# Forum

# Shadows of Divestment: The Complications of Diverting Fossil Fuel Finance

Kate J. Neville\*

#### Abstract

This forum article offers a critical assessment of the strategy of divestment from fossil fuels as climate action, considering the unintended or spillover consequences of reinvestment in other industries. With a focus on two sectors—agriculture and renewable energy—it examines how reinvestment to achieve competitive financial returns might exacerbate non-emissions-based environmental and social damage. The analysis draws on established and emerging research in global environmental politics on the political economy of commodity trade to sound a cautionary note about divestment, arguing that the strategy can maintain the status quo as readily as it can disrupt systems of power. A focus on divestment addresses a crucial immediate problem, but without a critical look at reinvestment and the current political economic order, activists could be reinforcing the same systems of environmental and social damage they are aiming to dismantle.

In September 2019, the University of California (UC) announced that its investments were going fossil-free. The decision placed the state higher educational system among a growing cluster of institutions that eschew fossil fuel investments, from the World Council of Churches to the Guardian Media Group to the Norwegian Sovereign Wealth Fund. Led most publicly by the grassroots climate action group 350.org, hundreds of institutions and thousands of individuals have shifted their money into other sectors (Ayling 2017), diverting more than US\$ 11 trillion from fossil fuels.<sup>1</sup> Such financial redirection signals heightened attention to climate change in a time of stalled progress on international

1. https://gofossilfree.org/divestment/commitments, last accessed March 26, 2020.

*Global Environmental Politics* 20:2, May 2020, https://doi.org/10.1162/glep\_a\_00555 © 2020 by the Massachusetts Institute of Technology. Published under a Creative Commons Attribution 4.0 International (CC BY 4.0) license.

<sup>\*</sup> I am grateful to Peter Dauvergne, Amy Janzwood, Kate Harris, Jane Lister, and two anonymous reviewers for thoughtful comments and suggestions on this article. My thanks, too, to the Social Sciences and Humanities Research Council of Canada and the University of Toronto for research support and funding. To those who are working hard for climate justice, especially those who see divestment as a tool to advance that path: while I offer a caveat here in this article, I still offer to you my gratitude, enthusiastic encouragement, and solidarity.

negotiations. It also reinforces the role of markets in shaping environmental outcomes, calling attention to the private sector's authority over systems of production and trade. Divestment efforts delegitimize the fossil fuel sector, countering its political and cultural power (Bergman 2018).

Divestment advocates present fossil fuel markets as risky for investors, given that these fuels destabilize the climate. If externalized costs are internalized, goes the economic logic, then investors will respond by moving their money to other sectors. The costs of fossil fuels are often indirect and hidden and are distributed around the world, although unevenly. They range from more frequent extreme weather events, often far from sites of extraction and consumption, to stranded assets. The appeal of fossil fuel divestment is further increased by the promise of profit from sustainable business practices, such as saving energy, water, and packaging (Dauvergne and Lister 2013). Green business is good business, investors are told, and a shift in finance can kick-start a new economy.

However, a cautionary note is needed: despite the enthusiasm of its proponents, divestment can maintain the status quo as readily as it can disrupt systems of power. Divestment strategies thus require close scrutiny. If climate change is the root problem, and fossil fuels the cause, then dismantling the financial underpinnings of the sector will lead to the transformation of the economy and society. A focus on divestment addresses a crucial immediate problem. But, as many scholars and activists argue, if climate change is only a symptom of a larger imbalance in our politics and economies, then undoing the fossil fuel industry will not achieve environmental justice. Without a critical look at reinvestment, activists could reinforce the same systems of environmental and social damage they aim to dismantle.

Proponents of fossil fuel divestment often urge for reinvested funds to be directed to socially and environmentally responsible companies. However, divestment advocates must consider whether nonexploitative commerce can generate competitive economic returns in the current system. Through a brief survey of research in two sectors—agriculture and renewable energy—this forum article sounds a cautionary note about divestment, highlighting the unintended social and environmental consequences that can result from reinvestment.

#### **Divestment: Dismantling or Reinforcing Corporate Control?**

A financial rearrangement might disrupt the economic system, offering space for other forms of value and other modes of exchange. Specifically, as Bratman et al. (2016, 677) argue, divestment campaigns can push institutions to reject their "complicity with fossil fuel economies" and contribute to "an emergent paradigm of climate justice." For divestment enthusiasts, a shift in financing arrangements unsettles the hegemony of the fossil fuel sector.

Yet divestment can also reinforce a market logic. Rather than being the first step in a fundamental restructuring of the economy, divestment can offer a growth-oriented solution to climate change that maintains and expands the power of the current economic order. This malleability is the source of both its value as a tool for change and its vulnerability to cooptation by powerholders. As explained in the announcement of UC's investment decision, "The reason we sold some \$150 million in fossil fuel assets from our endowment was the reason we sell other assets: They posed a long-term risk to generating strong returns" (Bachher and Sherman 2019). Here the pursuit of financial gains continues apace, but with a change in the specific commodities that produce economic value.

Investors moving their money out of fossil fuels turn to other profitgenerating, green-presenting sectors, including agriculture and renewable energy. These sectors promise to deliver commodities that are globally necessary and low carbon. However, established and emerging scholarship on these sectors reveals three key reasons for concern about their direct and indirect consequences. First, these sectors often cause environmental damage. Second, the supply chains for these industries have histories of social exploitation that intensify environmental injustice. And third, these sectors are embedded in complex financing structures, where new commodities can enable the further consolidation of corporate control. As a result, even if carbon emissions decrease, financial actors might intensify damage to people and the planet in other ways, while portraying themselves as responsible investors. Through reinvestment in high-return sectors, institutional and private investors might exacerbate the very social and environmental harm they want to avoid.

## Agricultural Commodities in Fossil-Free Portfolios

The environmental and social consequences of industrial agricultural need little elaboration: the production of agricultural commodities has long provoked land use debates, created imbalances between laborers and capital holders, and required significant energy inputs. Contemporary agricultural systems depend heavily on migrant labor (Taylor 2010), and agricultural practices— especially conventional production, but even organic systems—have large environmental impacts (Ramankutty et al. 2018; Meemken and Qaim 2018).

Even if agriculture could be weaned off of fossil fuels, replacing petroleumbased inputs with low-carbon alternatives, those invested in the sector still must contend with its other social and environmental impacts. Land use change and intensive livestock production can generate carbon emissions (Havlík et al. 2013). Moreover, even when soil management practices sequester carbon, there can be negative social repercussions (Leach et al. 2012). The expansion of industrial agrifood systems can intensify existing social inequalities (Ariza-Montobbio et al. 2010), although inequality is not absent in community-based production.

Hoping to avoid the negative outcomes associated with industrialized agriculture, investors might turn to certified production systems—but research on certification suggests that its ability to safeguard social well-being is limited. In work on cotton and sugar, Sneyd (2014, 233) finds that "the imperative of price competition within the world commodity order has circumscribed the possibilities for roundtables to deliver pro-poor business practices." The pressures for profit can constrict the supply chain, with negative social consequences.

Research on corporate globalization and finance suggests further reasons for concern about investment in the agrifood sector. In the wake of the 2007-2008 food crisis, renewed interest in large-scale land acquisitions in the Global South, including for biofuel crops, gained such traction that they were described as part of a new global "land grab." These land deals contribute to inequitable geopolitical and financial relationships in the food sector (McMichael 2012), adding to exploitative credit relations that harm peasant farmers (McMichael 2005). New financial vehicles, too, have intensified the already high concentration of corporate power in agriculture (Clapp 2019). A small number of asset management firms own interests in the major agrifood companies through equity investments and exchange-traded funds. The resulting common ownership, involving interlocking oligopolies, is obscured from the usual metrics of sectoral concentration (Clapp 2019), and the proliferation of brands in the marketplace belies a highly narrowed set of corporate beneficiaries of that consumption. These investment arrangements incentivize industrial-scale production rather than prioritizing environmental and social well-being.

#### **Renewable Energy as Low-Carbon Investments**

In a low-carbon world, renewable energy technologies are hot business. For investors looking to redirect funds, wind turbines and solar panels, among other technologies, seem a straightforward choice. But renewables need to be further scrutinized before being championed as forging a path toward a low-carbon future. Both the direct and indirect impacts of renewable energy must be examined to ensure that a climate-smart future does not intensify social and environmental harm. As renewable energy production requires land, water, and labor, among other inputs, it imposes costs on people and the environment. Hydropower projects, for instance, have led to community dispossession and exclusion (Khagram 2004). Renewable energy supply chains are also intertwined with mining, and their technologies contribute to growing levels of electronic waste (O'Neill 2019). Furthermore, although renewable energy can be produced and distributed through small-scale, local systems, such an approach might not generate the high returns on investment needed to attract capital.

Although an emerging sector, renewables are enmeshed in long-standing resource extraction through their dependence on minerals and metals (Park et al. 2019). Scholars document the negative consequences of mining (Bridge 2004; Jacka 2018), even for mining operations that commit to socially responsible practices (Gamu and Dauvergne 2018). As Park et al. (2019) highlight, "many of the world's largest reservoirs of minerals like cobalt, copper, lithium, [and] rare earth minerals"—the ones needed for renewable technologies—"are found in fragile states and under communities of marginalized peoples in

Africa, Asia, and Latin America." Since the demand for metals and minerals will increase substantially in a renewable-powered future (World Bank 2017, 58), this intensification could exacerbate the existing consequences of extractive activities.

Among the connections between climate change and waste, O'Neill (2019, 7) highlights that "devices developed to reduce our carbon footprint, such as lithium batteries for hybrid and electric cars or solar panels[,] become potentially dangerous electronic waste at the end of their productive life." The disposal of toxic waste has long perpetuated social injustice through the flows of waste to the Global South and to marginalized communities in the Global North (Pellow 2007). Recycling efforts, sometimes presented as an environmental solution for e-waste and other materials in renewables, can still have negative social and environmental consequences (O'Neill 2019, 10; Dauvergne and LeBaron 2013).

While renewable energy is a more recent addition to financial portfolios, investments in the sector must be considered in light of our understanding of capital accumulation. As agricultural finance reveals, the concentration of control of corporate activity facilitates profit generation. For some climate activists, the promise of renewables rests on their ability not only to reduce emissions but also to provide distributed, democratized access to energy (IRENA 2019; McKibben 2019). But Burke and Stephens (2018, 78) caution that "renewable energy systems offer a possibility but not a certainty for more democratic energy futures." Small-scale, distributed forms of energy are only highly profitable to institutional investors if control is consolidated somewhere in the financial chain. Renewable energy can be produced at the household or neighborhood level. However, such small-scale, localized production is unlikely to generate high returns for investors. For financial growth to be sustained and expanded by the renewable sector, production and trade in renewable energy technologies will need to be highly concentrated, and large asset management firms will likely drive those developments.

## **Beyond Divestment**

There remain questions about whether the redirection of investment, given the scale of the market, is sufficient to interrupt the power of the fossil fuel industry (Bergman 2018). As Gunningham (2017, 311) notes, "many of the biggest fossil fuel extraction companies are not public companies but are state owned ... and, in any event, other, less ethically concerned investors will snap up the divested shares." However, beyond its efficacy, more fundamental questions about divestment need to be asked: Can we financially innovate our way out of environmental collapse? Is it really the financial sector that will catalyze a more just future?

Moving finance out of fossil fuel companies alone may not defund the fossil fuel industry. According to Ritchie and Dowlatabadi (2014), even when investors commit to fossil-free investment portfolios, they may still have holdings

with a "carbon emission shadow"—that is, carbon-exposed investments, including electric utilities and steel (cf. Hunt and Weber 2019). More fundamentally, even if divestment does reduce carbon emissions, other social and environmental concerns arise from reinvestment.

As investors redirect funds from fossil fuel interests into agriculture and renewable energy, the noncarbon consequences of this low-carbon future must be considered. Even if divestment is "primarily a moral and normative initiative" (Gunningham 2017, 317), rather than one that sees itself fundamentally rerouting finance, a critical lens is needed. Technological solutions to environmental problems—from geoengineering to biofuels and beyond—have attracted scholarly attention to their unintended consequences (e.g., Dauvergne 2008; Fuentes-George 2017; Dauvergne and Neville 2010). Such scrutiny, too, is needed for investment redistribution: if solving climate change merely relocates ecological and social damage, the value of divestment becomes less clear.

Research suggests that the characteristics that make industries profitable in the contemporary capitalist system are the same ones that undermine social and ecological well-being. A growth-oriented model is needed to produce returns on investments—but is also the source of unsustainable extraction and untenable models of labor. A focus on investor action reinforces a troubling assumption: that the current financial system can be redirected to provide climate solutions. Rather than a specific material or commodity, it is capitalism's "valuation processes" articulated by Birch (2016)—what he describes as the construction and extraction of value from commodities through political economic practices of financialization, capitalization, and assetization—that drive economic growth. Instead of turning to the existing financial system to address climate change, then, scholars and citizens must consider alternate models of economies looking to degrowth (Kallis et al. 2018), sufficiency (Princen 2005), localized economies (Ducros 2014), and Indigenous and social political economies (Kuokkanen 2011; Neville and Coulthard 2019), among others.

As a tool to disrupt the dominance of the fossil fuel industry, divestment has some potential. But to unsettle the power of economic elites, and to catalyze more equitable global arrangements, divestment falls short. Global capital is inexhaustibly creative. Divestment may be a short-term strategy to unsettle the current dominance of fossil fuels and create space for envisioning new futures. However, rather than developing lists of fossil-free portfolios with competitive returns on investment, divestment campaigns must be accompanied by more critical questions about the role of finance and the forms of political economy that underpin a more just future.

**Kate J. Neville** is an assistant professor at the University of Toronto, where she is cross-appointed to the Department of Political Science and the School of the Environment. Her research is positioned at the intersection of contentious politics and global political economy, with a focus on contested energy and extractive projects.

## References

- Ariza-Montobbio, Pere, Sharachchandra Lele, Giorgos Kallis, and Joan Martinez-Alier. 2010. The Political Ecology of Jatropha Plantations for Biodiesel in Tamil Nadu, India. Journal of Peasant Studies 37 (4): 875–897.
- Ayling, Julie. 2017. A Contest for Legitimacy: The Divestment Movement and the Fossil Fuel Industry. *Law and Policy* 39 (4): 349–371.
- Bachher, Jagdeep Singh, and Richard Sherman. 2019. Opinion: UC Investments Are Going Fossil Free. But Not Exactly for the Reasons You May Think. Los Angeles Times, September 17. Available at: https://www.latimes.com/opinion/story/2019-09-16/ divestment-fossil-fuel-university-of-california-climate-change, last accessed March 26, 2020.
- Bergman, Noam. 2018. Impacts of the Fossil Fuel Divestment Movement: Effects on Finance, Policy and Public Discourse. Sustainability 10 (2529): 1–18.
- Birch, Kean. 2016. Rethinking Value in the Bio-Economy: Finance, Assetization, and the Management of Value. Science, Technology, and Human Values 42 (3): 460–490.
- Bratman, Eve, Kate Brunette, Deirdre C. Shelly, and Simon Nicholson. 2016. Justice Is the Goal: Divestment as Climate Change Resistance. *Journal of Environmental Studies and Science* 6: 677–690.
- Bridge, Gavin. 2004. Contested Terrain: Mining and the Environment. Annual Review of Environment and Resources 29: 205–259.
- Burke, Matthew J., and Jennie C. Stephens. 2018. Political Power and Renewable Energy Futures: A Critical Review. *Energy Research and Social Science* 35: 78–93.
- Clapp, Jennifer. 2019. The Rise of Financial Investment and Common Ownership in Global Agrifood Firms. *Review of International Political Economy* 26 (4): 604–629.
- Dauvergne, Peter. 2008. The Shadows of Consumption: Consequences for the Global Environment. Cambridge, MA: MIT Press.
- Dauvergne, Peter, and Genevieve LeBaron. 2013. The Social Cost of Environmental Solutions. New Political Economy 18 (3): 410–430.
- Dauvergne, Peter, and Jane Lister. 2013. *Eco-Business: A Big-Brand Takeover of Sustainability*. Cambridge, MA: MIT Press.
- Dauvergne, Peter, and Kate J. Neville. 2010. Forests, Food, and Fuel in the Tropics: The Uneven Social and Ecological Consequences of the Emerging Political Economy of Biofuels. *Journal of Peasant Studies* 37 (4): 631–660.
- Ducros, Hélène. 2014. Localized Responses to Unsustainable Growth. *Global Environmental Politics* 14 (2): 122–128.
- Fuentes-George, Kemi. 2017. Consensus, Certainty, and Catastrophe: Discourse, Governance, and Ocean Iron Fertilization. *Global Environmental Politics* 17 (2): 125–143.
- Gamu, Jonathan Kishen, and Peter Dauvergne. 2018. The Slow Violence of Corporate Social Responsibility: The Case of Mining in Peru. *Third World Quarterly* 39 (5): 959.
- Gunningham, Neil. 2017. Review Essay: Divestment, Nonstate Governance, and Climate Change. *Law and Policy* 39 (4): 309–324.
- Havlík, Petr, Hugo Valin, Aline Mosnier, Michael Obersteiner, Justin S. Baker, Mario Herrero, Mariana C. Rufino, and Erwin Schmid. 2013. Crop Productivity and the Global Livestock Sector: Implications for Land Use Change and Greenhouse Gas Emissions. *American Journal of Agricultural Economics* 95 (2): 442–448.

- Hunt, Chelsie, and Olaf Weber. 2019. Fossil Fuel Divestment Strategies: Financial and Carbon-Related Consequences. *Organization and Environment* 32 (1): 41–61.
- IRENA. 2019. A New World: The Geopolitics of the Energy Transformation. Available at: http://geopoliticsofrenewables.org/assets/geopolitics/Reports/wp-content/ uploads/2019/01/Global\_commission\_renewable\_energy\_2019.pdf, last accessed March 26, 2020.
- Jacka, Jerry K. 2018. The Anthropology of Mining: The Social and Environmental Impacts of Resource Extraction in the Mineral Age. *Annual Review of Anthropology* 47: 61–77.
- Kallis, Giorgos, Vasilis Kostakis, Steffen Lange, Barbara Muraca, Susan Paulson, and Matthias Schmelzer. 2018. Research on Degrowth. Annual Review of Environment and Resources 43: 291–316.
- Khagram, Sanjeev. 2004. Dams and Development: Transnational Struggles for Water and Power. Ithaca, NY: Cornell University Press.
- Kuokkanen, Rauna. 2011. Indigenous Economies, Theories of Subsistence, and Women: Exploring the Social Economy Model for Indigenous Governance. *The American Indian Quarterly* 35 (2): 215–240.
- Leach, Melissa, James Fairhead, and James Fraser. 2012. Green Grabs and Biochar: Revaluing African Soils and Farming in the New Carbon Economy. *Journal of Peasant Studies* 39 (2): 285–307.
- McKibben, Bill. 2019. To Stop Global Catastrophe, We Must Believe in Humans Again. *The Guardian*, April 23. Available at: https://www.theguardian.com/commentisfree/ 2019/apr/23/stop-global-catastrophe-believe-humans-again-geoengineering, last accessed March 26, 2020.
- McMichael, Philip. 2005. Global Development and the Corporate Food Regime. Research in Rural Sociology and Development 11: 269–303.
- McMichael, Philip. 2012. The Land Grab and Corporate Food Regime Restructuring. Journal of Peasant Studies 39 (3–4): 681–701.
- Meemken, Eva-Marie, and Matin Qaim. 2018. Organic Agriculture, Food Security, and the Environment. *Annual Review of Resource Economics* 10: 39–63.
- Neville, Kate J., and Glen Coulthard. 2019. Transformative Water Relations: Indigenous Interventions in Global Political Economies. *Global Environmental Politics* 19 (3): 1–15.
- O'Neill, Kate. 2019. Linking Wastes and Climate Change: Bandwagoning, Contention, and Global Governance. WIREs Climate Change 10: e568.
- Park, Susan, Teresa Kramarz, Craig Johnson, and Stacy D. VanDeveer. 2019. Globalizing the Global Green New Deal: Harmful Extractives in the Clean Energy Shift. *Public Administration Review*, July 16. Available at: http://www.publicadministrationreview.com/2019/07/16/gnd15/, last accessed March 26, 2020.
- Pellow, David Naguib. 2007. Resisting Global Toxics: Transnational Movements for Environmental Justice. Cambridge, MA: MIT Press.
- Princen, Thomas. 2005. The Logic of Sufficiency. Cambridge, MA: MIT Press.
- Ramankutty, Navin, Zia Mehrabi, Katharina Waha, Larissa Jarvis, Claire Kremen, Mario Herrero, and Loren H. Rieseberg. 2018. Trends in Global Agricultural Land Use: Implications for Environmental Health and Food Security. Annual Review of Plant Biology 69: 789–815.
- Ritchie, Justin, and Hadi Dowlatabadi. 2014. Understanding the Shadow Impacts of Investment and Divestment Decisions: Adapting Economic Input–Output Models to Calculate Biophysical Factors of Financial Returns. *Ecological Economics* 106: 132–140.

- Sneyd, Adam. 2014. When Governance Gets Going: Certifying "Better Cotton" and "Better Sugarcane." Development and Change 45 (2): 231–256.
- Taylor, J. Edward. 2010. Agricultural Labor and Migration Policy. *Annual Review of Resource Economics* 2: 369–393.
- World Bank. 2017. The Growing Role of Minerals and Metals for a Low Carbon Future. Available at: http://documents.worldbank.org/curated/en/207371500386458722/pdf/ 117581-WP-P159838-PUBLIC-ClimateSmartMiningJuly.pdf, last accessed March 26, 2020.