



# ANALYSIS & NEW INSIGHTS



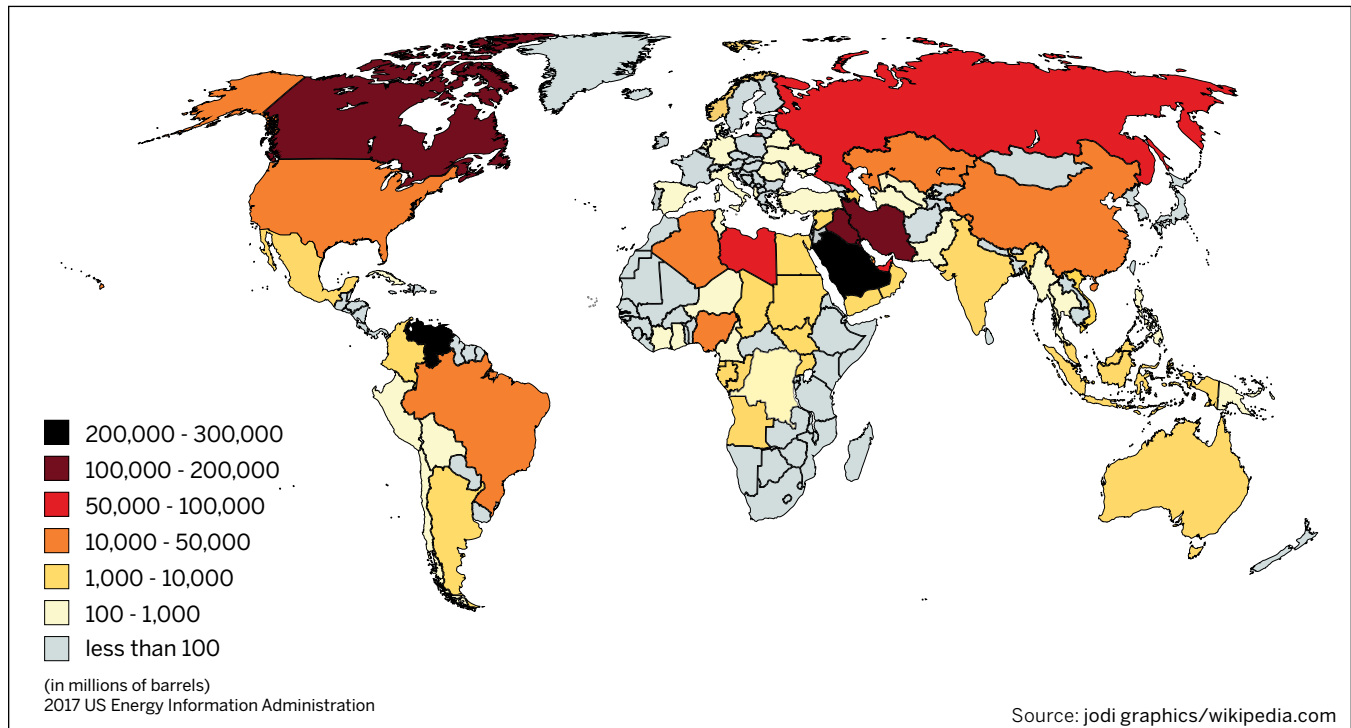
## The Four Ds of Oil's Just Transition: Debt, Disclosure, Demand, and Planned Decline of Production

By Victor Menotti

Our world faces persistent turmoil in oil markets amid imminent climate tipping points brought on largely by the burning of fossil fuels, particularly products from the politically powerful oil industry.<sup>1</sup> Convergence of the COVID-19 and climate crises creates a chance for both breakthrough climate action and oil's just transition by focusing on four Ds now dominating today's oil industry—deepening debt, shrinking demand, increasing risk disclosure, and the planned decline of oil production.



**Figure 1. Got Oil? Countries with Proven Oil Reserves**



## The Geopolitics of Geophysics: COVID-19 and Climate Crises Put Oil's Outlook in Play

Oil companies' recent writedowns of assets (BP: \$17 billion, Shell: \$22 billion, Chevron: \$10 billion), dividend cuts, and renewable energy strategies are evidence that the economic tide has turned against fossil fuels, especially oil.<sup>2</sup> Our polluted planet's changing geophysics is shifting not only financial flows but also geopolitics to rewrite the rules of the global oil game that are now broken. How to seize the opportunities in today's postpandemic recovery—for workers, communities, and indeed entire countries if not regions—to correct oil's course before polluting our planet beyond repair?

Today's top oil-producing countries—the United States, Russia, and Saudi Arabia—are already positioning to maximize the monetization of their oil assets before growing climate concerns completely curb output.<sup>3</sup> In 2018, the leaders of Saudi Arabia and Russia personally forged the OPEC+ alliance of 23 oil-producing nations to enhance the coordination of oil production levels for price stability, agreed to a detailed Declaration of Cooperation, and invited all other oil producing nations to participate.<sup>4</sup> The United States ideologically opposes government interventions into markets, yet recent price instability pressured it to participate informally in cuts with OPEC+.<sup>5</sup>

The three countries' collective actions are evidence of their capability to coordinate emergency emissions cuts, quickly curtailing one-tenth of oil output in their collective interest.<sup>6</sup> Despite their

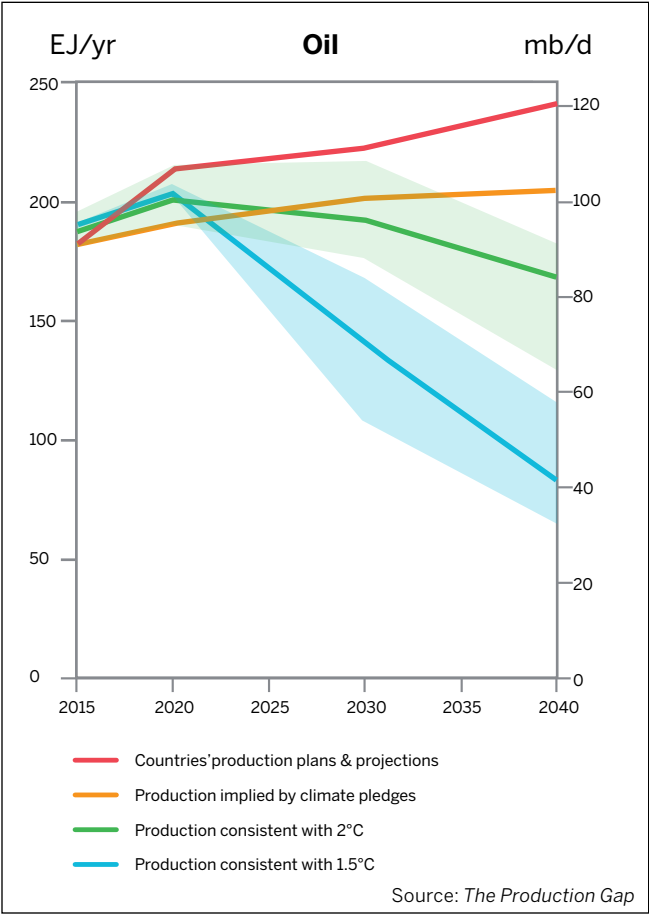
current leaders' climate-denialist rhetoric, recognition by all three of the geophysical realities of an overpolluted atmosphere is apparent in their actions and geopolitical agendas:

- Saudi Arabian Crown Prince Mohammed bin Salman's Vision 2030 aims to both derisk the kingdom from oil dependency (by partially privatizing if not outright selling assets of state-owned oil giant Aramco) and to help pay for diversifying the economy into other industries (meanwhile securing Saudi Arabia's position as top oil supplier to China).<sup>7</sup>
- US President Donald Trump's "American energy dominance" agenda attempts to advance increased oil output as part of an epic foreign policy offensive (although still advocating for seawalls to save his golf courses), yet the fatal flaw of his foolhardy wish was recently revealed by Russia and Saudi Arabia merely pumping more oil, bankrupting many US oil companies.<sup>8</sup>
- Russian President Vladimir Putin, a newcomer to climate concerns, appealed to Trump at their Helsinki summit for cooperation to stabilize oil prices and has been met with only silence, yet Russia's recent gambit to undercut US shale oil producers seems to have successfully brought Trump to the table, compelling unofficial coordination of oil production the world will watch closely.<sup>9</sup>

True, COVID's economic lockdown clearly caused a dramatic drop in global oil demand, but Saudi Arabia's reckless response to Russia's refusal of an OPEC proposal to deepen production cuts



Figure 2. Oil Production Gap 2015-2040



made prices plummet much more than the global pandemic did.<sup>10</sup> Saudi Arabia's sudden tsunami of oil output, at deep discounts, caused a collapse in prices and financial panic among US shale oil companies—as well as their creditors—who had planned on prices staying much higher.<sup>11</sup> The oil industry's instability is intrinsic if only one individual can cause such chaos.

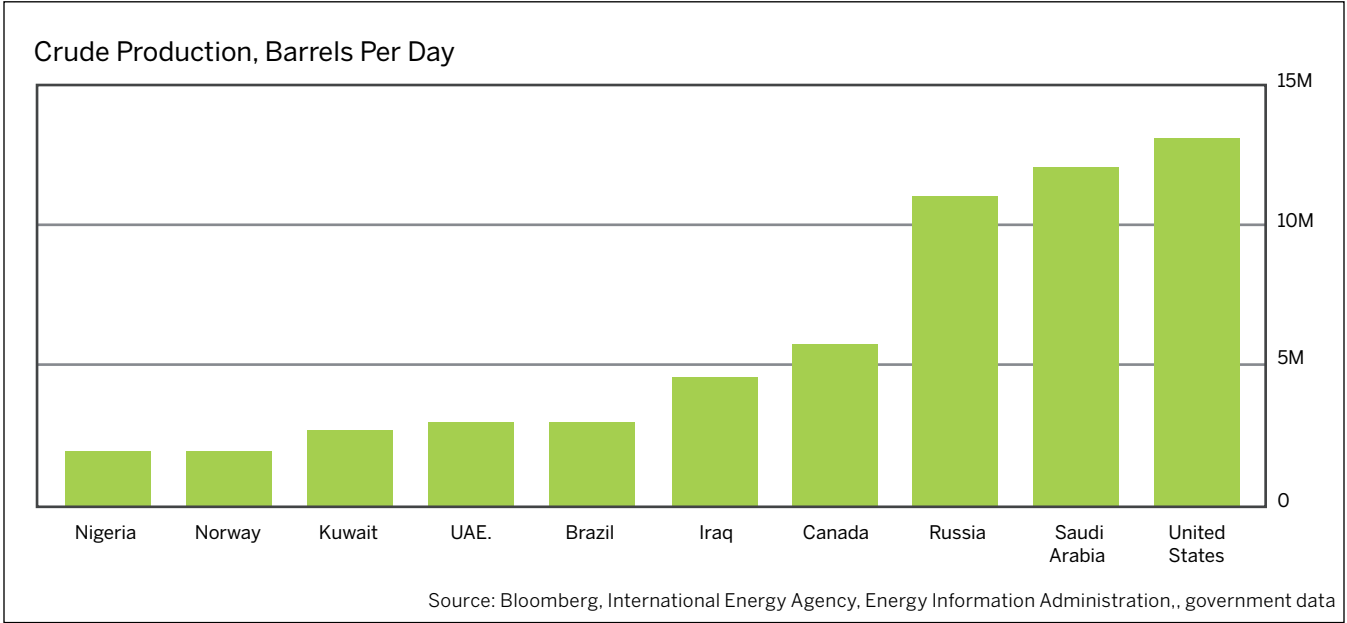
Months later, lower-for-longer oil prices have dried up drillers' access to credit with waves of bankruptcies continuing.<sup>12</sup> OPEC+ is now aiming to gradually continue to lower oil prices over the next decade, increasing constant pressure on US shale oil producers while also consistently undercutting competition from renewable energy sources globally.<sup>13</sup> Oil demand has yet to return to its pre-COVID levels, and some say it may never fully recover due to broad behavioral changes becoming permanent as the pandemic persists.<sup>14</sup> As of mid-September 2020, depressed demand made oil prices again dip below \$40 per barrel, well beneath the break-even benchmark for many oil producing companies' and countries' budgets.<sup>15</sup>

### Fusing Two Top Imperatives: Stabilizing Prices, Phasing Out Production

Fundamental to oil's just transition is addressing two of today's top imperatives for the industry:

- Stabilizing prices: Oil companies today face unprecedented financial pressures with deepening debts, mounting disclosures due to investor scrutiny, peaking demand, and impending decline of production. Governments dependent on oil (for earnings, employment, energy, et al.) strive to stabilize prices in order to predictably proceed with economic planning, including sustainable development and

Figure 3. Top Ten Oil Producing Countries, February to April 2020



diversification from oil dependency.<sup>16</sup> Yet market volatility is intrinsically tough to tame, and too often government revenue is insufficient to finance well-intended programs. At the same time, oil-consuming countries are accelerating plans for low-carbon transitions to renewable energy, making the future demand for oil entirely uncertain; some say it may have already peaked.<sup>17</sup> Therefore, we have a growing global constituency for oil price stability that could provide predictable pathways for the exit strategies of oil-dependent countries tenaciously trying to diversify away from oil, such as Saudi Arabia's Vision 2030.<sup>18</sup>

- Phasing out production: Alas, the world is awash with oil yet there is not enough space remaining in our planet's atmosphere to safely accommodate the emissions from even the existing oil wells now in operation, let alone the endless amounts of oil governments still plan to produce. BP's recent plan to cut production 40 percent by 2030 is a start, yet the 2019 *Production Gap Report* found governments are on track to produce 120 percent more fossil fuels in 2030 than is consistent with limiting global warming to the 1.5°C target of the Paris Agreement.<sup>19</sup> If the global goal is to halve emissions over the next decade, then aligning oil output with atmospheric limits must be central to any approach and include top oil producers. That means the expansion of the fossil fuels industry—and the financing for it—must end immediately, with a fast yet fair process to phase out existing and planned production of oil while supporting the just transition of oil-dependent countries, impacted communities, and workers worldwide.<sup>20</sup>

Fusing these two imperatives—stabilizing prices and phasing out production—could provide a fundamental policy framework for facilitating an exit from oil that is fast and fair.

## Focus on Debt, Disclosure, Demand, Decline for Oil's Just Transition

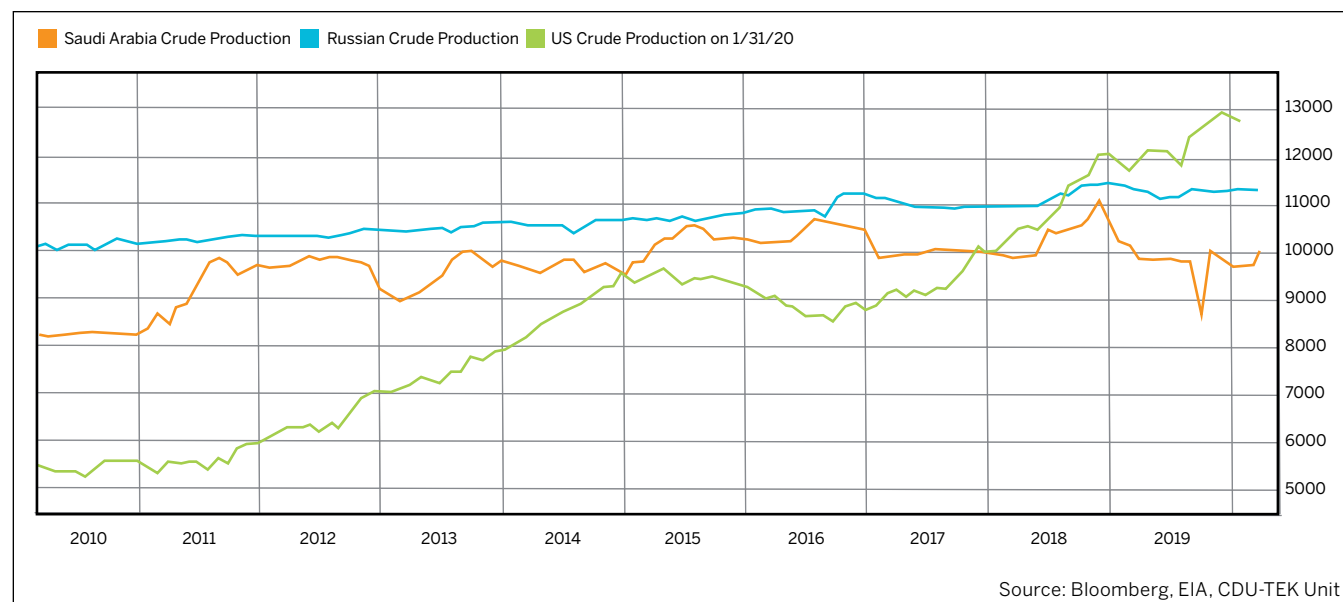
Oil's just transition requires focusing on at least four policy fronts of finance that intersect with energy and the environment: debt, disclosure, demand, and decline. Addressing all four Ds in concert could be a cure for stabilizing prices while prudently phasing out production. Much more detail is described below, but briefly, the four areas of activity aim at:

- Dealing with oil companies' **debt**, from private creditors to recent raids on the public purse.
- Answering calls for **disclosure** of climate risks as wary investors assess big bets on oil's future.
- Regularizing reduced oil **demand** as the new public norm for post-COVID behavior change.
- Cooperating with key constituencies to stabilize prices during a planned **decline** of production.

Working with financial, monetary, and energy authorities, as well as oil asset owners, investors, and workers, it is possible to capitalize on today's geopolitical moment with resource-restrained realism to articulate transparent and predictable policies that advance a just transition for all countries and communities. Immediate action is in the common interest of all industry actors to avoid any chaotic crash or collapse.

Uncertainty is ubiquitous in the current state of play, yet clear opportunities for structural change exist in the industry's inter-related challenges. As the COVID-19 and climate crises continue to play out, key leverage points for setting new norms are found in the four Ds of oil's just transition described below:

**Figure 4. Top Three Producers' Pathways: United States Surpasses Saudi Arabia and Russia**



## Debt: When Stuck in a Hole, Stop Digging

Oil has created some of history's greatest fortunes, but today many producers are increasingly in debt. Given how quickly remaining atmospheric space is shrinking, the world must move more urgently and forcefully to close down access to credit for financing oil's further expansion—and ultimately its very production—while supporting just transitions for workers, communities, and countries reliant on oil revenue.

Private companies that should be raising equity to finance their operations have instead been raising debt on top of already existing debt, and now they are prying open the public purse to increase their debt, often at the expense of poor people. Not only US shale oil companies but also state-owned oil companies, from Saudi Aramco to those of African countries, are turning more to debt to finance their future.<sup>21</sup> Oil-dependent governments, such as Russia and Saudi Arabia, are also ramping up borrowing to balance budget shortfalls.<sup>22</sup> Supermajors Shell and BP's debt problems are worsening while they also sell assets to pay down debts.<sup>23</sup>

The industry's financing ills began far before the COVID-19 outbreak and oil prices' current lower-for-longer outlook. Investors were already becoming more wary of putting their money into oil companies, especially US shale oil, the industry's infrastructure, as well as the exploration and production subsector. Oil equity shares have been sliding while corporate debt and bonds are attracting capital as high-yield investment, offering some of today's biggest returns. Standard & Poor's recently reported, "US oil and gas distressed debt has doubled to its highest level ever," as its Energy Index dropped 38 percent during the first half of 2020.<sup>24</sup> Activists' calls for full divestment from fossil fuels are indeed slowly moving some money and paying off profitably for first movers, as seen in the poor performance of oil and gas, whereas green and ESG (environmental/social/governance) funds are handling the crisis comparatively well.<sup>25</sup>

Nevertheless, while it is true that smart investors are fleeing fossil fuels, 35 global banks still financed \$2.7 trillion in fossil fuels since the 2015 Paris Agreement.<sup>26</sup> European officials failed in July 2020 to "neither include nor exclude gas from the EU taxonomy," yet shutting down private sources of credit may eventually require enforceable rules prohibiting the various forms of fossil fuels financing since voluntary divestment isn't occurring fast enough.<sup>27</sup> Greater risk disclosure by oil asset owners could accelerate the process. (See more details in the next section on disclosure.)

As private lenders leave the fossil fuels space, protecting the public purse to stop the "Big Oil Bailout" is a new priority of US climate campaigners.<sup>28</sup> The US Federal Reserve is, for the first time ever, not only buying billions of dollars in corporate debt but after relaxing lending rules as requested by indebted drillers, the Fed is now in fact "overweight" oil in its bond-purchasing programs.<sup>29</sup> Oil's big "stealth bailout" comes as key countries already subsidize fossil fuels with endless forms of financing, from Trump's emergency cash/tax refunds today to decades of direct financing from export credit agencies (ECAs), although some European

governments are already cutting off, or considering cutting off, bilateral support via ECAs after pressure by campaigners.<sup>30</sup>

Together with the Treasury, financial markets authorities in the United States are currently biased in favor of fossil fuels, Trump's top donor base amid an election season. There is some fear in the market that if oil prices stay low for a lot longer, then a barrage of oil companies' bankruptcies could trigger a broader crisis across credit markets, asset classes, economic sectors, and countries.<sup>31</sup>

Opening the public purse wider amid a pandemic not only digs oil into deeper debt but delays structural change in shifting to sustainable energy supplies while saddling taxpayers with soon-to-be-stranded assets. Canada's oil industry bailout is an example of the wisdom of the old adage, "When stuck in a hole, stop digging."<sup>32</sup> Producers plundering the public purse also complicates future policy decisions since officials will not want to undermine the market conditions that allow oil to be profitable, otherwise oil companies risk not being able to pay back their debts now owned by the public. Developing countries could also explore options combining debt forgiveness with climate action.

If Democrats dominate 2020 US elections, public ownership of oil assets, including debt instruments, could be a basis to begin decommissioning oil operations and workers' transitions perhaps paid by compensation clawbacks from oil executives and investors who laid off workers while having paid themselves excessively using COVID funds. At a minimum, any requests for public funds must be leveraged for greater advance disclosure of all climate risks to assess and publicize, through which the informing of any investors could also be processed to establish, in advance, potential legal liabilities of owning said oil assets.

As credit access closes down, uncertainty and instability could intensify given that for years, oil producers have been warning of chronic underinvestment soon leading to severe production shortfalls and price hikes. Avoiding pandemonium amid a pandemic is all the more reason to pursue a path of planned phaseout of oil output. (See more details in section below on decline.)

## Disclosure: Reveal All Risks of Owning Oil Assets

Oil as an asset, and an industry, has many hidden risks that are becoming increasingly revealed to private investors and public financial authorities charged with administering fiscal and monetary measures in the current economic crisis. Private investors have a right, and asset managers a fiduciary responsibility, to know if assets are overinflated based on assumptions not aligned with science. Public officials must exercise even more caution in providing credit.

Climate risks include three types: physical, transition, and liability. The urgent demand for more disclosure comes at a time when investors and central bankers worldwide are already working to incorporate more disclosure of climate risks into official practice and policy. As Mark Carney, former governor of the Bank of England, and others have proposed, financial policymakers must require carbon accounting, stress testing, and more insurance





measures of all types of climate risk. Some central banks and private investors are already applying their own risk assessments and due diligence, a practice that should be widely shared.

Particularly relevant now are oil companies' long-term price forecasts, especially from Exxon and Chevron, since their European Union (EU) counterparts already disclose their oil price projections.<sup>33</sup> Disclosure increases transparency for investors to assess how much of oil and gas companies' project portfolios are viably profitable at particular price estimates. European companies' disclosure made it harder to hide potentially stranded assets, forcing their write-downs of assets and ensuing market reactions. Safeguards are needed now against failure to disclose forecasting since its use is so essential to fossil fuels' continuing to attract more money.

Policymakers might also mandate full risk disclosure as a required loan condition and raise screening standards to include stress testing that applies significant internalization of climate costs (including potential liabilities) predicted under Intergovernmental Panel on Climate Change scenarios of climate change impacts.

### **Demand: The Role of a Green Recovery**

Oil executives and investors are extremely anxious about COVID's dramatic decrease in consumer demand potentially becoming permanent as companies' supply chains are shortened, peoples' life patterns are downshifted, and travel and trade are truncated. "Demand destruction" was the industry term already in use pre-COVID to forecast oil's inevitable decline due to climate concerns causing more millennials not to drive and cars converting to electric. Oil inventory backed up by over one billion barrels, and still much of it remains as mass airline layoffs continue amid green recovery plans. Tesla shares skyrocket even as China and India top their tanks of strategic petroleum reserves, and what was seen as new behavior now becomes normal.

Nothing might have more impact on permanently destroying oil demand than speeding up and scaling up a number of official measures: reshaping consumer preferences, encouraging working from home, discouraging the use of airlines and automobiles, and promoting public transit and urban bicycling.<sup>34</sup> While some of these policies and practices may not be the purview of investment authorities, their enactment could accelerate the reallocation of financial assets out of oil and into renewables and other investment opportunities in the energy space. Many mayors and other municipal-level leaders are already quite engaged in climate action but could be better supported by macroeconomic, financial, and monetary measures to make the most of green recovery efforts.

Trade is also in transition as supply chains shorten, spurring decreased demand from industrial manufacturers who are localizing and onshoring their suppliers. Sourcing is shifting from "just in time" to "just in case," reflecting the new reality of risks. The National Association of Manufacturers found 34 percent of companies had supply-chain disruption caused by COVID, accelerating onshoring for manufacturing.<sup>35</sup> With trade tensions

still simmering, COVID is not the only force behind onshoring. Resilience has been dubbed the decade's mantra while climate change looms large as an even greater disruptor to transform sourcing energy locally, if not on-site.

Travel drives oil demand, and many modes have been hit hard by life under lockdown, including:

- Airlines: Jet fuel makes much of oil's projected demand growth, yet too few people are willing to travel.
- Autos: Companies are shifting, as best seen in layoffs and stock shares either soaring or sinking.

Oil producers have been warning for years of chronic underinvestment in new capacity, portending potentially severe supply shortfalls the next few years, given full-recovery scenarios. Oil traders thrive on price volatility, while countries and communities struggle to survive, so such dire forecasts only reinforce the case for providing price-stability mechanisms as soon as possible.<sup>36</sup>

The relative challenges of various oil-producing countries are illustrated in Figure 5 (see page 7).

### **Decline: Price Stability for a Fast and Fair Phaseout of Oil**

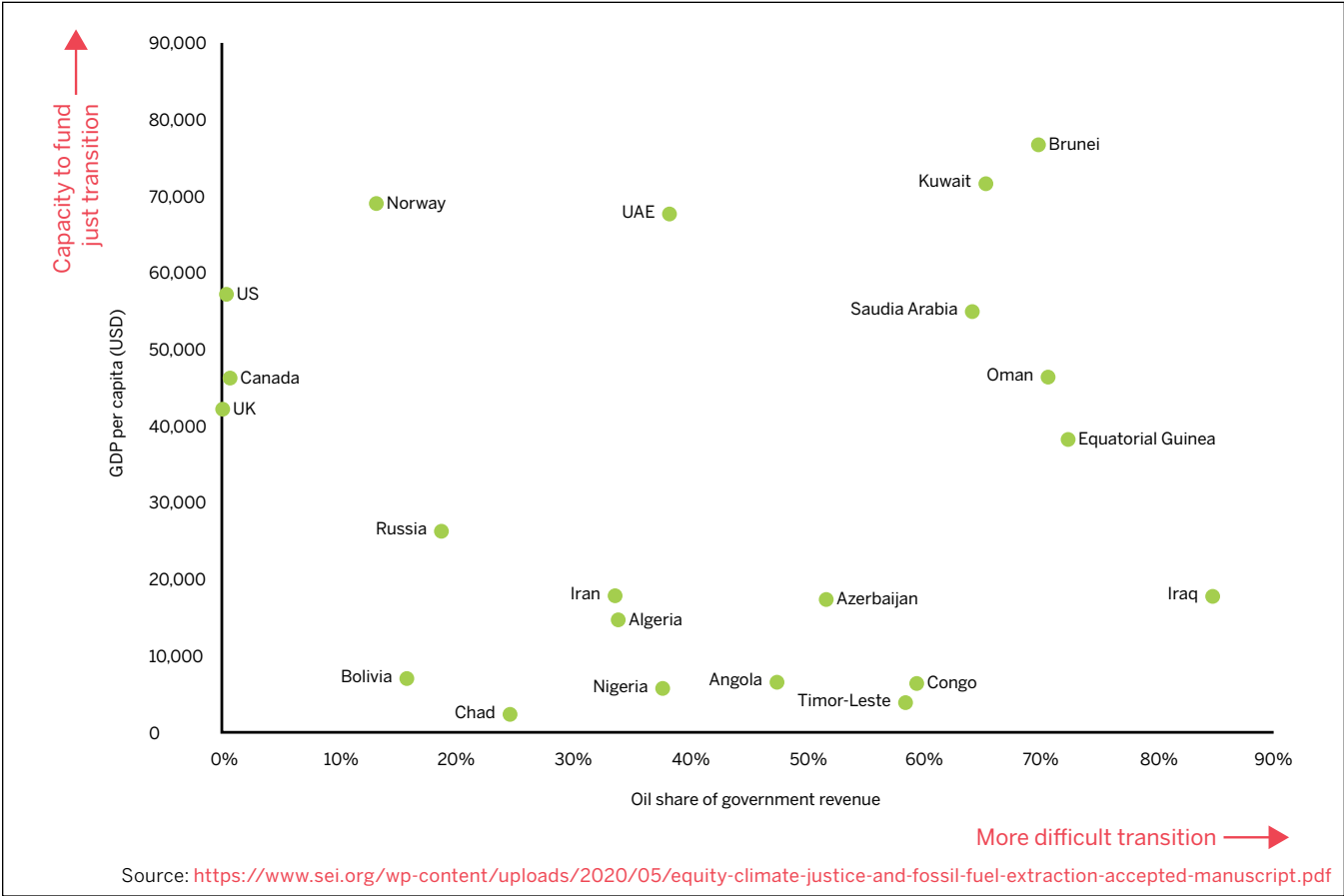
With credit closing off and demand drawing down, oil asset owners will want an elegant exit, but after epic profits from polluting the planet possibly beyond repair, few owners will find generous offers out of oil's debt trap. Of most interest to Earth's atmosphere are the owners of the largest oil and gas reserves, public property of governments who depend on the revenue, so attracting their interest must meaningfully address their ability to transition. Policies must address not only the legitimate anxieties of oil workers and communities impacted by industry operations but also the aspirations of almost 500 million people living in oil-dependent countries that make up OPEC.

Today's oil market volatility and lower-for-longer price outlook is at worst deepening oil's debt trap and at best creating larger constituencies for policies to provide global price stability.<sup>37</sup> As calls increase by climate campaigners for coordinating a phaseout of oil production urgently, predictably, and fairly, serious plans are already afoot to advance a fossil fuels treaty that could become a policy platform for global process.<sup>38</sup>

Cooperative arrangements among countries on energy-environment, trade-investment, as well as debt-development could create a faster economic recovery from COVID and allow more-ambitious and equitable climate commitments when updated Nationally Determined Contributions (NDCs) to the Paris Agreement are due at the United Nations Framework Convention on Climate Change (UNFCCC) in late 2020. Establishing multilateral mechanisms to manage decline must have a clear climate mandate to phase out fossil fuels according to UNFCCC principles of Common but Differentiated Responsibilities to:



Figure 5. Oil Producing Countries' Challenges



- Adjust production levels downward within price ranges acceptable to consuming countries.
- Avoid investors' "rush to the door" and secure a stable shift away from fossil fuels.
- Address OPEC's warning of more investment needed now to avoid a supply crunch.
- Manage decline of oil production predictably, transparently, equitably, and urgently.
- Support oil-dependent countries, communities, and workers in dignified transitions.
- Secure supplies of oil to avoid strategic concerns over geopolitics and armed conflict.
- Stabilize prices of oil at fair and predictable levels preferred for prudent economic planning.
- Secure demand for solar panel exports and other clean energy products and services.
- Spur other countries to also contribute their fair share to climate justice, as China's NDC does.
- Provide global leadership on two of the planet's top crises of equity and ecology.

One way German Chancellor Angela Merkel might make a historic mark on climate diplomacy during her hold of the EU presidency is to get going on an EU-China axis of oil-consuming countries that could convene a coalition to drive down global oil demand predictably while fast tracking solutions for just transition through meaningful finance and technology partnerships as if our survival depended on their success.

China's manifold interests in co-convening a diplomatic process for a global mechanism are to:

As Russia and Saudi Arabia show continued concern over climate change while pursuing paths from oil-based economies, the open invitation by OPEC+ to other oil producers (including the United States) offers an extraordinary opportunity to explore pairing price stability with a planned phaseout of production to help implement a Paris+ Agreement with adequate ambition.

Recognizing the new realities of Earth's altered atmosphere, the United States could initiate such a global agreement's supply-side measures by beginning to close down oil operations, cap existing wells, and restore drilling sites based on clear ecology and equity

criteria. This could constitute a first step to establish trust in a broader effort to do its fair share for mitigation and providing financial and technological support, as articulated by civil society organizations globally.<sup>39</sup>

Much more must be done to develop technical propositions and detail diplomatic road maps for a decommissioning vehicle of global oil assets. Even more, policymakers must explore compelling financial offers for oil asset owners in critical countries

and full support for workers and communities dependent on oil. Indigenous, frontline, and fenceline communities that have suffered damages, diseases, and endless indignities due to oil operations particularly deserve compensation and immediate respect for their human rights. Such a mandate must help manage a just transition of the crucial oil sector and provide guidance for policies promoting structural shifts in energy supplies away from fossil fuels while fast tracking fair solutions globally.

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*Analysis and New Insights are thought-provoking contributions to the public debate over peace and security issues. This Analysis and New Insights is part of the **Playbook for Paradigm Shift** paper series, a collaborative effort of the Stanley Center for Peace and Security and E3G to develop bold ideas and practical solutions for faster climate action and a fairer economy out of this crisis. (Cover photo: Oil tankers serve as “floating storage” from California to China; governments are on track to produce 120% more fossil fuels by 2030 than needed to stay within the 1.5C target of the Paris Agreement. [US Coast Guard video by Petty Officer Third Class Aidan Cooney])*



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