macfarlane shows in his chapter in this volume. Given Central Canada's political and economic dominance, this meant that it was generally unnecessary to exercise tight state control over the oil industry.¹²

By contrast, when oil is virtually the only game in town, as it is in Ecuador, the stakes are higher. The lack of economic diversification means that the amount of revenue from hydrocarbons can determine whether a government can afford to pursue economic and social development. As a growing body of literature shows, it also determines the extent to which resident populations and their traditional territories are socially constructed as expendable, with their interests, health, and ways of life sacrificed to an economic project that is deemed to be for the greater societal good.¹³ The struggle of the Cofán people of the Ecuadorian Amazon to defend their right to cultural reproduction, and to collect punitive damages for the harm inflicted upon them by the multinational interests of Texaco (now Chevron), has drawn support from academics and activists worldwide.14 The "slow violence" of extractivism that Michael Cepek identifies as having structured the Cofán people's "life in oil" continues to be inflicted upon the lands and bodies of peoples deemed marginal in other international, national, and regional contexts.¹⁵ This slow violence is central to the stories of the Hunkpapa Lakota, Sihasapa Lakota, and Yanktonai Dakota of Standing Rock, North Dakota, where the grassroots protests against the Dakota Access Pipeline emerged; the Dene, Cree, and Métis community of Alberta's Fort McKay First Nation, surrounded by open pit oil sands mines;¹⁶ and the marginalized fishing communities who suffer the environmental degradation of Venezuela's Lake Maracaibo.¹⁷ Ostensibly progressive governments, such as those of Barack Obama or Evo Morales, treated Indigenous rights to free, prior, and informed consent as enshrined in the International Labour Organization Convention 169 with ambivalence. If a leftist government in Brazil enabled Petrobras to move deeper into the Amazon, failing to consult Indigenous Peoples in the area,¹⁸ how will the same groups fare under Bolsonaro, who transferred responsibility for Indigenous land rights to the Ministry of Agriculture by executive order immediately after his inauguration? Some outlets accused him of planning a "genocide" of Indigenous Peoples in Brazil.¹⁹ And while this may seem alarmist to some, successive inquiries into the treatment of Indigenous Peoples in Canada have used the same term.²⁰ In Canada, as in Brazil, the dispossession of Indigenous Peoples is directly connected to resource production.²¹

The unequal conflict between industry and government, on the one hand, and Indigenous Peoples and cultures, on the other, is central to critical analysis of energy history in North and South America. Not only do Indigenous Peoples reside upon or have rights to so much of the land where the extraction and production of energy resources occurs, but the historical construction of national identity has been associated with modernity and progress. A vast literature that spans the continent demonstrates how Indigenous Peoples have served as a foil in many national histories for the construction of a modern nation-state by the predominately European-descended settlers of the Americas.²² The exploitation of Indigenous Peoples and lands was overdetermined because energy production and consumption have also served as markers of modernity in these national narratives. Traditional energy sources such as firewood and charcoal are deemed backward, whereas more modern forms of energy, such as fuel oil and hydroelectricity, are seen in both popular thought and in much of the literature on energy history as being measurable evidence of economic and social development.²³ The most prolific proponent of this perspective is Vaclav Smil, whose influential work on energy transitions

7

has added much to our understanding of the world economy and the place of energy in society.²⁴ By employing this approach, César Yáñez in this volume demonstrates how Chile's continued reliance on coal was associated with its comparatively poor industrial progress in the twentieth century, and suggests that relative lack of hydroelectric power represented a concomitant lack of modernization. Macfarlane, taking a page from Timothy Mitchell, argues in this volume that the development of hydro in Ontario led to the emergence of "hydro democracy," a state in which the citizenry accepted the validity of government intervention in the economy and its management of natural resources, including energy.²⁵ The contributors to a recent volume on the petroleum industry in Alberta, by contrast, suggest, in a manner that is reminiscent of the resource curse narrative, that the oil industry has had deleterious effects on the quality of democracy not only in Alberta, but in Canada at large.²⁶

The idea that the predominant type of energy resource employed in a given country affects the quality and form of its government, its citizens' quality of life, and the development of its economy-either positively or negatively-clearly holds broad sway. Fernando Coronil, in his Magical State, provided a masterful demonstration of this effect in the Venezuelan context,²⁷ and as Matthew T. Huber shows, the connection between oil and development shaped not only the scholarly literature but also popular thought.²⁸ In the US, this led voters steeped in postwar consumer culture to demand cheap gasoline, and in turn prompted successive governments to pursue policies that have delivered it through aggressive capitalist expansion-much of it, not coincidentally, in Latin America. By contrast, in Brazil, the oil-development nexus has given popular meaning to the refrain "o petróleo é nosso" (petroleum is ours) (which has its equivalents in other parts of the Americas: Quebec's "nous sommes tous Hydro-Québécois,"29 and Mexico's "el petróleo es nuestro"30). This widely held belief sustained the idea that, once found, petroleum wealth should propel Brazil's import substitution industrialization in the postwar era, and its ascent as one of the so-called BRICS emerging economies (comprised of Brazil, Russia, India, China, and South Africa) at the beginning of the twenty-first century.³¹ Although Brazilian voters also value cheap gasoline, they believe even more strongly in the role of Petrobras, or at least they did until Operation Car Wash.

One of the keys to understanding the diversity of energy histories in the region, as well as the pendulum effect that is evident in the energy policies of various national governments, is found through the analysis of the mechanisms by which workers and the expanding middle classes were incorporated into the political process in countries throughout the Americas over the course of the twentieth century. In Michael Camp's contribution to this volume, he describes how the fate of Maine's Dickey Dam, which was derailed by environmental objections, differed from that of the Tennessee Valley Authority (TVA), one of the showpieces of the New Deal under Franklin Delano Roosevelt.³² Although the United States is generally considered the bastion of private capitalism, the political and technological feats of the hydroelectric engineers of the TVA were an example to the world of the advantages of state intervention in the energy market, while also speeding the incorporation of poor southerners into the US body politic. The TVA was based on lessons learned from the earlier nationalization of hydro power in the Niagara region through the Hydro-Electric Power Commission of Ontario, established in 1906, as well the engineers' understanding of the revolutionary land reform and irrigation projects underway in "Mexico's New Deal" under President Lázaro Cárdenas. During the Cold War, Latin American politicians and engineers (and their global counterparts in Asia and Africa) who visited the TVA took away both technological and political lessons, which helped their respective governments think through how to respond to their own challenges.³³ The goals of these projects were as political as they were environmental, and they ranged from providing irrigable land for marginal rural workers who had newly obtained the franchise, to stopping the spread of international communism during the Alliance for Progress. Decades later, the proponents of the Dickey Dam, like those of Chile's controversial HidroAysén project (cancelled in 2014),³⁴ faced very different political and economic terrain than had FDR's New Dealers.

Conceptions of the state's role in providing a stable source of energy, protecting the environment, and providing basic social welfare, have varied not only according to country, but also across time and space. At the beginning of the twentieth century, during the era of export-led growth throughout the Americas, the dominant mode of thinking was that private companies possessed the expertise and capital to propel economic growth, and governments therefore allowed and generally encouraged private companies to pursue resource development through concessions. To attract investors, governments pursued policies that would lure investors, such as repressive social control, low wages, and liberal tax regimes.³⁵ The United States and Canada should not be excluded from this characterization, given the internal colonialism that investment firms and their contemporary multinational successors continue to engage in. This arrangement was cut short in Mexico in the wake of the 1910 revolution and the oil expropriation of 1938,³⁶ but throughout the entire region, the rise of mass politics brought significant social dislocation. As governments throughout the hemisphere scrambled to mitigate the effects of the Great Depression, many necessarily experimented with early forms of import substitution industrialization as export markets dried up and imports became unavailable.³⁷ The growth that most countries experienced after the Second World War, during the era of massive government intervention in the economy, enabled fragile democracies in the region to begin to improve the standard of living for workers and reduce poverty rates, earning loyal voters in the process. But Latin American economies, with their vast natural resources and commodity endowments, remained export-oriented, and the fundamental disagreement over whether the government's role was to provide a social welfare state or a favourable environment for investment (which it was assumed would eventually benefit the populace through economic growth) was never resolved. The pace and timing of swings are produced by the complex energy histories of each country in North and South America, in tandem with increasingly interdependent international energy markets; but in its international, regional, and local dimensions, it is this basic disagreement that provides the pendulum's kinetic energy.

The chapters included in this volume represent some of the best emerging research on the national cases they describe. Although energy resources are among the most globalized commodities, these are national stories, with a few exceptions where technology and corporate actors take the stage. And although the volume focuses on the role of governments and politics in the creation of energy regimes, rather than the role of the workers who sustain energy industries, people are still at the heart of the discussion, because energy policies affect consumers, workers, and indeed all of the members of society whose lives are affected by the existence or absence of the social welfare state.³⁸ In his chapter, Pablo Heidrich proposes that the conception of energy as either a market good, a common good, or a political good can help to break through the ideological paradigms that colour analyses of energy policies. The often unconscious ideas we hold about the role of energy in society shape our investigations in this area as much as they influence the decisions of CEOs and governments, as the chapters in this volume-many of which employ Heidrich's schema-show. In Linda Hall's chapter, which is written from the perspective of a scholar who has written extensively on the triumphant construction of the Mexican oil monopoly, its undoing seems nonsensical. In the NAFTA (now CUSMA) era of free trade that firmly posits energy as a market good, however, this about-face seems to have been foretold in changing ideas about the place of government regulation of the economy. Just as Gail Triner points out in her chapter that economic theory predicted that the opening of Brazil's economy in the 1990s should have eliminated rent-seeking behaviour and improved the performance of Petrobras, academics (the contributors to this volume included) make a whole host of assumptions regarding economic behaviour and capitalism, and these of course shape our conclusions. Ernesto Serrani's chapter on the (re)nationalization of the Argentine energy industry may appear to be at odds with the Brazilian example outlined by Triner, but in both cases the management of energy transitions (in Brazil from conventional onshore to deepwater drilling in the pre-salt basin, and in Argentina with the emergence of a potentially lucrative shale gas industry) contributed significantly to the political changes that they accompanied. And as Paul Chastko suggests in his analysis of the Canadian experience in the Alberta oil sands, the whims of the market can precipitate energy transitions in even the most politically unlikely places. Heidrich's exhortation that we analyze energy as either a market good, a common good, or a political good, rather than resorting to the knee-jerk truisms that have guided so much of the conversation thus far, is another way that we can integrate histories of energy in the Americas. However, Dermot O'Connor and Juan Pablo Bohórquez Montoya, in their chapter on contemporary energy production in Colombia, remind us that treating energy as a common good holds its perils, because although it breaks down the naturalization of market-based energy policies, the common good is also a historically constructed idea that continues to sacrifice the interests of marginal groups to those of the majority.

In his chapter in this volume, which examines the experience of Exxon in Venezuela, Joseph Pratt identifies three periods in the oil giant's activities, that of unabashed exploitation, the assertion of national control (or abashed exploitation), and accommodation. This broad periodization can guide our understanding of energy experiences throughout the hemisphere. Brian McBeth's chapter on the early years of oil exploration and development in Venezuela demonstrates that even at the dawn of the period of unabashed exploitation, energy firms were constrained by local realities and personalities that hindered their freedom of action. As O'Connor and Bohórquez Montoya show, these constraints continue, such that international companies must pay careful attention to local conditions and involve local populations in decisions over their own futures. The social constraints faced by energy companies and governments alike are joined by environmental and technological constraints and opportunities. Daniel Macfarlane shows how environmental, as well as political and ideological, differences in the nationalist sensibilities of the United States and Canada during the mid-twentieth century played a role in the sometimes tense negotiations over the construction of the Niagara and St. Lawrence hydro projects. And as Camp shows, environmentalism intertwined with politics to create a very different outcome in the case of the Dickey Dam, which was never constructed. César Yáñez's long-run consumption analysis of Chile shows that, despite the ebb and flow of public policies, changes in energy production-and energy transitions in particular-tend to happen at a much slower pace. Whereas each country's transition from one energy regime to another can help explain its developmental outcomes, Tyler Priest's chapter shows that these transitions also occur within an international context that reflects the prevailing thinking on technology and science; these attitudes drive change in energy industries and the regulatory regimes adopted by governments, which in turn influence ideas about the state's role in society.

Taken together, these chapters demonstrate that we have much to learn from a comparative examination of energy histories in the Americas. Such an approach enables us to re-evaluate many of the accepted truths that have held sway, influencing policy-making and research production alike. The contributors to this volume are at the forefront of a new wave of scholarship on the history of energy production and regulation. By bringing them into dialogue, this volume broadens the conversation by de-emphasizing the traditional focus on national peculiarities in favour of a more integrated understanding of the role of energy in society.

NOTES

- 1 See, for example, Michael L. Ross, *The Oil Curse: How Petroleum Wealth Shapes the Development of Nations* (Princeton, NJ: Princeton University Press, 2012). For a contrasting perspective, see Pauline Jones Luong and Erika Weinthal, *Oil Is Not a Curse: Ownership Structure and Institutions in Soviet Successor States* (New York: Cambridge University Press, 2010).
- 2 Recent edited volumes on Latin America from the perspective of anthropology and political ecology and geographical economy have brought much theoretical precision to the study of energy regimes in Latin America. Together with the special issues of the Journal of American History (vol. 99, no. 1 [June 2012]) and the Canadian Journal of History (vol. 53, no. 3 [Winter 2018]), which include chapters on Canada and the United States as well as Mexico, these volumes constitute an emerging field of comparative research. In particular, see Anthony Bebbington and Jeffrey Bury, eds., Subterranean Struggles: New Dynamics of Mining, Oil, and Gas in Latin America (Austin: University of Texas Press, 2013); Anthony Bebbington, ed., Social Conflict, Economic Development and the Extractive Industry: Evidence from South America (London: Routledge, 2012); Håvad Haarstad, ed., New Political Spaces in Latin American Natural Resource Governance (Basingstoke, UK: Palgrave Macmillan, 2012); Kalowatie Deonandan and Michael L. Dougherty, eds., Mining in Latin America: Critical Approaches to the New Extraction (London: Routledge, 2016); Andrea Behrends, Stephen P. Reyna, and Günther Schlee, eds., Crude Domination: An Anthropology of Oil (New York: Berghahn Books, 2011); and John-Andrew McNeish, Axel Borchgrevnik, and Owen Logan, eds., Contested Powers: The Politics of Energy and Development in Latin America (London: Zed Books, 2015).
- 3 E. A. Wrigley, *Continuity, Chance and Change: The Character of the Industrial Revolution in England* (New York: Cambridge University Press, 1988).
- 4 Rubén Berríos, Andrae Marak, and Scott Morgenstern, "Explaining Hydrocarbon Nationalization in Latin America: Economics and Political Ideology," *Review of International Political Economy* 18, no. 5 (December 2011): 673–97.
- 5 See Kevin A. Young, "From Open Door to Nationalization: Oil and Development Visions in Bolivia, 1952–1969," *Hispanic American Historical Review* 97, no. 1 (2017): 95–129; Kevin A. Young, *Blood of the Earth: Resource Nationalism, Revolution, and Empire in Bolivia* (Austin: University of Texas Press, 2017); Stephen C. Cote, *Oil and Nation: A History of Bolivia's Petroleum Sector* (Morgantown: West Virginia University Press, 2016).

- 6 Derrick Hindery, From Enron to Evo: Pipeline Politics, Global Environmentalism, and Indigenous Rights in Bolivia (Tucson: University of Arizona Press, 2013).
- 7 Berríos, Marak, and Morgenstern, "Explaining Hydrocarbon Nationalization in Latin America."
- 8 Carl E. Solberg, *Oil and Nationalism in Argentina* (Stanford, CA: Stanford University Press, 1979). See also Elana Shever, *Resources for Reform: Oil and Neoliberalism in Argentina* (Stanford, CA: Stanford University Press, 2012).
- 9 The contrasting case of Cuba, which was intent upon finding oil reserves that never materialized, is analyzed in Erig T. Gettig, "Oil and Revolution in Cuba: Development, Nationalism, and the U.S. Energy Empire, 1902–1961," (PhD diss., Georgetown University, 2017).
- 10 Tina Loo, "High Modernism, Conflict, and the Nature of Change in Canada," *Canadian Historical Review* 97, no. 1 (Spring 2016): 34–58; James L. Kenny and Andrew G. Secord, "Engineering Modernity: Hydroelectric Development in New Brunswick, 1945–1970," *Acadiensis* 39, no. 1 (Winter/Spring 2010): 3–26; Daniel Macfarlane, *Negotiating a River: Canada, the US and the Creation of the St. Lawrence Seaway* (Vancouver: UBC Press, 2014).
- 11 Tyler Priest, "Petrobras in the History of Offshore Oil," in New Order and Progress: Development and Democracy in Brazil, ed. Ben Ross Schneider, 53–77 (New York: Oxford University Press, 2016).
- 12 Also see these authors' monographs: Paul Chastko, *Developing Alberta's Oil Sands:* From Karl Clark to Kyoto (Calgary: University of Calgary Press, 2004); Macfarlane, Negotiating a River; Daniel Macfarlane, Fixing Niagara Falls: Environment, Energy, and Engineers at the World's Most Famous Waterfall (Vancouver: UBC Press, 2020).
- 13 For one example, see Sherry Smith and Brian Frehner, eds., *Indians and Energy: Exploitation and Opportunity in the American Southwest* (Santa Fe, NM: School for Advanced Research Press, 2010).
- 14 Suzana Sawyer, Crude Chronicles: Indigenous Politics, Multinational Oil, and Neoliberalism in Ecuador (Durham, NC: Duke University Press, 2004); Marc Becker, Indians and Leftists in the Making of Ecuador's Modern Indigenous Movements (Durham, NC: Duke University Press, 2008).
- 15 Cepek uses Rob Nixon's term "slow violence" to describe the experience of the Cofán in *Life in Oil: Cofán Survival in the Petroleum Fields of Amazonia* (Austin: University of Texas Press, 2018).
- 16 A documentary on the Moose Lake reserve near Fort McKay, *Moose Lake: Home and Refuge*, presented by Bori Addobo, who represented the Fort McKay First Nation, and Peter Fortna, Tara Joly, and Hereward Longley of Willowsprings Strategic Solutions, provided the opportunity for discussion of corporate social responsibility frameworks at the "Energy in the Americas" conference. See Fort McKay First Nation, *Moose Lake: Home and Refuge*, online documentary, 20:49, 20 August 2013, https://vimeo. com/72715280.

- 17 Elvin Delgado, "Spaces of Socio-ecological Distress: Fossil Fuels, Solar Salt, and Fishing Communities in Lake Maracaibo, Venezuela," (PhD diss., Syracuse University, 2012).
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