PEACEWORKS

Traumatic Decarbonization in Fragile States

By Aditya Sarkar, Benjamin Spatz, Alex de Waal, Jared Miller, and Tarun Gopalakrishnan

United States Institute of Peace
Making Peace Possible

NO. 196 | MAY 2024

PEACEWORKS

NO. 196 | MAY 2024

ENVIRONMENT

ABOUT THE REPORT

Decarbonization is essential to address climate change, but evidence in this report shows that rapid, unplanned loss of carbon revenues imperils democratization and peace in fragile, oil-producing states. The report presents a framework for analysis and offers options for policy response. Research for the report was supported in part by a grant from the United States Institute of Peace; additional funding was provided by the World Peace Foundation at the Fletcher School of Law and Diplomacy at Tufts University.

ABOUT THE AUTHORS

Aditya Sarkar is a PhD candidate at the Fletcher School at Tufts University. Benjamin Spatz is a senior lecturer at the University of Cape Town's Graduate School of Business. Alex de Waal is a professor at the Fletcher School and executive director of the World Peace Foundation (where Sarkar and Spatz are research fellows). Jared Miller and Tarun Gopalakrishnan are PhD candidates at the Fletcher School.

Cover photo: A man walks along the former jetty of Ugborodo, Nigeria, on June 13, 2016. The water in the area is heavily polluted by oil. (Photo by Jane Hahn/New York Times)

United States Institute of Peace
2301 Constitution Avenue NW
Washington, DC 20037

(202) 457-1700
www.USIP.org

Peaceworks no. 196. First published 2024.

ISBN: 978-1-60127-939-2

UNITED STATES
INSTITUTE OF PEACE PRESS

Contents

Summary

Decarbonization—the replacement of fossil fuels with non-hydrocarbon-based forms of energy—has vastly different implications in developed economies and fragile states. Through case studies of recent “traumatic decarbonization”—a rapid, unplanned reduction in hydrocarbon revenues—this report assesses how fragile, conflict-affected oil-producing countries will fare as the world transitions to clean energy and they incur losses to the revenues that sustain their current economies and political systems.

In such fragile states, where governance institutions are weak, politics centers on transactional bargains among rival elites rather than functioning under the rule of law. In such “political marketplaces,” elites use material rewards to sustain political bargains and peace settlements, alongside coercion.

In a significant number of poorer and conflict-affected countries with hydrocarbon reserves, oil and gas revenue serves as a primary source of finance for players in the political marketplace, so that entire systems of government are constructed around it. The global transition away from fossil fuels threatens to eliminate such political finance and jeopardizes elite deals in precisely those contexts where governments are least prepared to manage the transition. Progress toward peace, stability, democracy, and development was already uncertain in these countries, and it is further jeopardized by the political disruptions associated with traumatic decarbonization.

Policymakers engaged in conflict resolution and environmental policy formulation currently work in silos; to avoid harmful unintended consequences associated with traumatic decarbonization in fragile states, they will need to find ways of working together and with other partners such as international organizations and civil society organizations in the relevant countries. Responding to decarbonization will require improved analyses and proactive policy responses that move away from viewing environmental challenges solely through the lens of security. Instead, sustained diplomacy will be required to redesign both existing climate commitments and peace processes as the political economies of these decarbonizing nations change over time.

Pedestrians walk past a sculpture of oil workers on a sidewalk in Caracas, Venezuela, on October 23, 2014. By the time global oil prices collapsed earlier in the year, Venezuela—whose government finances are heavily dependent on oil exports—was already in the throes of a macroeconomic crisis. (Photo by Ariana Cubillos/AP)

Introduction

Decarbonization—the replacement of fossil fuels with cleaner, non-hydrocarbon-based forms of energy—is essential for the world to meet its climate goals. Without it, there is no way to achieve the benchmarks set by the Paris Agreement, forge a carbon-neutral future, and avert disastrous climate tipping points.[1] Yet despite its centrality in addressing climate change, a crucial aspect of decarbonization is missing from the clean energy agenda: its impact on the politics of fragile oil-producing states.

In these states, hydrocarbon revenues are central not only to national economies but also to the functioning of politics. Many hydrocarbon-dependent developing countries are fragile in the sense that they lack well-developed institutional political systems. In such countries, politics operates very differently than in developed, institutionalized states. Instead of functioning according to the rule of law, politics is organized around transactional bargains among rival members of the elite. For those elites who hold the levers of state power, hydrocarbon revenue provides the discretionary funds needed to distribute patronage, secure loyalty, and retain power—indeed, this revenue is a necessary, if not primary, means of political control. Eliminating this essential means of political finance risks upsetting the elite deals underpinned by oil money—and, in turn, unleashing violence and increased cycles of corruption and causing widespread human suffering. Even if crises are difficult to detect from the outside, they lurk behind a facade of stability.

The unexpected and extreme nature of the oil shocks thrust normally hidden processes of elite bargaining into plain view, revealing how leaders behaved with reduced discretionary hydrocarbon rents.

The stakes of inaction are high and not at all theoretical, as examples ranging from Iraq to Venezuela to Nigeria make vivid. South Sudan highlights the risks most starkly: From 2005 to 2012, the South Sudanese government used oil money to buy the loyalty of rivalrous armed groups, and a tenuous peace held among them. The collapse of those rents in 2012 and 2013 was a factor in triggering civil war. Worse, when oil revenues did not rebound, the competing factions shifted the financial basis of South Sudan's patronage system from division of oil revenues to predation; armed groups taxed and raided populations under their control. This change has only intensified elite dominance and exacerbated inequality and misery, even causing starvation among many South Sudanese.

Confronting this reality requires a new research and policy agenda, one that applies a theory of politics to discussions of the transition to a post-oil future. The research described in this report meets this need by systematically analyzing the effects of loss of oil revenues on elite politics, war, and peace in oil-producing fragile states, more precisely called "political marketplaces." It combines knowledge of how these states actually function with an examination of the role oil rents play in elite bargaining. This approach provides researchers and policymakers with a framework to assess both how processes of decarbonization will be understood by the leaders of those systems—that is, as threats to key sources of political finance used to maintain power—and what the implications are of a move away from hydrocarbon-based economies.

Since there has not yet been a global transition away from hydrocarbons, this report uses two strategies to apply lessons from the recent past to an uncertain future.

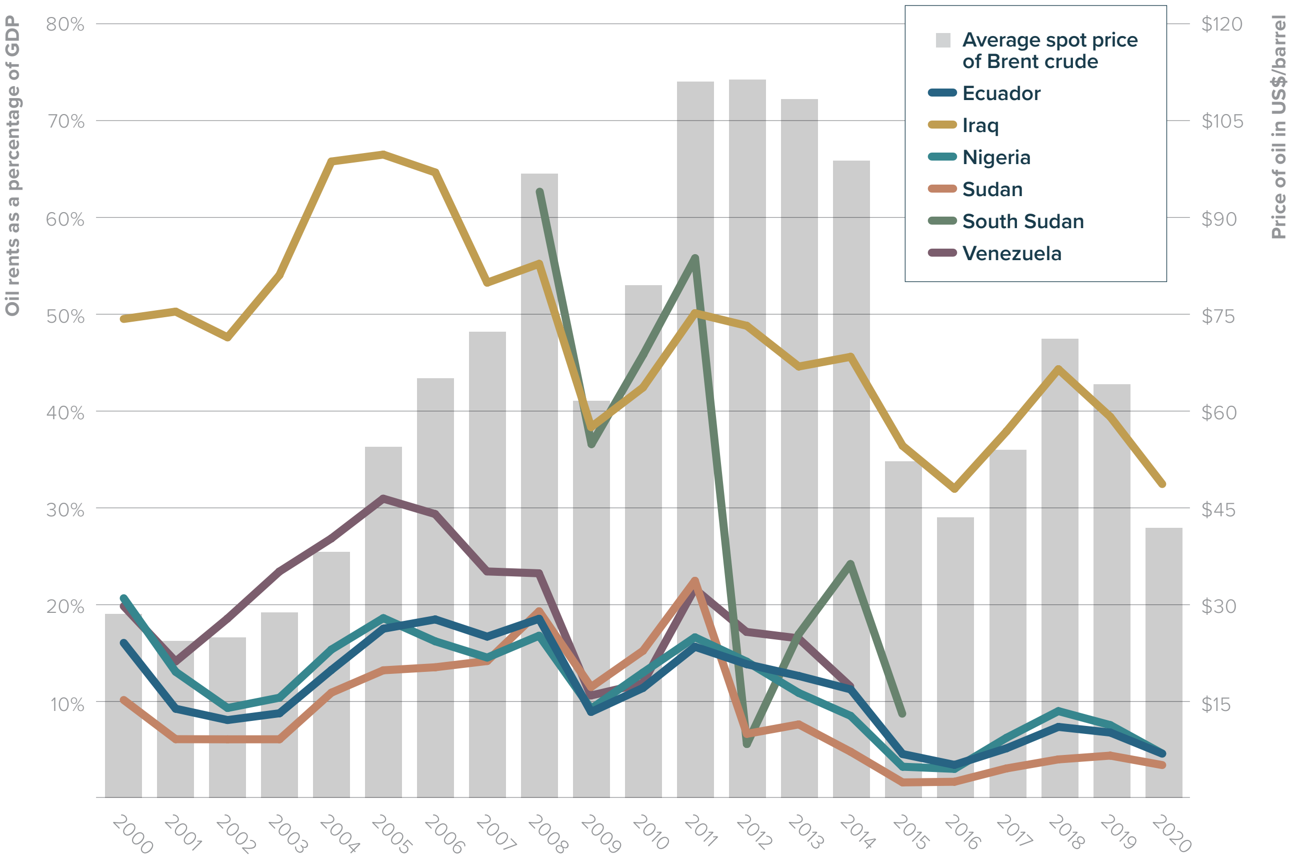
First, the report analyzes cross-national research on the impact of oil shocks on peacemaking by combining data from the University of Edinburgh's Peace Agreements Database, a comprehensive set of coded peace agreements dating back to 1990, and data on oil price fluctuations in conflict-affected oil-producing states. This strategy allows for insights into how a green energy transition might affect the type and scope of peacemaking.[2]

Second, the report identifies six illustrative instances of loss of oil revenues, including cases of de facto decarbonization over the past decade, that serve as indicators for future decarbonization: Ecuador, Iraq, Nigeria, South Sudan, Sudan, and Venezuela.[3] These countries' recent experiences provide insights into what is likely to happen in other hydrocarbon-dependent political systems in the future.

In all cases except Ecuador, the loss of revenues was traumatic: it was unplanned and socially destabilizing and sparked intense elite political jockeying as access to political finance plummeted. The unexpected and extreme nature of the oil shocks thrust normally hidden processes of elite bargaining into plain view, revealing how leaders behaved with reduced discretionary hydrocarbon rents and providing a unique opportunity for analysis.

De facto decarbonization has followed different dynamics in each case. These range from transient dramatic price and production fluctuations, including global price drops from 2014 to 2016 and in 2020 (as economic activity and travel fell dramatically due to the COVID-19 pandemic), to irreversible production and revenue drops due to losses in productive capacity or mismanagement. In Iraq and Nigeria, oil revenue collapses have been dramatic though still reversible when prices rebound, at least in the short term. In Sudan, most oil revenue was permanently lost after South Sudan gained independence in 2011, because most of the oil

Figure 1: Oil rents as a proportion of GDP, 2000–2020



Sources: Data on oil rents (defined as the difference between the value of crude oil production at regional prices and total costs of production) as a proportion of GDP are extracted from "Oil Rents (% of GDP)," World Bank, https://data.worldbank.org/indicator/NY.GDP.PETR.RT.ZS. Data on average price of oil (the spot price of Brent Crude in US$/barrel) are extracted from "Petroleum & Other Liquids," US Energy Information Administration, https://www.eia.gov/dnav/pet/hist/RBRTED.htm.

Note: No data on oil rents are available for Venezuela after 2014 or for South Sudan after 2015. Because spot prices are reported on multiple dates every year, the average annual spot price is used for oil prices in this figure.

fields were located in the south.[4] The next year, South Sudan's leaders deliberately shut down the country's entire domestic production in what they expected to be a temporary measure—a move that had dire financial impacts on a country that funded over 95 percent of its national budget through oil sales. (The shutdown was a way to avoid sharing revenue with Sudan, which received a cut based on the transshipment of oil through Sudan to Port Sudan for export.[5]) A more gradual process took place in Venezuela, where President Hugo Chávez's years of mismanagement led the oil industry to crisis prior to the 2014 fall in oil prices.[6]

Regardless of the particulars of why and when hydrocarbon revenues contracted, looking across the cases allows for preliminary conclusions about (1) the general political impacts of rapid and unplanned decarbonization, and (2) the mechanisms through which these impacts are channeled. Figure 1 illustrates the dynamics of oil rents in comparison to global oil prices in each of the cases.

The research shows that decarbonization reshapes these states' political economies, creating winners and losers and reconfiguring elite political incentives along the way. But tellingly, even as the specifics vary (different dominant elite players, available sources of income, and formal regime types), the underlying character of these systems does not. They remain elite-dominated, transactional, rent-seeking, and often violent systems, and—regardless of ideological leaning or formal regime type—the logic of power in them is remarkably resilient.

Far-reaching implications follow for the prospects of these countries and their citizens. The case studies show that when faced with a cash crunch, leaders fell back on tried-and-true strategies: they sought replacement sources of political finance, typically through rent seeking, corruption, and exploitation, and also resorted to repression. Populations suffered. Patterns of peacemaking, too, shifted on the basis of availability of discretionary oil rents. Increased oil revenue made possible more inclusive and robust peacemaking processes, whereas austerity made such processes unviable. None of the countries discussed transitioned toward a productive, development-focused economy or a democratic system—a sobering finding for those aspiring to link an energy transition with a broader sociopolitical transition. Even when populations responded to increased repression and rent seeking with demands for democracy and accountability through protests and civic engagement, any short-term gains they made were easily reversed.

A woman holds a sign that reads in Spanish, “Gasoline goes up. Everything goes up. National strike,” during a protest in Quito, Ecuador, on October 2, 2019, days after President Lenín Moreno announced an end to government subsidies holding down fuel prices. (Photo by Dolores Ochoa/AP)

The Material Nature of Politics in “Political Markets”

The “political marketplace” refers to a system of governance and a way of analyzing how power works within that system; specifically, it describes states where politics is conducted as the exchange of political services or loyalty for payment.[7] It provides a framework for understanding how such states function and how they are likely to respond to external interventions and other political and economic changes.

Essentially, the political economies of fragile states are monetized, transactional, often violent, and not regulated by the rule of law; instead, formal institutions are subordinated to material-based elite dealmaking.[8] The last point is key. All politics involves dealmaking of some sort, but in these systems, the deals dominate. Because these countries are buffeted by the squalls of a turbulent global economy and because politicking is concerned with the here and now, ruling elites operate with short-term time horizons. Strategic policy planning is subordinate to the diktat of political survival. Governance institutions, laws, and bureaucratic processes—including democratic institutions and practices—are bent toward the elites’ tactical political goals.

To make sense of and analyze otherwise opaque political dynamics, it is necessary to discern the rules structuring elite behavior and distill them into a set of empirically grounded principles.

The rules are as simple as they are distasteful. So is the goal itself: to gain and maintain political power, overriding all else. The logic of power wins out over the effort to better the livelihoods of populations, which becomes a secondary, and usually tactical, consideration, if it factors in at all. Longer-term national priorities such as sustainable development, public health, and environmental conservation are filtered through tangible short-term gains for those in power. Political elites (mostly men) seek power using violence and material reward (the "twin currencies" of political power).[9] Money is key to both; mobilizing material rewards has a clear financial element, but so too does the control of the means of violence, as material inducements are used to buy (or rent) loyalty and violent capabilities.[10]

The core business, then, is to secure discretionary cash or its noncash equivalent—that is, the ability to grant or withhold access to material rewards, such as noncash bribes, contracts, and formal and informal licenses to operate and predate in certain areas. These discretionary funds are called the "political budget"—funds deployed for political ends—and hydrocarbon revenue is among the most effective ways to finance a political budget.

Elite bargaining is the heart of these systems, and it is nearly constant as individuals seek better deals to advance their personal positions and those of the factions they command. The concepts of allies and enemies break down; members of the elite can compete one moment and collude the next, and often do both simultaneously in different spheres of influence. These arrangements make these systems look confusingly volatile to outsiders, but such political turbulence becomes legible once one understands the rules.

The rules consist of four guiding principles:

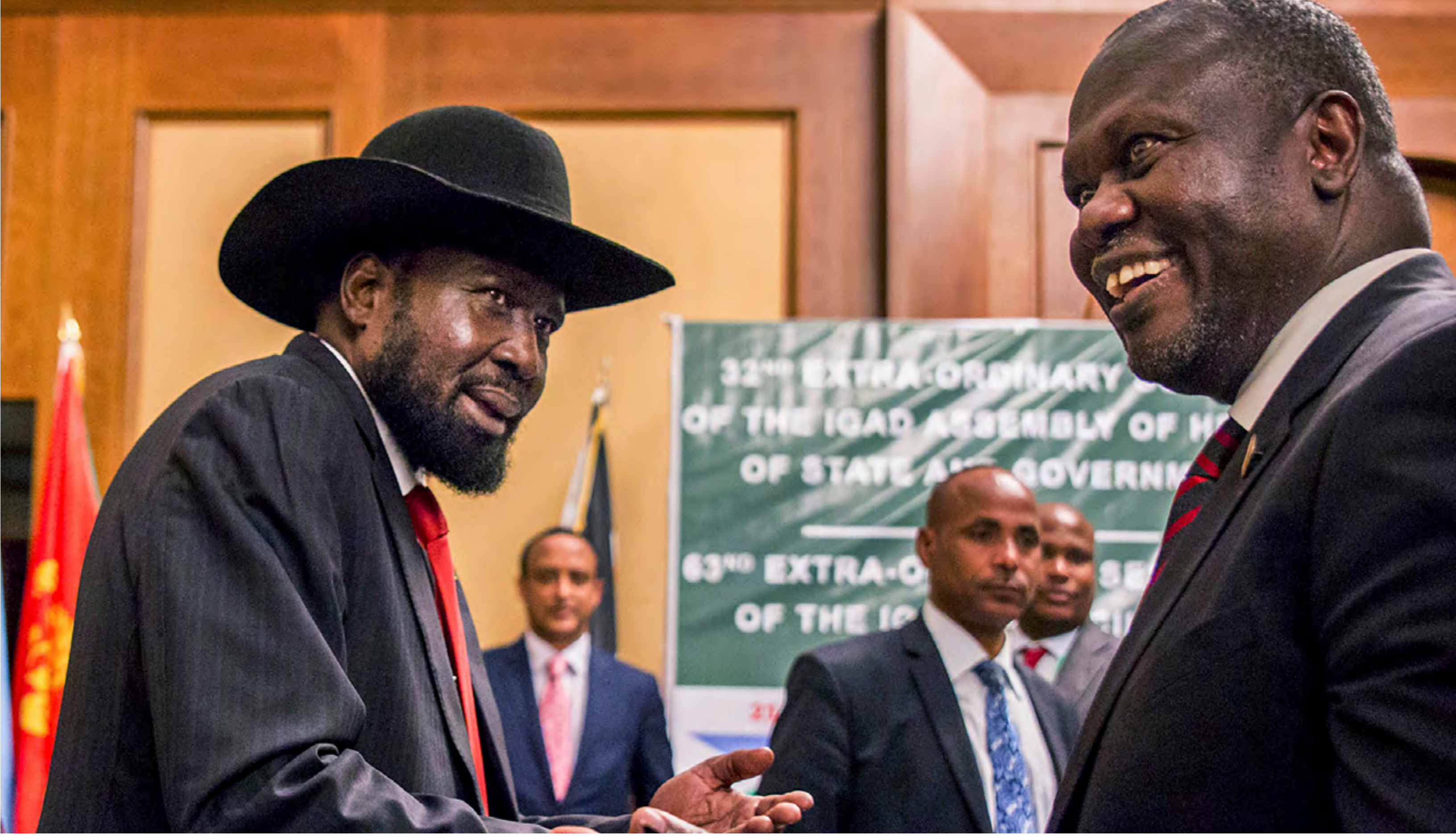
1. **It's an elite game.** Elites dominate and instrumentalize populations and public policy.

2. **Transactional politics trumps institutional governance.** Transactions—or elite deals—dominate formal institutions, rules-based governance mechanisms, laws, and regulations; short-term gain (or survival) trumps long-term planning.

3. **Money is key.** Elite deals are structured around material rewards and violence; money is necessary for both—to be doled out as bribes and to buy or rent the means of violence.

4. **Everything is political.** War, peace, repression, and corruption, as well as development and public policy, should be viewed by outside analysts through the prism of elite-level political dealing.

Political viability—survival, both political and literal—requires playing along with this logic. Reformers or those pursuing their political objectives through other means (such as a democratic reform agenda) do so at their own peril, with few examples of success. The laws of political selection inexorably dictate the survival of the best-funded and least scrupulous. And increasingly, the political and financial networks of these actors are global; in oil-producing states, this is so almost by definition, because they are intricately bound up with the business practices of transnational oil companies.



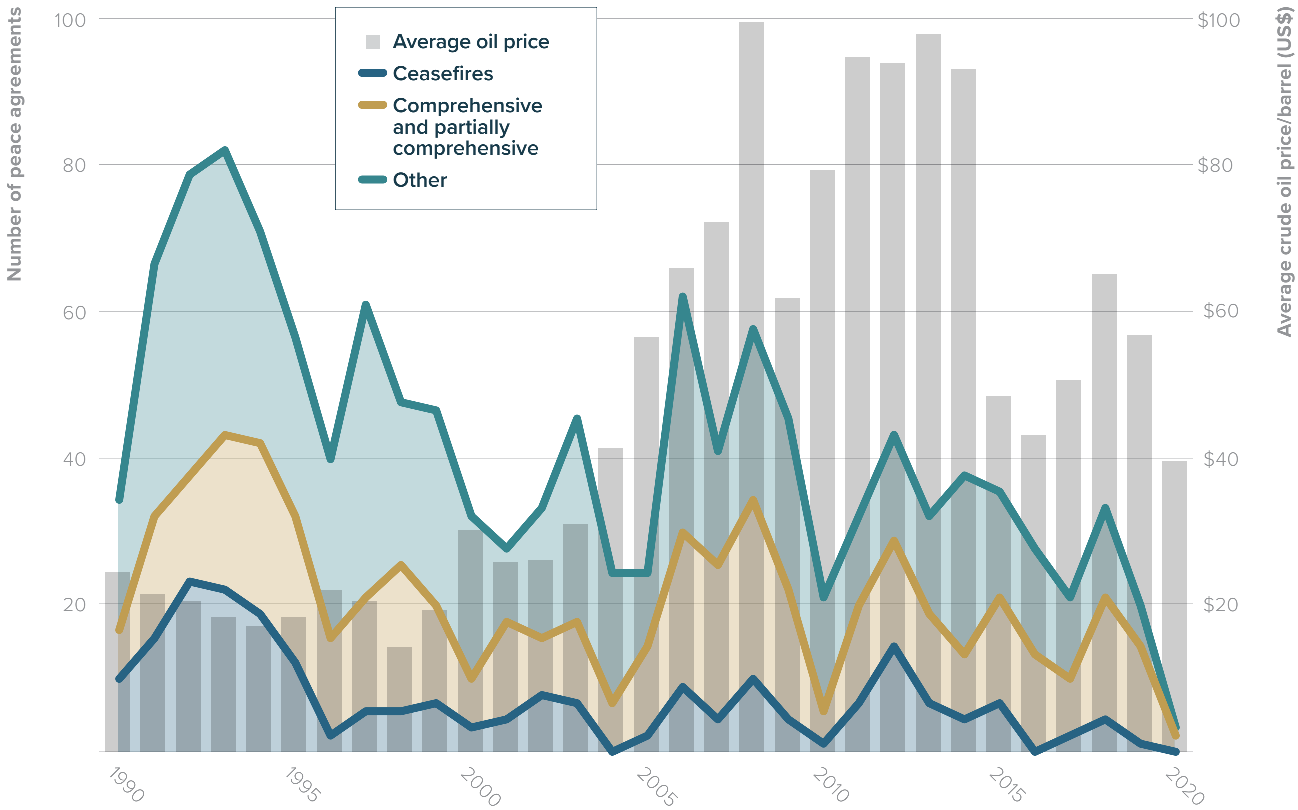
South Sudan's President Salva Kiir, left, and opposition leader Riek Machar shake hands during peace talks in Addis Ababa on June 21, 2018. The peace agreement that emerged from these talks was the latest in a series of "payroll peace" agreements in the country that relied on oil revenues to support expansions of government and military payrolls. (Photo by Mulugeta Ayene/AP)

Carbon Rents and Peace Settlements

Oil shapes war and it shapes peace. There is a rich literature on how the discovery and exploitation of oil contribute to authoritarianism, corruption, increased defense spending, and conflict.[11] In the past decade, scholars have also investigated the ways in which oil extraction affects communities and precarious groups, the differentiated impacts of oil extraction on subregions within a country, and the mechanisms through which resources (and most specifically oil) weaken institutions and affect the origins, intensity, duration, and geographical manifestation of civil war.[12] There is much less focus on what happens when the oil rents run dry. The partial exception here is evidence for defense budgets, which are retrenched in some cases but not others.[13] Arms purchases and military payroll are prioritized by governments facing major military threats, but they serve equally as mechanisms for filling and dispensing political budgets.

The literature on contributors to peace processes and their success is also rich and contested. The role played by oil revenues as a resource to be allocated in peace talks has been noted in case studies but not

Figure 2: Peace agreements in oil-dependent countries, 1990–2020



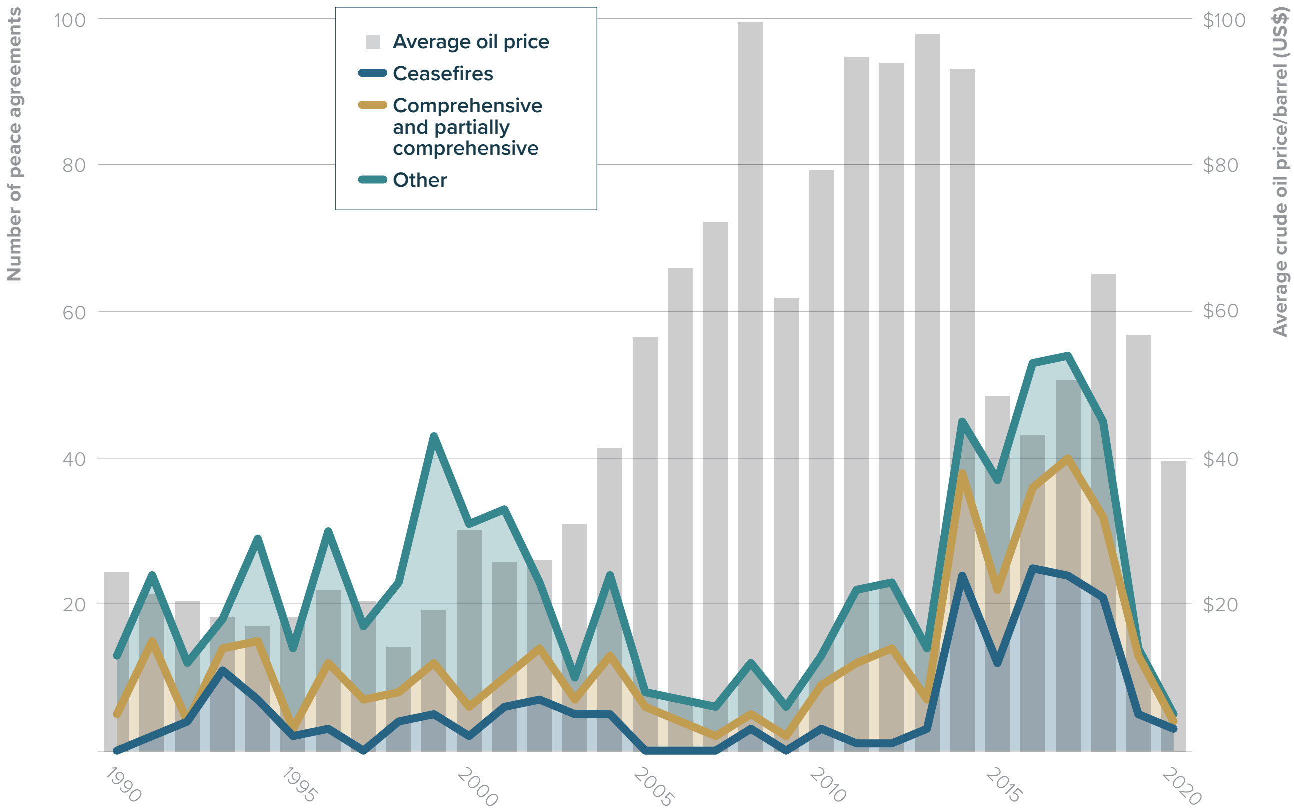
Sources: Adapted from Jan Pospisil, "The New Era of Turbulence: Peacemaking Trends in Post-Carbon Times," World Peace Foundation, February 2023, https://worldpeacefoundation.org/wp-content/uploads/2024/03/A-new-era-of-turbulence-d1.pdf. Data on peace agreements are from the University of Edinburgh PA-X Database, https://www.peaceagreements.org/; see Christine Bell et al., "PA-X Codebook, Version 7," Peace and Conflict Resolution Evidence Platform (PeaceRep), University of Edinburgh, Edinburgh, 2023. Average crude oil prices are based on West Texas Intermediate (WTI or NYMEX) crude oil prices per barrel, available at https://www.macrotrends.net/1369/crude-oil-price-history-chart.

Note: Oil-dependent countries are defined here as countries with oil revenue equal to 1 percent or more of GDP.

generalized. South Sudanese, for example, speak about "payroll peace," whereby conflict is ended by bringing the fighters from rebel armed groups onto the national payroll, which is premised on a military budget flush with oil funds.[14] The cross-national data analyzed for this report suggest that the availability of oil rents affects patterns of peacemaking—increasing or decreasing the incidence of peace agreements—and also leads to strikingly different types of peacemaking. More comprehensive political agreements are associated with greater availability of political funds, and more limited deals tend to occur when money is tight. This relationship is shown in the data for (limited) ceasefires and (comprehensive) settlements. In oil-producing countries, short-term ceasefires increase as oil prices go down, whereas comprehensive agreements are the opposite, positively correlated to oil prices. Non-oil producers do not show the same year-to-year fluctuations.

This analysis is based on the University of Edinburgh's PA-X Peace Agreements Database, a comprehensive set of publicly available written peace agreements from 1990 to 2020.[15] The database includes 1,868 peace agreements from 160 distinct episodes of armed conflict–related peacemaking.[16] The database utilizes a six-part typology of peace agreements, which can be simplified into three broad categories: ceasefires, comprehensive or partially comprehensive peace

Figure 3: Peace agreements in non-oil-dependent countries, 1990–2020



Sources: Adapted from Jan Pospisil, "The New Era of Turbulence: Peacemaking Trends in Post-Carbon Times," World Peace Foundation, February 2023, https://worldpeacefoundation.org/wp-content/uploads/2024/03/A-new-era-of-turbulence-d1.pdf. Data on peace agreements are from the University of Edinburgh PA-X Database, https://www.peaceagreements.org/; see Christine Bell et al., "PA-X Codebook, Version 7," Peace and Conflict Resolution Evidence Platform (PeaceRep), University of Edinburgh, Edinburgh, 2023. Average crude oil prices are based on West Texas Intermediate (WTI or NYMEX) crude oil prices per barrel, available at https://www.macrotrends.net/1369/crude-oil-price-history-chart.

agreements, and others—the last including prenegotiation, implementation, and renewal agreements—which are used in the present analysis.[17]

To compare the effects of oil revenues and carbon revenues on peace processes, the 160 conflict episodes were narrowed down to 54 determined to be carbon-related.[18] A carbon-related episode of conflict was positively identified when it involved a country with oil revenue equal to over 1 percent of GDP.[19]

Increased oil revenue went hand in hand with broader, stronger peacemaking processes; revenue reductions led to weaker agreements and increases in violent contestation. Figure 2 displays disaggregated peace agreement data from the carbon-related conflict dyads (54 episodes); it shows far fewer agreements but relatively more comprehensive ones as oil prices spike. This trend is visible only in the carbon-related conflicts. Figure 3, which displays data from non-oil-dependent economies (106 episodes), shows that the number of peace agreements in these economies has remained fairly stable since the post-Yugoslav wars of the 1990s. Further substantiating this finding are data comparing oil prices and the average length of the signed peace agreements—using the number of pages as a proxy for comprehensiveness—in the 54 carbon-related conflicts and the 106 non-carbon conflict episodes.

Beyond whether peacemaking writ large is increasing or decreasing, figure 2 reveals a striking difference in the type of peacemaking as related to oil revenue. The pattern is primarily caused by divergence in the numbers of ceasefires (blue) and the comparably high number of partially comprehensive and comprehensive peace agreements (gold). In oil states, ceasefires dramatically decreased in periods of high oil prices and increased in periods of low oil prices. The partial and comprehensive peace agreements appear to move in the opposite direction. This points to remarkable differences in how violence ends when oil rents are or are not flowing.

The rationale becomes clearer when the data are matched with the rules of the game in violent, transactional systems. During oil boom years with flush political budgets, there is more incentive to establish a more inclusive political bargain for a share of oil largesse. Thus, there are fewer overall peace agreements, but the ones that are signed are broader and appear to last longer—or at least to last as long as the oil rents are flowing.

Underpinning these agreements are "carbon compacts"—elites' deals to divide oil wealth among themselves. When oil prices fall, however, the deals come under stress. Elites' bargaining shifts toward violence. Military-political entrepreneurs faced with shrinking political budgets deploy violence as a bargaining tactic in the effort to carve out as much as they can from an ever-smaller pie. It is these short-term violent patterns that are picked up in the increased number of ceasefires relative to more comprehensive agreements. The ceasefire agreements are essentially tools to manage violent bargaining, but they are inherently unstable.[20]

These data reflect a deeper truth about the nature of violence in transactional political systems. "War" and "peace" are not distinct categories in these countries.[21] Many of these systems exist in a state of "inter-war," where political negotiation and economics are shaped by coercion and the always impending threat of violence.[22] "Peace" is rarely peaceful. During ostensible periods of peace, Venezuela has continued to experience some of the highest homicide rates in the world.[23] In Iraq, violence has been deployed strategically by armed groups to extort funds, suppress protests, and target civil society leaders.[24] In Sudan, where the oil boom coincided with conflict in Darfur, the government used oil money to rent the loyalty of extremely violent paramilitaries, who demanded a high price.[25]

Oil Rents, Politics, and Decarbonization in Practice

To help make sense of how oil rents and politics relate in practice, it is important to distinguish countries by the ways in which their carbon compacts differ from each other. It is also informative to pick apart the specific roles that oil rents play in very different countries.

POLITICAL SETTLEMENTS AND UNSETTLEMENTS

Oil rents affect politics everywhere, but the impacts differ markedly across states according to the ways their institutions function. This is what separates Norway from Iraq, Venezuela, or Nigeria. The specific institutional arrangements in a country can be called its "political settlement," and variation across countries is the result of different bargaining outcomes among contending elites.[26]

Not to be confused with a peace agreement, a political settlement in this sense can be, and often is, an implicit understanding among elites about how to best serve their interests and divide power. In some instances, political settlements break down, causing reorganizations of institutional power sharing (again, not necessarily codified), sometimes attended by political violence. When contestation itself becomes institutionalized, the situations are said to be "political unsettlements." Some of these are formalized by public law, for example, in Bosnia and Herzegovina or Northern Ireland.

The analysis here is concerned with another kind of political unsettlement, managed only by the rules of the political marketplace. Such countries are chronically corrupt, institutionally weak, and prone to violence, though their political systems are often resilient and sometimes give a plausible imitation of stability.

Oil-producing states have diverse politics and include developed, institutionalized countries such as Norway and the United States; rich and stable authoritarian states such as the Gulf monarchies; fragile and conflict-affected countries such as Iraq and South Sudan; and others, such as Brazil and Russia, that display even greater diversity in levels of formal and informal institutional rule. Faced with the energy transition, they have vastly different economic and political capabilities and incentives.

Those that have diversified economies or can use their accumulated wealth to diversify are well-placed to withstand the strains of the energy transition. But the focus here is on those that do not possess a robust economy and whose leaders do not have the option of planning longer-term adjustments, both because the levers of state power are poorly connected to social and economic policy and because the demands of staying in power are overwhelming. Rulers of these countries are like sailors on a leaky ship in rough seas who need the skills of seamanship to stay afloat; they cannot think of navigating their vessel to a far-off destination.

Countries can shift between categories. Iraq and Venezuela are cases in point; they have moved from being relatively stable and prosperous authoritarian states to fragile and conflict-affected ones. Others defy clear categorization. Iran and Russia are sui generis, each following a unique pattern too complex to explore

Protesters gather near the provincial council building during a demonstration in Basra, Iraq, on October 29, 2019. Protesters were seeking to put pressure on the central government and the Council of Representatives to provide local residents with more job opportunities at oil companies in the region. (Photo by Nabil al-Jurani/AP)

here. The point is that the mere fact that a state derives income from hydrocarbon revenue is less analytically useful than understanding how hydrocarbon rents factor into its political (un)settlement, and consequently how decarbonization will play out.

Thus, a key to understanding these systems is understanding how political funds are accumulated, who controls them, and how they are leveraged to gain, maintain, or exercise political power. Although corruption is often central to securing political budgets, its common definition—the use of public office for private gain—does not capture the full spectrum of what is happening in these systems.[27] While elites siphon off oil revenues for self-enrichment in all cases, not all personally controlled money is for personal use in the traditional sense. Personal control of political finance does much more than drive consumption (e.g., the purchase of mansions and luxury cars); it is key to maintaining power. Indeed, political competition drives accumulation of revenue; the type and extent of that competition determine how much money is required to be politically competitive. From this perspective, embezzlement of public funds, mercenarism, narco-trafficking and the sale of other illicit commodities, extortion, looting, and brigandage all commingle with international finance and sovereign-backed loans in the same system—and help fill the gaps left by reduced hydrocarbon rents.

HOW HYDROCARBON RENTS INFLUENCE POLITICS

Hydrocarbon rents are instrumentalized for political ends in four main ways. Most oil producers use all four, but in different combinations and to different ends.

Simple corruption. Oil money can be stolen—or moved through corrupt channels—by elites for personal enrichment. This occurs across the full spectrum of countries to differing degrees, and the precise mechanisms also vary depending on a country's political economy and degree of institutionalization. Among the most common corrupt paths is arms purchasing, which provides opportunities for fraudulent enrichment as well as funding of autocracy, purchase of military loyalties, and establishment of foreign security pacts.[28]

Public spending. Oil funds can pay for public goods—welfare, subsidies, infrastructure, and public-sector salaries. In developed economies, overreliance on minerals can cause shrinking of other tradable sectors of the economy and appreciation of the exchange rate, with knock-on effects on politics. Public spending commitments can be written into peace deals, and indeed this is part of what can make them attractive for insurgents to sign.

Autocratic subsidy. Centralized authoritarian rule can exist across a variety of carbon-based political systems, from stable states with diversified economies to political unsettlements. Autocrats use oil rents to consolidate their hold on power in multiple ways: (1) to establish a welfare contract with the population, thereby generating popular support for an authoritarian system; (2) to generate public employment, thereby creating a salaried class subject to some form of governmental discipline and reliant on and loyal to the state; (3) to fund a military security apparatus, effectively increasing the ruler's control over repression; and (4) to fund an assertive foreign and security policy. The increased military power of an autocrat, threatening both a domestic insurgent and its backers in neighboring states, can be an incentive for a peace settlement.

Political funding. Oil dollars can be used to fill political budgets. This often neglected but crucial practice is most (but not solely) visible in carbon-related political unsettlements, such as in Nigeria, South Sudan, and Sudan. As elites engage in near-continuous bargaining over positions of power, oil rents are critical to finance political deals and secure loyalty. Such deals and loyalty can be crucial to a peace agreement—for instance, if an armed group is to transition to a political party able to compete in an election, its leaders need a political budget.

Notwithstanding the different techniques of governance, continuities in governance practices are evident across most oil-producing countries. In all but the most institutionalized countries, state reliance on oil rents decreases the need for accountability to taxpayers, while the volatility of oil prices accentuates short-term horizons among politicians.

WHAT DECARBONIZATION DOES AND DOES NOT CHANGE

Decarbonization contributes to the immiseration of the general population, which inevitably fuels popular discontent. However, a key point that emerges from the cases examined later in this report on the relationship between decarbonization and politics in transactional political systems is that the rules of these political systems are "sticky." Even if decarbonization can reconfigure elite dynamics and positioning, there are few off-ramps—if any—to non-transactional political systems. Civic protest movements are rarely able to force a change in the political rules, nor do protests usually result in public-minded institutions taking the reins of policymaking.

In short, despite decarbonization, the rules of the political game stay the same. When decarbonization causes rapid revenue shortfalls, politicians look for alternate revenue sources and make calculations about which constituencies need to be satisfied immediately, which can be postponed, and which can be either disregarded or violently suppressed. The result might look like deep political instability, but it is better understood as a manifestation of "turbulence"—day-to-day changes in the conduct of politics. Indeed, the rules of these political systems remain unchanged even if the players and tactics adjust.[29] Intensified elite bargaining occurs among politicians and armed actors (who are usually the same men) as they seek the upper hand through securing control of alternative revenue sources.

As a result of this turbulence, alliances shift, political fortunes rise and fall with clear winners and losers, and methods for filling political budgets change. Common tactics include (1) cutting spending on public goods and services; (2) mortgaging future oil production for cash in hand (often at a large discount);[30] (3) securing other forms of legal commodity extraction, including the sale and allocation of licenses to exploit the commodity itself; (4) rent seeking through illicit and semi-licit activities, including trafficking of narcotics, smuggling, extortion, and protection rackets; and (5) preying on populations through plunder or seizure of land (and either willfully ignoring such predation or sanctioning it through legal means).

No revenue substitute has yet proven as effective for political control as oil. Oil revenue centralizes political finance in the hands of those who control the state and its institutions. Alternate sources of revenue almost always entail shifts in the political geography of extraction, which reconfigure the relative balance of strength among leaders and shape elite bargaining. Not all reconfigurations in political bargains are rapid or immediately evident from the outside. In Sudan, for instance, it took more than five years without oil to redefine the sources of power and elite positioning.[31]

A rebel soldier stands guard at dusk in Leer, South Sudan. The collapse of government revenues following the country's 2012 shutdown of oil production made it difficult for the government to purchase the loyalty of diverse armed groups. (Photo by Jacob Zocherman/AP)

Six Cases of De Facto Decarbonization

Research for this report examined six instances of de facto decarbonization: one permanent instance (Sudan); two transient instances brought about by downturns in oil prices (Iraq and Nigeria); and three instances that were a combination of permanent and transient factors (South Sudan, Ecuador, and Venezuela).[32] These cases are summarized in turn, followed by a description of two consequences that emerged in all cases: (1) the widespread immiseration of populations catalyzed by decarbonization, even if decarbonization was not the sole or even primary cause of the economic distress; and (2) elite resistance to popular actions to transform the system.

SUDAN: THE SEARCH FOR OIL RENT SUBSTITUTES

Sudan represents a historically rare instance of a country that was compelled to decarbonize permanently, in this case through the secession of its oil-producing southern region in 2011. When Sudan's oil production began, in 1999, President Omar al-Bashir and the cabal running the ruling National Congress Party (NCP) used oil revenues to enrich themselves, placate domestic constituencies, and, most critically, reshape and enlarge patronage networks. These patronage practices helped "subdue some of the grievances of middle- and upper-class Sudanese living in Khartoum and its surroundings . . . through improved economic conditions and new infrastructure and subsidies."[33] Oil rents fed public and security sector employment. They allowed for manipulation of ostensibly democratic mechanisms, funding the NCP's campaigns and rewarding its voters. Above all, a share-out of oil revenues underpinned the Comprehensive Peace Agreement (CPA) with the armed opposition Sudan People's Liberation Movement and Army (SPLM/A)—a clear case of high oil revenues facilitating a major peace deal. This system allowed Bashir to hold on to power despite significant challenges, including wars in Darfur, US-led sanctions, and diplomatic isolation.

Sudan's political market began to collapse after South Sudan's independence in 2011: Sudan lost three-quarters of its oil production and almost all its oil exports after the split. Bashir and his cronies turned to artisanal gold mining and mercenarism to fill the political revenue gap, but both brought in far less money than oil and were far harder to control. Unlike oil production, gold mining was not centralized, and its distance from Khartoum forced Bashir to rely on indirect control. Indeed, General Mohamed Hamdan Dagalo (known as Hemedti), leader of the Rapid Support Forces paramilitary group, gained power through his control of important mining areas in Darfur.[34] Sudanese mercenaries—often linked to Hemedti—were rented by the United Arab Emirates (UAE) and Saudi Arabia to fight in Yemen and Libya.[35]

These changes left Bashir vulnerable to dissent from the top and the bottom. Less revenue trickled in, and he was forced to cut subsidies for food and commodities that the population had come to expect, sparking protests. Bashir controlled less of the political money, so his political power diminished vis-à-vis previously junior players, such as Hemedti. No longer able to dispense oil rent–driven patronage, the president lost supporters in Khartoum, and his emergent rivals established direct links to outside patrons (the UAE and Saudi Arabia) so they no longer had to go to Bashir for money or favors. These outcomes combined to contribute to his overthrow in 2019.

Bashir's successors struck two crucial agreements: the Khartoum Declaration of 2019, which set up a military-civilian power-sharing government; and the Juba Agreement of 2020, which brought armed rebels into the fold. Both agreements needed massive injections of money if they were to succeed. But Sudan no longer had oil; and the economy, crippled by debt and sanctions, continued its downward spiral, helping doom both deals.[36] Civil war broke out again in April 2023, between the Sudanese Armed Forces and Hemedti's Rapid Support Forces.

IRAQ: COLLAPSED GOVERNMENT PAYROLL, INTERNATIONAL BAILOUTS, AND FAILED PROTESTS

Iraq has no plans to decarbonize, but the government has been compelled to manage the fallout from the oil price collapses, which it has done primarily by repressing popular aspirations. Oil funds 90 percent of Iraq's government budget and is the most significant (though not the only) source of political funds for elites.[37] It also underpins a large and fragile patronage network based on the extension of state-backed salaries (within a large public sector) and contracts.

Since 2003, Iraqi politics have centered on bargaining over budgets and ministries in an informal quota-based system of ethno-sectarian political parties (referred to as *muhassasa ta'ifiya* in Arabic).[38] The choicest positions (in oil and public works ministries, for example) give officeholders the ability to distribute state funds to their networks, which are linked in complex ways to violent sectarian politics and militia groups. Oil sales across Iraqi governorates (with the exception of the Kurdish region) are centralized in the national coffers, and funds are in turn distributed to party-controlled ministries, security agencies, and provincial budgets. Oil also generates secondary sources of revenue for non-oil-producing regions in the form of service contracts, public and private employment, and profits from smuggling and extortion at checkpoints controlled by political parties and armed groups.

In 2020, the collapse of oil revenues eviscerated Iraq's budget, leaving an estimated $43 billion gap that upended the patronage system.[39] The government secured international loans to cover some of the deficit, largely from the International Monetary Fund; Iran, too, stepped in, seeking to fill the political vacuum through its proxies, with varying success. Overall, the armed groups lost funding from the state and political parties—a result that slightly shifted the balance of power in favor of nonviolent civic actors. A public protest movement emerged to demand reforms, yet any real window of opportunity appears to have been brief. When violence erupted, it was not among the armed elites, but rather targeted at civilian leaders of the reform movement. The civic movement's relative success led to an implicit consolidation of shared interests among violent forces that have the most to lose from a dismantling of the current system of monetized governance.

NIGERIA: EMBEZZLEMENT AS A SUBSTITUTE FOR OIL RENTS

Nigeria has undergone transient shocks to its system due to the oil price collapses of 2014 and 2020 but has no plans to decarbonize. Oil rents historically provide 65 percent to 85 percent of overall Nigerian government revenue, but this figure underestimates oil's true political importance as arguably the key component of the Nigerian transactional political system.[40]

The country's political market is both lucrative and expensive; being involved in government is a major source of wealth, yet obtaining and retaining political power is extremely costly. The political market is also multitiered and multicentered—that is, no single party or person has a monopoly over either the sources of revenue or the means of violence; there is instead collusion and competition among many individuals at the central and subnational levels, which makes operating in the market very expensive.[41] International oil companies, despite their regular complaints about the costs and hazards of doing business in Nigeria, are willing accomplices in this system, and indeed they profit handsomely from it.

Much elite bargaining centers on dividing oil rents before they even hit federal government coffers. Indeed, control of the national oil company (the Nigerian National Petroleum Corporation) makes or breaks political fortunes. Moreover, aspects of the Nigerian oil sector that look from the outside like mere inefficiencies—such as underutilized infrastructure, frequent sabotage, opaque government budgets, layers of convoluted contracting arrangements, and inflated costs—are actually used by elites, sometimes quite intentionally, to reward allies or keep them in check and to prevent the rise of well-financed opponents.

Substitutes for oil rents are hard to come by. After prices for Nigeria's crude dropped by 75 percent in 2020, President Muhammadu Buhari secured international loans to fund an estimated 20 percent gap in the federal budget.[42] Then, despite calls for austerity measures, many budgeted line items associated with patronage (such as zonal projects and state-owned enterprises) remained intact or increased, even as broad cuts were made to health and welfare budgets amid the global pandemic.[43] This suggests that a substitute for oil-derived patronage funds was written into the federal budget.

SOUTH SUDAN: OIL REVENUE, VIOLENT CONTESTATION, AND WAR

South Sudan didn't expect to decarbonize, but it permanently crippled its oil revenues in 2012. Oil lay at the center of the violent contestation between Sudan and newly independent South Sudan. Before the 2005 CPA, oil rents enabled Bashir to bid for the loyalty of armed groups in southern Sudan, fueling a well-established divide-and-rule strategy to counter his main military rival, the SPLM/A.[44] During the war, those insurgents relied mostly on predation, local taxes, diversion of humanitarian aid, and outside military assistance to fund their war effort.

Dynamics changed with the signing of the CPA. From this point on, it was the SPLM/A in Juba that had access to oil revenues, which it used to secure the loyalty of military commanders.[45] The 2006 Juba Declaration was an oil-funded payroll peace or "big tent" that sought to purchase the loyalty of diverse armed groups to bring them into the ruling coalition. However, those same armed actors used mutiny and the threat of rebellion to claim ever-bigger payoffs. This situation created an inflationary political system, with the price of loyalty increasing faster than the political budgets, especially as oil income flattened. Commanders and provincial leaders would mutiny to lay claim to a share of oil rents, drawing violent responses from the SPLM/A, and the cycle of violence would continue until the two sides struck a deal on how much would be paid. Each bargain prompted those who had already cut their deals to reassess their options, and some would then initiate another rent-seeking rebellion, setting the cycle in motion all over again.[46]

The self-inflicted collapse of oil rents in 2012—when South Sudan shut down its own production—meant that the government in Juba could no longer pay for its "big tent" patronage system. Bashir's government in Khartoum demanded a political purge before it was ready to reopen the pipeline. Mismanagement of political tensions then sparked war. The 2015 Agreement on the Resolution of the Conflict in South Sudan failed for many reasons, but high among them was the shortage of funds to re-create the 2006 payroll peace.[47]

ECUADOR AND VENEZUELA: AUTHORITARIAN OIL-DEPENDENT REDISTRIBUTION

Ecuador and Venezuela each experienced gradual and potentially irreversible decarbonization, in one case managed and in the other mismanaged, over a period of two decades. Space does not permit a full account of the complexity of the two countries' recent political-economic histories, but in both countries, leaders gained and maintained political control by using oil money to fund populist redistribution programs and expand welfare-state services to the poor. The cases diverge in the type and degree of authoritarian leadership, the role of the military, and the response to decarbonization processes. The most significant difference, however, seems to be that Ecuador's government institutions—which exhibited some elite dealmaking, but not so much as to wholly subsume the rule of law—constrained what could have been more extreme authoritarian and violent moves, like those in Venezuela.

In Venezuela, Hugo Chávez used the country's oil wealth to cement his popularity among the elite and the citizenry after winning his first election in 1998. He funneled vast wealth to the military and cronies while also spreading funding throughout society in welfare programming.[48] This gave Chávez additional cover to make sweeping changes to consolidate his control, and he "eventually crippled the traditional parties, deeply eroded checks and balances, and placed the military at the center of power."[49] In response to several strikes by oil workers, Chávez fired most employees and restructured the national oil company, causing huge problems of mismanagement.

By the time of the global oil price crash in 2014, Venezuela, now led by Nicolás Maduro, was already in the throes of a macroeconomic crisis. Maduro

Indigenous protesters march in downtown Quito, Ecuador, on June 27, 2022, the day after President Guillermo Lasso announced a cut in gasoline prices that fell short of what Indigenous leaders demanded as a condition for ending a strike. (Photo by Dolores Ochoa/AP)

responded with a two-part strategy: repression and revenue extraction. The latter flowed through a complex web of bribery involving "artisan miners, gangs and guerrillas, members of the military, and high-ranking government officials."[50] He put down protests, expanded the role of the military in economic activity (especially mining), and licensed elites to act with impunity—for example, by diverting funds from state-owned enterprises for their own enrichment. As the country's oil production declined from well over 2 million barrels per day in 2014 to 500,000 in 2020, the regime turned to wholesale illicit activity to generate funds.[51] Illegal mining sites mushroomed, and drug trafficking flourished; revenues from both were channeled to ruling elites. Overall, the military and hard-line factions gained both commercially and politically in what had earlier been a highly centralized authoritarian regime.[52] Sanctions imposed by the United States on the Maduro regime also deprived the oil industry of investment and deepened the economic crisis.

Ecuador, too, saw oil prop up a welfare state through a form of "resource nationalism," especially under the increasingly authoritarian leadership of Rafael Correa (2007–17), but it followed a different and more benign decarbonization trajectory. In Ecuador's case, decarbonization was driven primarily by oil price shocks, though recurrent protests also led to a reduction in oil production. Although there were no expropriations or nationalizations (such as in Venezuela), the tax rate on extraordinary profits for oil companies was increased to channel profits to the state in the event of production above forecasted levels, thus increasing state revenues during oil booms.[53] This measure allowed for increased state spending on basic needs—including monthly cash transfers (*bono de desarrollo humano*)—which led to reductions in poverty and inequality and expanded access to education, sanitation, housing, and health care. Simultaneously, President Rafael Correa increased his control over the executive and the judiciary—a task that would have been significantly more difficult absent his oil-fueled popularity.[54]

Ecuador responded to the decline in oil rents in 2014 through predominantly formal-institutional mechanisms and economic orthodoxy. It cut spending, awarded mining leases through formal mechanisms (though illegal mining did increase), allegedly mortgaged future oil production for discounted Chinese loans, and sought financial support from international financial institutions. These steps did not change Ecuador's resource dependence or inequitable income distribution, nor did they avert ecological crisis, but the country did not experience a traumatic decarbonization collapse, nor did it move toward a system of political dealmaking.[55]

IMMISERATION OF THE POPULACE

A common consequence of traumatic decarbonization in fragile, oil-dependent economies is the widespread immiseration of the population. This is true even when decarbonization is merely the catalyst of economic distress rather than the sole or direct cause. Across the cases, the decline in oil rents caused budgetary shortfalls and precipitated macroeconomic crises, and in every case other than Ecuador, governments either carried on business as usual in denial of the crisis or exacerbated the crisis through both their efforts to find alternate sources of rent and the often violent methods they used to extract that rent.

The causal path begins with the transactional and violent rules of the game. Political elites try to protect their personal economic fortunes from oil price fluctuations and long-term decarbonization. They diversify their own commercial portfolios and political budgets. They move their capital—and often their families—abroad.

Even at their most benign, elites in these countries have little incentive to provide public goods or undertake welfare-enhancing economic reform.[56] Instead, when they negotiate new political arrangements, the people are instruments in their bargaining. This is true across the spectrum, ranging from Ecuador (the most institutionalized country, where funds were directed toward economic redistribution and expansion of services while also used to strengthen networks of cronies and beef up the state's security apparatus) to South Sudan (the least institutionalized, with a purely predatory political economy). Everywhere, ordinary people's livelihoods are already precarious, and ordinary people are the ones who suffer most when elites turn to violence or extortion, or simply withdraw the subsidies and employment that are offered when the treasury is flush.

Take, for instance, the case of Iraq, where budget shortfalls meant that the quota-based system for allocation of jobs and contracts—the *muhassasa ta'ifiya*—was no longer workable after 2014. Here, the pattern of bargaining based on ethno-religious considerations was replaced by negotiations based on business calculations between parties, businessmen, and armed actors—called the *muhassasa hezibiya*.[57] This system, too, ignored the desires and aspirations of ordinary Iraqis, and it contributed to the widespread protests in 2019.

In contrast, South Sudan's loss of oil revenue sparked a reversion to older patterns of predation and extraversion, as armed actors have been given license by the regime in Juba to loot and pillage and to tax and divert humanitarian aid.[58] These violent processes have been accompanied by large-scale seizure of land by brute force and corrupt administrative and judicial processes. The elite become landowners, and villagers become day laborers on land that used to be their own family farms.[59]

Levels of hunger have spiked in many countries, too. Venezuelans darkly joke about the "Maduro diet," a reference to widespread food shortages (including shortages of staples such as rice and milk) and extraordinarily high inflation, which caused rapid increases in both malnutrition and infant mortality.[60] Rural Sudanese have gone hungry for generations even as wheat subsidies funded by oil revenues subsidized urban diets. Post-oil cash shortages spurred elites to cut these subsidies, flattening the differences in hunger between peripheries and urban centers of the country, effectively bringing hunger into Sudan's cities.[61] Similarly, South Sudan continues to suffer from intermittent local famine caused by war and looting.

ELITE RESISTANCE TO TRANSFORMING THE SYSTEM

Mass impoverishment causes mass discontent. But in the case study countries discussed above, discontent has rarely translated into effective popular action to transform the system.

Oil has a bad reputation among those supporting democracy. A central assumption of the political economy of oil-producing states is that oil revenues insulate the governing regime from popular demands by rendering rulers independent of citizen taxpayers. This situation can have contrasting outcomes. Governments can invest in long-term national policies and override the vagaries of bond markets and creditor conditionalities, but they can also consume themselves with factional politicking or spend their patrimony on conspicuous consumption or prestige projects without any public good. Countries that suddenly obtain oil rents can move in an authoritarian direction; Kuwait is an example.[62]

The logic of this report might optimistically imply the reverse, namely, that if these oil rents were withdrawn, states would lose their financial autonomy and become subject to popular pressure for democracy. But there is scant evidence for this outcome. In most of the cases discussed here, political systems remained under elite control.

Several countries witnessed some form of large-scale nonviolent civic protests during or after decarbonization. Civic mobilization is complex, and the profile of leaders and mass movements is specific to each country. However, most protests followed a well-established pattern: they were sparked by material issues—such as the price of bread, unemployment, the lack of electricity during summer—and then expanded to demand broader systemic change.[63] But even when they won remarkable concessions, including changes in government, the popular protest movements were unable to effect transformational change.

In every country, even amid violent political conflict and turmoil, people organize to press for peace, democracy, law, and justice.[64] Indeed, large-scale protests remain one of the few ways to effectively challenge the fundamentals of a political system. However, the protests themselves, and any gains they might make, constantly run the risk of being overwhelmed or co-opted by transactional elite politics or simply crushed with violence.[65]

Iraq's historic protests in 2019—targeting "endemic corruption, economic decline, and endless cycles of violent conflict that have marked the post-2003 system"—ended in repression and elite retrenchment.[66] Security forces opened fire on protesters, killing and wounding hundreds.[67] Political parties and armed groups also deployed other tactics with impunity, including targeted assassinations, detention, torture, and intimidation of civil society and activists. Nigeria's #EndSARS protests—referencing Nigeria's Special Anti-Robbery Squad—broke out in 2020, sparked by the extrajudicial killing of an unarmed civilian, and grew to encompass public outrage over corruption and governmental abuse of power.[68] The protests turned violent and were met with repression; and despite the disbandment of the

Special Anti-Robbery Squad in name, other paramilitary units have carried on as before.[69]

Sudan provides the most tragic example of the endurance of entrenched kleptocrats. After popular discontent caused Bashir's fall in April 2019, a transitional government promised to pave the way toward democratic transition. It did not last. General Abdel Fattah al-Burhan, the head of the Sudanese Armed Forces, and Hemedti, flush from funds from gold and bolstered by support from the UAE and Saudi Arabia, undermined the civilian government.[70] In October 2021, they overthrew the government and took power themselves. Despite the churn among the elite, and despite the extraordinarily courageous pro-democracy protests, which continued to agitate against the military takeover until the outbreak of civil war in April 2023, the broader system of violent, transactional politics in Sudan has remained largely the same.[71]

Ecuador is the outlier, and again this appears to be due to the relative strength of its preexisting formal institutions vis-à-vis elite dealmaking and the limited role of the military (and other violent groups) in politics. There was mass political agitation, especially by Indigenous groups, labor organizations, and anti-tax demonstrators, around removal of fuel subsidies and violent displacement of communities for mining projects. This had a significant role in fueling a split within the ruling party and, subsequently, in ensuring that Correa did not seek reelection in 2017.[72] However, Ecuador has failed to rebuild a redistributionist petrostate after 2020, and politicians have pursued austerity despite increased oil revenues, all while facing widespread Indigenous mobilization to block oil and mining extraction. The government's unwillingness to return to oil-based distributionism, together with a spike in criminality, appears to have weakened the state, perhaps contributing to the recent spike in gang-related criminality and violence.

A woman walks along an oil pipeline in Warri, Nigeria, on January 15, 2006. Nigeria solidified its status as a major oil-producing economy when it became the third African nation to join OPEC in 1971. (Photo by George Osodi, File/AP)

Conclusion and Policy Implications

This report provides evidence aimed at catalyzing a new evidence-based research and policy agenda focused on the political realities of fragile oil-producing countries. It presents a framework for assessing issues of decarbonization in relation to elite politics, corruption, war, and peacemaking that is grounded in the "rules of the game" structuring elite behavior in these states (as opposed to institutionalized countries). It distills these rules into a set of empirically grounded principles to guide analysis, which can in turn help make sense of otherwise opaque political dynamics; and it complements and enriches the current energy transition conversation.

Evidence in this report shows that loss of carbon rents imperils democratization and peace. No case examined saw decarbonization coincide with moves toward a productive, development-focused economy, suggesting no inherent link between an energy transition and broader sociopolitical progress.

This situation presents four interconnected challenges at the nexus of environment, conflict, and peacebuilding. The first challenge is to ensure that future decarbonization is not "traumatic" in the sense used here—entered into without foresight and planning. The second is to recognize and mitigate the risks posed to oil-producing fragile states by even a planned global decarbonization process. The third is to find creative ways to leverage the future green energy transition to promote chances for more representative and peaceful governance and not further entrench extractive, antidemocratic, rent-seeking patterns of elite control. The fourth challenge, related to the third, is to develop an agenda for peacemaking that does not rest on the promise of short-term material payouts, funded by oil, to publics and to political elites.

There are no stand-alone policy solutions for these challenges. Any policies aimed at addressing the above challenges must be part of much broader agendas to tackle kleptocratic political-economic systems. Critically, the development of these policies will require cooperation at the highest levels between policymakers working on the environment and those working on conflict resolution. Mitigation of risks posed by decarbonization will also require a full range of partnerships involving civil society in fragile states plus regional and global allies and international organizations.

By highlighting some of the risks of decarbonization, exposing the logic of power, and making connections between different agendas, this report aims to help activists working toward democracy and green energy transformation understand better the challenges they face.

The remainder of this report discusses some implications of the preceding analysis for future research and policy responses. This discussion is preliminary, however, since the background research for this report does not conclusively identify ways to mitigate the destabilizing impact of a green energy transition on hydrocarbon-based fragile states. Nor does the research yield definitive conclusions on the best means to move away from carbon-based political settlements.

IMPLICATIONS FOR ANALYSIS

The first step in attempting to prepare for the implications of decarbonization for fragile oil-producing states is to improve analysis, both of these political systems and of the feasibility of certain energy transition paths. This step is critical because policy is often formulated with Western states (or more institutionalized political systems) as the prototype. The states studied in this report are different; politics in them is dominated by bargains among elites rather than the rule of law. When assessing the impacts of decarbonization in these "political marketplaces," policymakers need to start by focusing on transactional bargains among elites and asking questions such as: Who are the key political elites? How do they interact—when do they use money (or rely on dispensing or withholding material favors), and when do they resort to violence? What are the main sources of political finance for elites? What is the price being paid by elites to rent loyalty? Is that price increasing or decreasing? How difficult is it for newcomers to enter politics?[73]

Political markets are dynamic, meaning that these analyses must be done on an ongoing basis, especially when these systems encounter major shocks or shifts in elite actors.

The above questions lead to several more specific analyses that should be carried out by policymakers when responding to the likelihood of decarbonization:

Identify the likely replacements for oil rents. The cases examined in this report demonstrate two key patterns related to rents in these political marketplaces. First, when political finance was plentiful or even static, these systems were inflationary, meaning the price of loyalty

When oil revenues decline, elites will need to replace these rents with money from other sources. Replacements can come from a variety of licit and illicit sources, such as mining, drug trafficking, international loans, licensed predation, and co-option or diversion of international support.

generally increased over time. However, the price of loyalty was also sticky. Even when rents decreased, the price of loyalty either stayed the same or decreased at a pace that was very slow relative to the amount of political finance available. Second, the combination of these two dynamics means that when oil revenues decline, elites will need to replace these rents with money from other sources. Replacements can come from a variety of licit and illicit sources, such as mining, drug trafficking, international loans, licensed predation, and co-option or diversion of international support, including climate funds and development or humanitarian aid. Proactively identifying changes in political finance is important to tackle these risks in advance.

Analyze how the decline of oil is likely to affect the rise and fall of elite actors. As oil rents decline, actors who are able to effectively control alternate sources of political budgets are likely to see their power rise and others' decline. For example, in Sudan and Venezuela, elites compensated for the decline in oil rents by taking control of gold mines and other mineral assets. In Nigeria, oil rents were replaced with government loans flowing through state ministries. In each case, the source that replaced political budgets, and more importantly, the entity that controlled that source, had major implications for the broader political economy in the state and the actors who were able to dominate. Identifying the impacts of decarbonization on elite politics can allow peacemakers to respond more rapidly and proactively and to deploy a full suite of policy instruments, ranging from sanctions to mediation.

Apply a theory of transactional politics to energy transition plans. Given the nature of these political systems, the centrality of oil rents in these states, and the focus of elites on short-term political survival, how feasible are the country's Paris Agreement commitments or domestic energy transition plans? Who are the likely spoilers? More important, what could make these plans more feasible, and what concessions are policymakers willing to accept in order to accomplish a global energy transition? Answering these questions and outlining new strategies will require applying a theory of transactional politics to technocratic climate policy. Effectively doing so will require collaboration among researchers, policymakers, and diplomats who have expertise in renewable energy technologies, climate policy, political systems, and negotiation, and—above all else—expert knowledge of the specific country. Given the nature of political markets, it should be understood that agreements represent only a commitment made at a particular point in time and may need to be revisited or renegotiated on an ongoing basis.

De-link decarbonization from the Washington Consensus. As they develop nationally appropriate transition plans, many countries (including those in Europe as well as the United States) have already moved away from unqualified market liberalization in enacting climate legislation. Yet the Washington Consensus and its associated policy orthodoxy continue to guide the analysis of and recommendations for transition in developing and fragile economies. Decarbonization is often linked to the reform of electricity markets, with the stated aim of appropriately pricing pollution, but reforms that involve price increases for consumers will likely impose unsustainable burdens on vulnerable household budgets. Decarbonization is also linked to the promotion of green innovation, with the stated aim of improving global competitiveness; but adequate consideration has not been given to the likely effect, which—absent intellectual property reform—will be to create new concentrations of ownership of critical technologies. Alternatives to these market fundamentalist recommendations exist, such as nationally grounded assessments of political priorities and iterative reconciliation with global decarbonization aims. Such approaches are currently unstandardized and contextual, but they should become a priority agenda item in international forums where climate plans are being adopted.

Limit securitization and de-securitize climate policy. Both climate change and responses to it imply the possibility of conflict through increasingly unpredictable changes in the geographic and socioeconomic distribution of natural resources, changes in human behaviors, and the response of political actors. This possibility has increased national security and military analyses of climate change, attracting more resources to a historically under-resourced issue but also framing the issue through the lens of security. This means that as energy transition momentum grows, there is a risk that transition pains in fragile carbon economies will be analyzed as security crises necessitating militarized responses. An alternative to this framing is the political marketplace framework, which can help develop policies responding to the more structural linkages between decarbonization, conflict, violence, and the role played by political elites.

IMPLICATIONS FOR A PROACTIVE POLICY RESPONSE

For better and worse, a global energy transition will destabilize political systems and markets, especially in fragile oil-producing states. Rather than developing new policy tools, policy responses to these effects may need to strengthen existing policy tools and take the following steps:

Invest in cross-cutting policy responses and sustained diplomacy. Many of the existing policy responses to decarbonization and fragile states operate in silos. Those engaged in "stabilization" policy (notwithstanding the intellectual challenges around the meaning of that term) in fragile states do not consider the effects of the global energy transition to be within their realm of expertise. Equally, those working on global climate compacts rarely foreground the case of fragile countries, considering them outliers. Responding to decarbonization will require these two groups of policymakers to overcome current institutional structures and incentives and work together. At the same time, the nature of politics in fragile states means that any initial agreement to a global climate compact will need to be periodically renegotiated. Continual and robust diplomatic engagement will be required to align (however partially) the interests of elites in these countries with the broader goals of the global energy transition.

Stay engaged in oil rent–based peace processes. The cases discussed in this report suggest that peace agreements—especially those premised on a share-out of oil rents and predicated on increasing oil revenues—may break down as oil rents decrease and the official or unofficial rent-sharing agreements fall apart. This means that peace processes can be threatened not only by the usual difficulties of holding parties to an agreement but also by international markets and a global energy transition. Countries seeking to support peace around the world need to stay engaged in peace processes beyond the signing of agreements so that they have influence, relationships, and leverage in the event that a peace process is threatened by the decline in oil rents. The key is to develop alternate mechanisms within peace processes capable of preventing future outbreaks of violence without having to rely on oil resource sharing—meaning mechanisms that lay the foundation for moving beyond oil-based political settlements.

Anticipate and prepare for the destabilizing impact of decarbonization. The cases examined in this report show that instances of traumatic decarbonization are associated with broader macroeconomic and humanitarian crises. Their impacts include rising hunger (the "Maduro diet"), poverty, and often the violence that increased migration flows engender. Humanitarian actors should actively build decarbonization into their processes of scenario planning and respond as quickly as possible—recognizing that humanitarian crises are likely to increase in severity over time if oil revenues do not recover.

Move beyond global backcasting and toward participatory transition modeling. Energy transition pathway modeling in developing and fragile economies is currently overly dependent on global-scope climate-economy models working backward from decarbonization aims (such as reaching net zero by 2050). In other words, these models assume that specific climate goals will have been achieved and attempt to evaluate the socioeconomic costs and benefits that accrue in the process. Quantitative modeling can of course be a useful tool: it can help test assumptions around and define limits of the energy transition and also frame demands for climate justice (for poorer nations) in standardized terms that build useful pressure at negotiations.[74] It is, however, unsuited to making nationally appropriate policy and can implicitly minimize the harms to fragile fossil-fuel-dependent economies. The overdue next step is to ground energy transition modeling in the insights and interests of national (and subnational) stakeholders. The often unstated assumptions underpinning current modeling efforts prioritize solving for aggregate indicators such as emissions and economic growth. Instead, the starting points need to be citizens' political, socioeconomic, and cultural aspirations, such as distribution of resources or income, rights and political participation, and state and community stability or evolution. These are value laden and contested by nature, so the transition modeling process will have to draw from a representative variety of perspectives and generate pathways that at least speak to (and ideally reconcile) diverse normative assumptions.

Support democratic activists before these crises emerge. In some of the cases discussed in this report, the political fallout of traumatic decarbonization led populations to demand democratic reforms and improved governance. In almost all of the cases, however, any democratic gains made were reversed. Although the research did not identify any obvious off-ramps from transactional politics for political marketplace countries, additional support to local democratic activists in advance of such crises might help civic organizations make claims for democracy and accountability more forcefully.[75]

Seek ways to take advantage of the energy transition. One of the largest opportunities presented by a global transition to renewable energy is the opportunity of decentralized electricity production. Renewable energy sources do not require the same large-scale infrastructure that petroleum-based power sectors require; electrifying a remote community can be done locally, without having to link to the capital or to an oil refinery across the country. For communities that have never had access to electricity or that have lacked consistent access, the energy transition could provide both new modes of production and business opportunities. The expansion of local economic activity could in turn reduce dependence on patronage networks for daily survival. While much of the analysis in this report has focused on the destabilizing effects of decarbonization, decarbonization also offers opportunities, and they should be sought out.

Notes

Research for this report was conducted from 2020 to early 2022 by Shahla Al Kli, Katrina Burgess, Javier Corrales, Joshua Craze, Luke Patey, Jan Pospisil, and the authors of the report.

1. "The Paris Agreement's central aim is to strengthen the global response to the threat of climate change by keeping a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius. Additionally, the agreement aims to increase the ability of countries to deal with the impacts of climate change." "Key aspects of the Paris Agreement," UN Climate Change, https://unfccc.int/most-requested/key-aspects-of-the-paris-agreement.
2. The report does not cover the effects of the resurgence in global energy prices in 2022, but there is good reason to think that the report's conclusions continue to hold.
3. This is not an exhaustive list of states that have undergone instances of decarbonization. Each of these countries, with the exception of Ecuador, is classified as a "fragile and conflict-affected state" by the World Bank. See "Classification of Fragile and Conflict Affected Situations," World Bank, July 10, 2023, https://www.worldbank.org/en/topic/fragilityconflictviolence/brief/harmonized-list-of-fragile-situations. Ecuador was included in the sample case set for comparative purposes to examine the effects of decarbonization in a state not deemed fragile, and also to see leader responses to an instance of decarbonization in that context.
4. Alex de Waal, "Sudan: A Political Marketplace Framework Analysis," World Peace Foundation, 2019, http://eprints.lse.ac.uk/101291/1/De_Waal_Sudan_a_political_marketplace_analysis_published.pdf; Jean-Baptiste Gallopin et al., "Sudan's Political Marketplace in 2021: Public and Political Finance, the Juba Agreement and Contests over Resources," World Peace Foundation and Conflict Research Programme, May 2021, https://eprints.lse.ac.uk/111791/2/Sudan_s_PMF_2021_updated.pdf; and Luke Patey, "Oil, Gold, and Guns: The Violent Politics of Sudan's Resource Booms," World Peace Foundation, February 2023, https://worldpeacefoundation.org/wp-content/uploads/2024/03/Oil-gold-and-guns.pdf.
5. Joshua Craze, "Making Markets: South Sudan's War Economy in the 21st Century," World Peace Foundation, February 2023, https://worldpeacefoundation.org/wp-content/uploads/2024/03/Making-Markets.pdf; and Alex de Waal, "When Kleptocracy Becomes Insolvent: Brute Causes of the Civil War in South Sudan," *African Affairs* 113, no. 452 (July 2014): 347–69.
6. No reliable production data are available for Venezuela after 2014. A longer trend of decline is visible in Venezuela, where the oil industry was plagued with inefficiency even prior to the decline in oil prices. Katrina Burgess and Javier Corrales, "Traumatic Decarbonization in Venezuela and Ecuador," World Peace Foundation, February 2023, https://worldpeacefoundation.org/wp-content/uploads/2024/03/Traumatic-Decarb-Venezuela-and-Ecuador-d1.pdf.
7. Alex de Waal, "Introduction to the Political Marketplace for Policymakers," JSRP Policy Brief 1, Justice and Security Research Programme, March 2016, https://www.lse.ac.uk/ideas/Assets/Documents/Conflict-Research-Programme/policy-reports/JSRP-Brief-1.pdf.
8. Benjamin J. Spatz, Aditya Sarkar, and Alex de Waal, "The Political Marketplace: A Framework and Toolkit for Analyzing Transactional Politics in Conflict-Affected Countries," Conflict Research Programme, March 2021, https://eprints.lse.ac.uk/111009/1/CRP_the_political_marketplace_framework_and_toolkit_published.pdf; and Alex de Waal, *The Real Politics of the Horn of Africa: Money, War and the Business of Power* (Cambridge: Polity, 2015).
9. Benjamin J. Spatz, "Cash Violence: Sanctions and the Politics of Power and Peace" (PhD diss., Tufts University, 2020); Aditya Sarkar et al., "The Political Marketplace Framework and Mass Starvation: How Can Humanitarian Analysis, Early Warning and Response Be Improved?," *Journal of Humanitarian Affairs* 3, no. 3 (December 2021): 43–55; and de Waal, *The Real Politics of the Horn of Africa*. Each "currency" has its own logic. They are not one-to-one substitutes for one another. The logic of violence is particularly complicated; it becomes clearer only over time and can be understood only by reference to the consequences of violence. The role of violence in these systems remains under-theorized, but for a brief discussion, see Alex de Waal et al., "A Theory of Change for Violent Political Marketplaces," World Peace Foundation and Conflict Research Programme, February 19, 2020, https://www.lse.ac.uk/ideas/Assets/Documents/Conflict-Research-Programme/crp-memos/PMF-TOC-Feb-2020.pdf.
10. Sarkar et al., "Political Marketplace Framework"; and Spatz, "Cash Violence."
11. Mary Kaldor, Terry Lynn Karl, and Yahia Said, eds., *Oil Wars* (London: Pluto Press, 2007).

12. Emma Gilberthorpe and Dinah Rajak, "The Anthropology of Extraction: Critical Perspectives on the Resource Curse," *Journal of Development Studies* 53, no. 2 (2017): 186–204; Elissaios Papyrakis, "The Resource Curse—What Have We Learned from Two Decades of Intensive Research: Introduction to the Special Issue," *Journal of Development Studies* 53, no. 2 (2017): 175–85; Jack Paine, "Rethinking the Conflict 'Resource Curse': How Oil Wealth Prevents Center-Seeking Civil Wars," *International Organization* 70, no. 4 (2016): 727–61; and Frederick van der Ploeg and Steven Poelhekke, "The Impact of Natural Resources: Survey of Recent Quantitative Evidence," *Journal of Development Studies* 53, no. 2 (2017): 205–16.
13. Nan Tian, "Oil Price Shocks and Military Expenditure," in *SIPRI Yearbook 2017: Armaments, Disarmaments, and International Security* (Stockholm: Stockholm International Peace Research Institute, 2017), 343–49.
14. Alan Boswell, Nanaho Yamanaka, and Alex de Waal, "South Sudan: The Perils of Payroll Peace," Conflict Research Programme, March 2019, https://www.lse.ac.uk/ideas/Assets/Documents/Conflict-Research-Programme/crp-memos/Revisiting-payroll-peace-final-updated.pdf.
15. The analysis is described in Jan Pospisil, "The New Era of Turbulence: Peacemaking Trends in Post-Carbon Times," World Peace Foundation, February 2023, https://worldpeacefoundation.org/wp-content/uploads/2024/03/A-new-era-of-turbulence-d1.pdf. For peace agreements signed at the national and international level, the PA-X database is by and large complete. Its collection of so-called local peace agreements (those produced at the subnational level) is progressing but not comprehensive. Nevertheless, for the macro comparison in this report, both agreement types were included. See Christine Bell and Sanja Badanjak, "Introducing PA-X: A New Peace Agreement Database and Dataset," *Journal of Peace Research* 56, no. 3 (2019): 452–66.
16. One country can have several peace processes going on sequentially or in parallel. These are usually referred to as dyads in the literature on conflict.
17. A distinction between comprehensive and partially comprehensive peace agreements may be helpful. Comprehensive peace agreement are ones that reflect an attempt by the parties to fully resolve conflicts, involving a wide range of issues such as governance, inclusion, human rights and equality, justice sector reform, etc. The specific contents of these agreement will depend on the context. Examples of comprehensive agreements include the Comprehensive Peace Agreement of 2005 between the Sudanese government and the Sudanese People's Liberation Army and the 1998 Multiparty Agreement in Northern Ireland (Belfast or Good Friday Agreement). In contrast, a partially comprehensive agreement reflects substantive efforts by parties to resolve a conflict but deals with only some of the conflict's issues. Partial agreements typically suggest that future agreements will be required to supplement or complement them. Partial agreements might deal with core confidence-building issues or put in place transitional processes—for example, the 2005 12-Point Understanding between the Seven Political Parties and Nepal Communist Party (Maoists).
18. Several countries with significant oil production have seen more than one peace process, such as Iraq with two, Libya with three, and South Sudan and Sudan with (in total) nine. Several other countries have a high number of negotiated peace agreements in this category due to the significant role of oil revenue in their GDP, including Colombia (six episodes of conflict), Indonesia (including East Timor and Aceh, three episodes of conflict), Russia (three), Syria (three), and Yemen (three).
19. Calculations are based on available World Bank data.
20. Pospisil, "New Era of Turbulence."
21. In this, too, Ecuador is an outlier.
22. Marielle Debos, *Living by the Gun in Chad: Combatants, Impunity and State Formation*, trans. Andrew Brown (London: Zed Books, 2016).
23. Burgess and Corrales, "Traumatic Decarbonization in Venezuela and Ecuador." The causes of homicide were not necessarily related to decarbonization, however.
24. In 2019, party and state armed groups opened fire on demonstrators agitating for reform, killing and injuring dozens, while intelligence and security forces co-opted by the parties targeted and threatened key leaders of the protest movement in an effort to deter future protests. Shahla Al Kli and Jared Miller, "Decarbonization and Political Transformation in Iraq," World Peace Foundation, February 2023, https://worldpeacefoundation.org/wp-content/uploads/2024/03/Political-Transformations-Iraq-d2.pdf; and Mac Skelton and Zmkan Ali Saleem, "Iraq's Political Marketplace at the Subnational Level: The Struggle for Power in Three Provinces," Conflict Research Programme, 2020, https://eprints.lse.ac.uk/105184/3/Iraq_s_Political_Marketplace.pdf.
25. De Waal, "Sudan: A Political Marketplace Framework Analysis."
26. Jonathan Di John and James Putzel, "Political Settlements: Issues Paper," Governance and Social Development Research Centre, 2009, 4, http://epapers.bham.ac.uk/645/1/EIRS7.pdf.
27. The definition is from Pranab Bardhan, "Corruption and Development Policy (Drawing upon the Recent Indian Debate)," *Journal of Public Economic Theory* 17, no. 4 (August 2015): 472–79.

28. Paul Holden, *Indefensible: Seven Myths That Sustain the Global Arms Trade* (London: Zed Books, 2016).
29. See Tarun Gopalakrishnan and Jared Miller, "Energy Transition in Fragile States: A Critical Primer," World Peace Foundation, January 2023, https://worldpeacefoundation.org/wp-content/uploads/2024/03/EnergyTransition_Paper-FINAL-20230214.pdf; and Aditya Sarkar, "Traumatic Decarbonization in Carbon-Based Political (Un)Settlements," World Peace Foundation, February 2023, https://worldpeacefoundation.org/wp-content/uploads/2024/03/Traumatic-Decarbonization-AS-FINAL-20230214.pdf.
30. This leaves open the question of what such measures may mean for future attempts at managed decarbonization.
31. Patey, "Oil, Gold, and Guns."
32. Ecuador is closer to transient than to permanent decarbonization.
33. Patey, "Oil, Gold, and Guns."
34. Patey, "Oil, Gold, and Guns."
35. Willow Berridge, Alex de Waal and Justin Lynch, *Sudan's Unfinished Democracy: The Promise and Betrayal of a People's Revolution* (London: Hurst and Co., 2022); and Atta El-Battahani, "Civil-Military Relations in Sudan: Negotiating Political Transition in a Turbulent Economy," in *Businessmen in Arms: How the Military and Other Armed Groups Profit in the MENA Region*, ed. Zainab Abul-Magd and Elke Grawert (Lanham, MD: Rowman & Littlefield, 2016), 135–56.
36. In the absence of oil revenue, the civilian-led government would have needed rapid action from the United States to lift sanctions and large scale economic assistance from donors (including the United States and multilateral financial institutions) to be able to make the difficult decisions demanded of it.
37. Al Kli and Miller, "Decarbonization and Political Transformation in Iraq."
38. Al Kli and Miller, "Decarbonization and Political Transformation in Iraq."
39. "Iraq's Cabinet Approves 2021 Draft Budget of $103 Billion," Reuters, December 21, 2020, https://www.reuters.com/article/iraq-budget-int-idUSKBN28V2G8. See also the discussion in Kirk Sowell, "Iraq's Dire Fiscal Crisis," *Sada* (blog), Carnegie Endowment for International Peace, November 2, 2020, https://carnegieendowment.org/sada/83108.
40. Estimates of oil revenue as a proportion of government revenue vary. The Extractive Industries Transparency Initiative (EITI) estimates the share at 65 percent currently, and the International Labour Organization estimates it at about 80 percent historically. See EITI, "Nigeria" (accessed November 7, 2023), https://eiti.org/countries/nigeria; and Sola Fajana, "Industrial Relations in the Oil Industry in Nigeria," Working Paper 237, International Labour Office, Geneva, January 1, 2005, https://www.ilo.org/sector/Resources/publications/WCMS_161189/lang--en/index.htm.
41. Jared Miller, "The Politics of an Oil Crash: How the 2020 Oil Shock Affected Political Settlements in Nigeria and Implications for Future Shocks," World Peace Foundation, February 2023, https://worldpeacefoundation.org/wp-content/uploads/2023/02/Politics-of-an-Oil-Crash-J-Miller-FINAL.pdf.
42. Loans were initially estimated to account for as much as 40 percent of the 2021 federal budget.
43. By its own admission, the Nigerian government says that many of the state-owned enterprises operate as "reverse Robin Hoods," taking subsidies from the government and giving very little economic benefit to the broader public. See Miller, "Politics of an Oil Crash."
44. De Waal, *Real Politics of the Horn of Africa*.
45. Craze, "Making Markets."
46. De Waal, "When Kleptocracy Becomes Insolvent."
47. In March 2024, following damage to a pipeline in Sudan through which South Sudanese oil is transported to international markets, South Sudan again faced a damaging collapse in oil revenue.
48. Burgess and Corrales, "Traumatic Decarbonization in Venezuela and Ecuador."
49. Javier Corrales and Michael Penfold, *Dragon in the Tropics: The Legacy of Hugo Chavez*, 2nd ed. (Washington, DC: Brookings Institution Press, 2015).
50. Burgess and Corrales, "Traumatic Decarbonization in Venezuela and Ecuador."
51. For a graph of the precipitous drop in Venezuela's oil production, see Amelia Cheatham and Diana Roy, "Venezuela: The Rise and Fall of a Petrostate," Council on Foreign Relations, last updated December 22, 2023, https://www.cfr.org/backgrounder/venezuela-crisis.
52. Burgess and Corrales, "Traumatic Decarbonization in Venezuela and Ecuador."
53. Thea Riofrancos, *Resource Radicals: From Petro-Nationalism to Post-Extractivism in Ecuador* (Durham, NC, and London: Duke University Press, 2020), 10.
54. Burgess and Corrales, "Traumatic Decarbonization in Venezuela and Ecuador."
55. Burgess and Corrales, "Traumatic Decarbonization in Venezuela and Ecuador."

56. Sarkar et al., “Political Marketplace Framework.”
57. Al Kli and Miller, “Decarbonization and Political Transformation in Iraq.”
58. Extraversion refers to the co-option, mobilization, appropriation, and redirection of foreign resources and agendas by national elites in the pursuit of their own strategic ends, which are often at odds with the original intentions of the foreign actors. See Jean-François Bayart and Stephen Ellis, “Africa in the World: A History of Extraversion,” *African Affairs* 99, no. 395 (2000): 217–67.
59. For the seizure of land by elites, see Craze, “Making Markets.” For the situation of villagers whose land is seized, see Edward Thomas, *Moving towards Markets: Cash, Commodification and Conflict in South Sudan* (London and Nairobi: Rift Valley Institute, 2019), https://riftvalley.net/publication/moving-towards-markets-cash-commodification-and-conflict-south-sudan; and Joseph Diing Majok, “War, Migration and Work: Changing Social Relations in the South Sudan Borderlands,” Rift Valley Institute, 2019, https://xcept-research.org/wp-content/uploads/2020/10/War-migration-and-work-by-Joseph-Diing-Majok-RVI-X-Border-Project-2019.pdf.
60. Burgess and Corrales, “Traumatic Decarbonization in Venezuela and Ecuador”; and Moises Rendon and Mark L. Schneider, “Venezuela’s Crisis Is Now a Regional Humanitarian Disaster,” Center for Strategic and International Studies, 2018, https://www.csis.org/analysis/venezuelas-crisis-now-regional-humanitarian-disaster.
61. Edward Thomas and Alex de Waal, “Hunger in Sudan’s Political Marketplace,” Occasional Paper no. 32, World Peace Foundation and Conflict Research Programme, April 2022, https://worldpeacefoundation.org/publication/hunger-in-sudans-political-marketplace/.
62. Jennifer Gandhi, *Political Institutions under Dictatorship* (Cambridge: Cambridge University Press, 2008).
63. Alex de Waal and Rachel Ibreck, “Hybrid Social Movements in Africa,” *Journal of Contemporary African Studies* 31, no. 2 (2013): 303–24.
64. De Waal et al., “A Theory of Change for Violent Political Marketplaces.”
65. James C. Scott, *Weapons of the Weak* (New Haven: Yale University Press, 1985).
66. Georgia Cooke and Renad Mansour, “Iraqi Views on Protesters One Year After the Uprising,” Chatham House, October 29, 2020, https://www.chathamhouse.org/2020/10/iraqi-views-protesters-one-year-after-uprising.
67. Renad Mansour, “Iraqis Protest Deadly Hospital Fires as Symptom of Embedded Corruption,” *Washington Post*, July 20, 2021, https://www.washingtonpost.com/politics/2021/07/20/iraqis-are-protesting-deadly-hospital-fires-symptom-embedded-corruption.
68. Miller, “Politics of an Oil Crash.”
69. Mayeni Jones, “Nigeria’s #EndSars Protests: What Happened Next,” BBC News, October 7, 2021, https://www.bbc.com/news/world-africa-58817690.
70. Berridge et al., *Sudan’s Unfinished Democracy*, 69; and El-Battahani, *Civil Military Relations in Sudan*.
71. Berridge et al., *Sudan’s Unfinished Democracy*.
72. Burgess and Corrales, “Traumatic Decarbonization in Venezuela and Ecuador.”
73. For additional guidance on conducting political market analyses, see Spatz, Sarkar, and de Waal, “Political Marketplace.”
74. For example, modeling can provide preliminary estimates of external/international climate finance required for transition.
75. For additional information on how international donors can best provide support for grassroots organizing and nonviolent movements, see Benjamin Naimark-Rowse, “Dollars and Dissent: Donor Support for Grassroots Organizing and Nonviolent Movements,” International Center on Nonviolent Conflict, 2022, https://www.nonviolent-conflict.org/resource/dollars-and-dissent-donor-support-for-grassroots-organizing-and-nonviolent-movements; and Erica Chenoweth and Maria J. Stephan, *The Role of External Support in Nonviolent Campaigns: Poisoned Chalice or Holy Grail?* (Washington, DC: International Center on Nonviolent Conflict, 2021).

ABOUT THE INSTITUTE

The United States Institute of Peace is a national, nonpartisan, independent institute, founded by Congress and dedicated to the proposition that a world without violent conflict is possible, practical, and essential for US and global security. In conflict zones abroad, the Institute works with local partners to prevent, mitigate, and resolve violent conflict. To reduce future crises and the need for costly interventions, USIP works with governments and civil societies to build local capacities to manage conflict peacefully. The Institute pursues its mission by linking research, policy, training, analysis, and direct action to support those who are working to build a more peaceful, inclusive world.

THE UNITED STATES INSTITUTE OF PEACE PRESS

Since 1991, the United States Institute of Peace Press has published hundreds of influential books, reports, and briefs on the prevention, management, and peaceful resolution of international conflicts. The Press is committed to advancing peace by publishing significant and useful works for policymakers, practitioners, scholars, diplomats, and students. In keeping with the best traditions of scholarly publishing, each work undergoes thorough peer review by external subject experts to ensure that the research, perspectives, and conclusions are balanced, relevant, and sound.

PEACEWORKS

NO. 196 | MAY 2024

Decarbonization—the replacement of fossil fuels with non-hydrocarbon-based forms of energy—has vastly different implications in developed economies and fragile states. Through case studies of recent "traumatic decarbonization"—a rapid, unplanned reduction in hydrocarbon revenues—this report assesses how fragile oil-producing countries will fare as the world transitions to clean energy and they incur losses to the revenues that sustain their current economies and political systems. Responding to decarbonization will require improved analyses and proactive policy responses that move away from viewing environmental challenges solely through the lens of security. Instead, sustained diplomacy will be required to redesign both existing climate commitments and peace processes as the political economies of these decarbonizing nations change over time.

OTHER USIP PUBLICATIONS

UNITED STATES
INSTITUTE OF PEACE PRESS

2301 Constitution Avenue NW
Washington, DC 20037
(202) 457-1700
www.USIP.org