



(No) Power to the People: Oil and the Politics of Energy Access in Chad

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Nearly 775 million people around the globe are estimated to have no access to electricity. In 2022, that number rose for the first time since the International Energy Agency (IEA) began tracking it. Most of the increase occurred in African states, where about 600 million people currently lack access.¹ The IEA and Kenyan president William Ruto observed that the need for investment in Africa to expand access to electricity poses an opportunity to develop Africa's fledgling renewables sector,² which accounts for less than 2 percent of global capital pouring into clean energy despite an extraordinary level of renewable sources on the continent.³ Of the world's best solar resources, for instance, 60 percent are estimated to be in Africa, but only 1 percent of the world's solar photovoltaic (PV) capacity has been installed there.⁴

Against this backdrop of low external investments in African renewables, as well as soaring energy prices around the world since 2022, many African governments have identified oil development as an obvious primary concern. The recent (re)prioritization of oil has been driven by opportunities to monetize resurgent production in Algeria (960,000 barrels per day [bpd]) and Libya (1,240,000 bpd) as well as impressive discoveries off the coast of Namibia and Côte d'Ivoire, historically major importers.⁵ In East Africa, Somalia and Tanzania seek to partner with foreign investors to explore—and soon begin tapping—their oil potential. The continent's longtime top producers are also trying to revive aging sectors. Angola is betting that abandoning the Organization of the Petroleum Exporting Countries (OPEC) and its quota constraints will improve economic performance and attract investment.⁶ President Bola Tinubu is modernizing Nigeria's petro-economy by renewing partnerships with Shell and TotalEnergies,⁷ working with local tycoons⁸ and Saudi Arabia⁹ to

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overhaul domestic refining capacity, and rationalizing fuel prices.¹⁰ After Russia's invasion of Ukraine, Abuja amplified gas exports to Europe and has since promised more increases,¹¹ with the understanding that bolstering gas production often involves revamping oil infrastructure given that an estimated one-third of gas in Africa is produced as a byproduct of crude oil.¹²

Petrodollars are not only an easily centralized source of income and foreign exchange for African governments.¹³ Current and prospective African producers also consider them key to addressing myriad challenges, including, supposedly, energy poverty.¹⁴ Uganda's minister of energy encapsulated this view when positing, "We need to develop petroleum, those who have potential, so you get the money to work on electricity infrastructure. If we don't do that, then we will remain cutting down trees, invading forests, looking for biomass."¹⁵ The centrality of boosting oil output in the policies of numerous African sovereigns explains widely shared displeasure on the continent with the World Bank's decision (along with similar determinations by other development finance institutions) to cease financing post-2019 upstream oil (and gas) development except under "exceptional circumstances."¹⁶ As Uganda seeks to emerge as an oil producer, for instance, President Yoweri Museveni has denounced Western "hypocrisy" in limiting funding for hydrocarbon development when Africa has contributed only marginally to climate change, contrary to European and North American emissions.¹⁷ Limiting African governments' energy policy options is politically sensitive: the governments themselves naturally recoil at the prospect of losing a key revenue stream, but also impoverished populations have found in those policy options rare opportunities to insist on greater inclusion.¹⁸ That African sovereigns intend to move forward with oil development across the continent even if Western-dominated institutions consider these at odds with their climate goals is borne out by the soon-to-be-launched African Energy Bank, which will look to find viable financing for both new and existing oil and gas projects.¹⁹

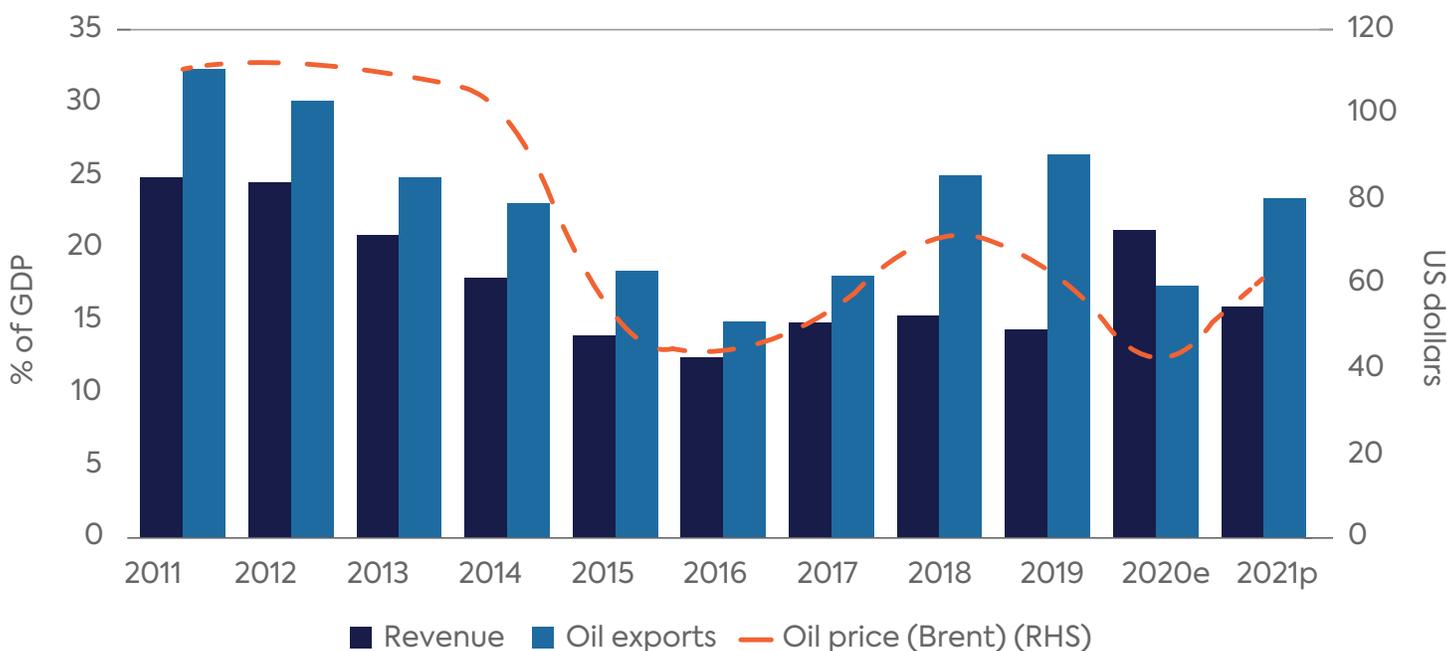
Yet while tripling or quadrupling current levels of energy consumption would be transformative for households and businesses, there is no straightforward relationship between fossil-fuel production and local energy use in much of Africa. An extensive academic literature documents that, whereas oil-producing states have historically committed to subsidizing ultra-cheap energy for citizens as part of the ruling bargain, pervasive inequality and energy poverty have only persisted and often widened for significant swaths of the population.²⁰ In the African context, as this commentary highlights via the example of Chad, oil exports have all too often helped entrench exclusionary modes of governance while facilitating minimal progress on human development, including energy access.



Oil and Chad’s Pivotal Role in Regional Affairs

Possessing Africa’s 10th-largest proven oil reserves,²¹ Chad emerged as a significant exporter in the early 2000s, when production from the Doba oil fields in the south came online via a pipeline through Cameroon to the Atlantic coast. Building an oil industry entailed geopolitical and commercial hedging. The government in Chad’s capital city of N’Djamena signed petro-partnerships with majors from the US (Exxon), France (Elf), Malaysia (Petronas), and China (CNPC). While 150,000–200,000 bpd of production remained modest compared to what neighboring Libya and Nigeria supplied to global markets, oil immediately became central to Chad’s economy, quintupling the size of GDP since 2000²²; today, the oil sector accounts for 30 percent of GDP, 86 percent of income from exports, and 62 percent of budgetary revenues.²³ The flip side of oil’s newfound centrality was that it rendered Chad highly vulnerable to market volatility. As Figure 1 illustrates, international oil prices and government revenues are closely correlated.

Figure 1: Effect of oil prices on Chad’s economy, 2011–2021



Source: International Monetary Fund, “IMF Country Report No. 21/267,” December 2021.



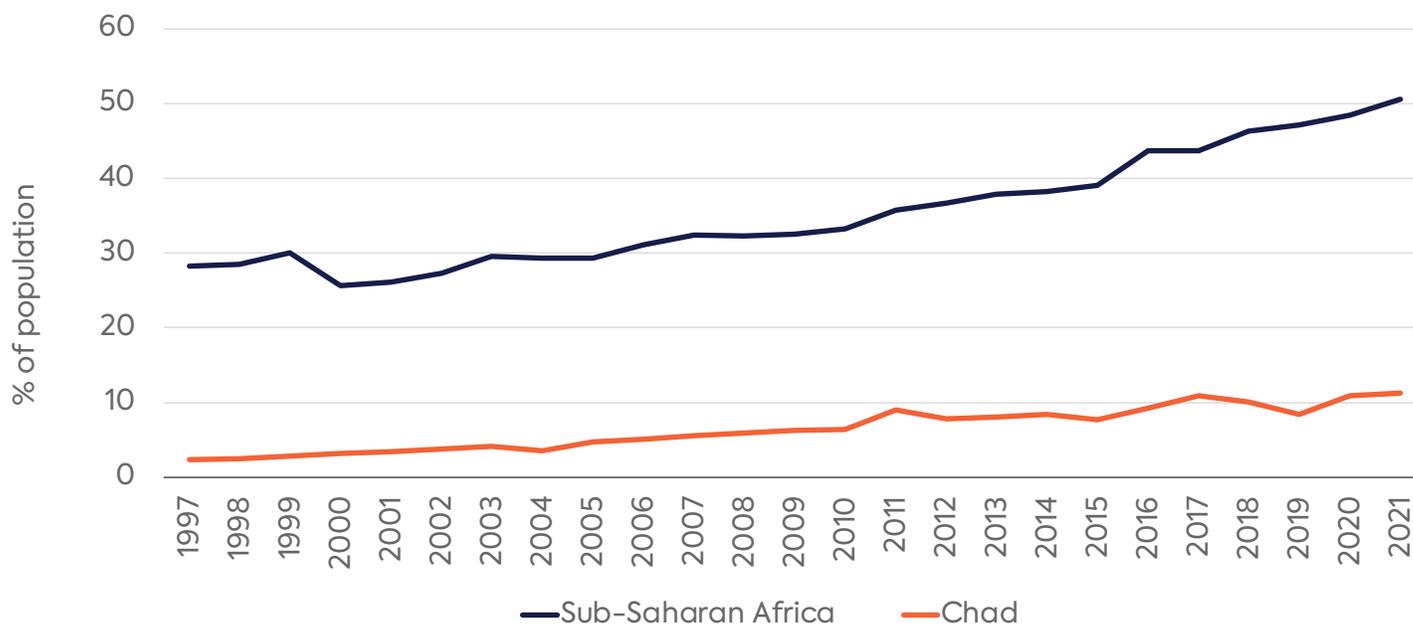
Oil was also transformational in a geopolitical sense. Chadian politics had long been a violent contest for power.²⁴ The exclusionary rule of the country's first president, François Tombalbaye, triggered a devastating civil war that lasted from 1965 until 1979. This was followed by the dictatorship of Hissène Habré, who disappeared tens of thousands of opponents. Chad's next president, Idriss Déby, who seized power in 1990, had access to unprecedented revenues generated by Chad's emergence as an oil exporter, which he used to reinforce his reign by fortifying patronage networks across the country and handing out cash (rather than government services) to ethno-political powerbrokers. Above all, Déby drew on oil money to expand and heavily arm a formidable army personally loyal to him.²⁵

The president did so to thwart rival warlords in northern and eastern Chad from challenging him and to enable him to intervene in Chad's near-abroad, from war-torn Darfur to the chaos in Central African Republic to Nigeria's northeast that was overrun by the jihadist insurgents of Boko Haram.²⁶ Such oil-funded interventionism garnered for Chad international diplomatic and military encouragement and support, especially from France and the United States, and thereby strengthened Chadian sovereignty, which had historically been strongly circumscribed.²⁷ Chad's utility to the West as an ally in the Global War on Terror in the troubled Sahel helped to shield Déby's regime from opprobrium over its dismal human rights record.²⁸

Global Energy Exports vs. Energy Poverty at Home

Despite its success in developing an export-focused oil industry that has generated massive government revenue over the past few decades, Chad remains stuck at the bottom of energy access rankings. As evident from Figure 2, only approximately 10 percent of Chad's population has access to electricity. Even in N'Djamena, refrigerators are a rarity and blackouts are a recurrent fact of life, if the power comes on at all.²⁹ New connections to the grid since the 2003 opening of the Chad–Cameroon Petroleum Development and Pipeline Project have largely been limited to select urban constituencies, and even within this elite slice of society electricity consumption remains limited. Astonishingly, Chadians use even less energy than their regional neighbors: 47 kilowatt-hours (kWh) per year per person versus 107 kWh for the poverty-stricken Sahel. They also face significant power outages: 20 per month versus 12 on average across the Sahel.³⁰ Since 2003, desperately poor Mali and Niger have more meaningfully expanded access to electricity (to 50 percent and 18 percent of their populations, respectively) than has Chad, despite starting from similarly low levels in 2000 and facing similar geographical challenges but not producing oil.³¹



Figure 2: Access to electricity in Chad and sub-Saharan Africa, 1997–2021

Source: World Bank Open Data.

In this vast and sparsely populated country with hundreds of nomadic communities, grid-based power is a difficult proposition. But institutional problems rather than simply geography are key to Chad's persistent energy poverty. The national utility company, the Société Nationale d'Electricité du Tchad (SNE), is mired in technical, logistical, and financial challenges³² that prevent it from carrying out its mission to connect Chadians to the energy they need. For the lucky few connected to the grid, prices are among the highest in the region—a result of regressive subsidies and high tariffs set by the Chadian government, which do not translate into actual investments in improving access.³³ While transmission infrastructure is virtually nonexistent across Chad, the SNE production facilities in place are mostly old and decaying, leading to frequent breakdowns and blackouts.³⁴ Furthermore, even where generation capacities are relatively new, the SNE runs into practical challenges it struggles to overcome. With instruction manuals mostly in Chinese and a dearth of qualified technicians, even small outages usually result in long delays.

Remediating these hurdles requires large investments, but the SNE is perpetually insolvent. Illegal connections are widespread, and the Chadian government, the SNE's main client, often fails to settle its bill.³⁵ Indeed, the utility mostly serves the purpose of clientelism rather than as an engine of growth or social inclusion. Directors at the SNE are frequently rotated in and out by presidential

decree, and as a form of political patronage the government grants free electricity access to high office holders, who then routinely sell the electricity to their neighbors for personal gain.

The disinterest of the Chadian government in prioritizing energy access is also evident in its unwillingness to capitalize on the country's potential in energy sources other than oil. After all, Chad is well positioned to partake in energy transitions. It has considerable untapped uranium reserves in the north, south, and west³⁶ that could be used to help supply the nuclear industry in Europe or the Middle East. Moreover, the sun shines for anywhere between 2,700 and 3,200 hours annually in Chad.³⁷ But whereas African economies such as Mauritania, Morocco, and Namibia have inked multibillion-dollar deals for hydrogen projects and solar farms,³⁸ Chad has not attracted international capital to develop renewable energy capacity, mainly because it lacks a regulatory environment conducive to investment in the sector. Though data is patchy, only about 3–4 percent of Chad's scarce energy provision comes from low-carbon sources—a paltry amount that is not changing, contrary to what is being achieved in other parts of Africa, including debt-burdened Ghana and Mozambique.³⁹ A 2022 vow by British firm Savannah Energy to invest in hundreds of megawatts of solar and wind energy capacity has been derailed by a legal battle with the Chadian government over the much more lucrative oil assets that Savannah has sought to acquire from Exxon and Petronas.⁴⁰ Because Savannah intended to leverage royalty payments as a guarantee for electricity payment, the solar plants it had agreed to build in Chad will probably not materialize.

The core reason for these failures in widening energy access is political in nature. While protracted insurgencies and Chad's daunting geography have deterred some investors and increased the costs for government and external partners to deal with energy poverty, Chad's rulers are simply unwilling to make this a priority. Dependence on oil rents and other forms of external finance has served them well, while few among the ruling elite are convinced that reforms would deliver similar benefits. The initial financing of Chad's oil infrastructure through the World Bank entailed setting aside up to 70 percent of the revenues from selling its crude in a special account dedicated to social and environmental spending that was to be monitored by development partners.⁴¹ Starting in 2005, however, Chad's leadership invoked a national security emergency to place this income under its full, sovereign control.⁴² Despite protestations by the World Bank and promises by the government to make oil development an inclusive national project, Chad's petrodollars have continued to be tightly controlled by the presidency, leaving most of the country literally and figuratively in the dark.

When senior leadership of the international financial institutions visited N'Djamena some years ago to meet President Déby, the latter affirmed that he had three priorities: “Energy, energy, energy.”⁴³ Yet despite such occasional rhetoric and recently allowing the World Bank to spend nearly US



\$300 million on energy access projects,⁴⁴ policy has been anything but proactive: the International Monetary Fund (IMF) has singled out the enduring weakness of governance and transparency in the energy sector,⁴⁵ and progress on the World Bank initiatives has been slow⁴⁶ while public communications about them have dried up, perhaps not to draw further attention to disinterest among cabinet members. There is simply no evidence that Chad's rulers are convinced that energy access is politically important to them or useful from a security standpoint; in their calculus, regime survival is determined by military prowess and Chad's role as a regional interventionist power rather than by helping their farmers, cattle herders, and teachers enjoy the benefits of electricity.⁴⁷ According to some estimates, a whopping 40 percent of government spending flows to the security apparatus.⁴⁸

Oil and the Politics of Transition

Although this system of political control in Chad has long been sustained by oil rents, its economics are troubling. Just a short while ago, Chad appeared on the brink. GDP per capita in Africa's largest landlocked country contracted by 4.6 percent in 2020 and 4.2 percent in 2021.⁴⁹ Despite an official death toll from the COVID-19 pandemic of less than 200, seven out of ten Chadian households reported struggling to access food supplies during this period.⁵⁰ Ostensibly to contain the spread of COVID-19, the government closed the border with Cameroon, a lifeline for Chadians who depend on trade with their neighbor and those active in the informal economy. Moreover, oil production in Chad dropped below 100,000 bpd at the very moment when global prices were plummeting. In January 2021, as its debt was judged unsustainable, Chad became the first country to apply for the G20's Common Framework for Debt Treatments.⁵¹ The debt crisis would soon be compounded by a political one. In April 2021, Idriss Déby, who had ruled with an iron hand since 1990, was killed while commanding troops at the front against insurgents. Fears regarding a collapse of Chad—and an ensuing regional vacuum—abounded.⁵²

Two years on, the former president's son and "interim" successor, Mahamat Déby, has seized the initiative by repeating his father's mantra concerning Chad's contributions to regional stability through oil and security cooperation.⁵³ The Chadian government has cleverly navigated the IMF and World Bank's desperate desire for successes under the Common Framework to get its main creditors—France, China, Saudi Arabia, India, and, above all, private commodity trader Glencore—to pledge to restructure Chad's debts,⁵⁴ helping it unlock fresh IMF funding,⁵⁵ even if privately IMF and World Bank staff are skeptical that the Chadian government will undertake overdue governance reforms, prioritize energy access, and reduce its dependence on oil rents and the security state.⁵⁶ However, there is little doubt that realpolitik will ensure N'Djamena receives debt relief and fresh cash regardless: Chad's rebels lack powerful friends abroad; with neighboring Sudan

in civil war,⁵⁷ Paris, Washington, and Beijing want to protect the status quo in Chad; and Chad's government is helpfully hosting hundreds of thousands of refugees from Sudan, Central African Republic, and elsewhere.⁵⁸ Moreover, Mahamat Déby's increasing alignment with the United Arab Emirates on regional geopolitics—including supplying Emirati allies in Sudan⁵⁹—helped him land a US \$1.5 billion loan and a US \$200 million energy partnership in June 2023.⁶⁰

Emboldened by high oil prices and higher oil production in 2022,⁶¹ the Chadian government is thus projecting confidence. Having ditched promises of a democratic transition within 18 months of becoming head of state, Mahamat Déby is drawing from his late father's political repertoire to assert his authority. Moves in March 2023 to nationalize all Exxon assets in Chad and nullify their sale to Savannah Energy,⁶² and to expel the German ambassador over criticisms of Chad's delayed elections,⁶³ might seem unusual behavior by a government that has helped to defend Western interests in the Sahel. But such decisions convey the primacy of projecting Chadian sovereignty externally and presidential authority internally, and as such are critical to shoring up Mahamat Déby's power. The ruling elite has regularly upended international agreements to remind its foreign friends of its importance and expand its grip on oil rents—Exxon's two decades in Chad were marked by serial disputes over royalties, taxes, and much else, including a US \$74 billion fine slapped on the multinational in 2016 as oil prices plummeted and the government scrambled to boost revenues and contain domestic protests.⁶⁴ Such politicking, then as today, does nothing to address the fact that 1 million people are acutely food insecure⁶⁵ or to provide electricity access to the overwhelming majority of Chadians who have never had any. But the brinkmanship is entirely in line with how the Déby family has long ruled Chad.

Broader Implications

As Chad's track record demonstrates, the notion that encouraging investment to expand oil production in African states will necessarily lead to greater energy access locally is illusory. Indeed, Chad is not alone in Africa in combining high levels of reliable oil exports and desperately entrenched energy poverty. More than half of all Angolans still do not have access to electricity even though their country has pumped more than 1 million barrels of oil per day for over 20 years.⁶⁶ Similarly, only 15 percent of Nigerians have access to clean cooking and more than 100 million have no access to electricity.⁶⁷ After more than 60 years of extracting hydrocarbons (amounting to a total income for the country of almost US \$400 billion just between 2011 and 2020⁶⁸), the argument that Nigeria needs to expand oil production to end energy poverty is not convincing. Achieving the latter objective instead requires new political imagination and choices around how resources are distributed.



Keeping such realities in mind is essential to nuancing often simplistic discussions of climate politics and energy transitions on the continent,⁶⁹ especially as African countries emerge as new oil and gas producers.⁷⁰ For instance, Mozambique, Somalia and Uganda are seeking to partner with foreign private and multilateral developers to bring their hydrocarbons to global markets. Yet like Angola, Chad and Nigeria, these states have long histories of political violence and authoritarian rule that have left most of their predominantly rural populations mired in multidimensional poverty, including exclusion from access to affordable and reliable energy. Potentially, a hydrocarbon bonanza could generate revenues to diversify their economies, expand energy for all, and build more equitable societies. But the idea that stimulating such production will automatically improve consumption levels for populations is thinly evidenced. Reversing the disconnect in much of Africa between energy production and consumption requires courageous political choices and deliberate institutional design to ensure inclusion. Chad offers a stark warning for why such outcomes remain, unfortunately, all too unlikely.

Notes

1. International Energy Agency, “For the First Time in Decades, the Number of People without Access to Electricity Is Set to Increase in 2022,” November 2022, <https://www.iea.org/commentaries/for-the-first-time-in-decades-the-number-of-people-without-access-to-electricity-is-set-to-increase-in-2022>.
2. William Ruto and Fatih Birol, “A New Energy Pact for Africa,” Project Syndicate, July 12, 2023, <https://www.project-syndicate.org/commentary/new-energy-pact-for-africa-will-create-prosperous-future-by-william-ruto-and-fatih-birol-2023-07>.
3. International Energy Agency, “Financing Clean Energy in Africa,” 2023, <https://iea.blob.core.windows.net/assets/f76594a5-8a9f-4820-ba3e-2908e03b02a9/FinancingCleanEnergyinAfrica.pdf>.
4. International Energy Agency, *Africa Energy Outlook 2022*, <https://www.iea.org/reports/africa-energy-outlook-2022/key-findings>.
5. Tom Wilson, “Could Namibia Be the Next Oil Frontier?,” *Financial Times*, August 27, 2023, <https://www.ft.com/content/6e34f11a-63a5-472a-9a17-ebb70e76f6e7>; “Eni Begins Oil and Gas Production in Ivory Coast Baleine Field,” Reuters, August 28, 2023, <https://www.reuters.com/business/energy/eni-begins-oil-gas-production-ivory-coast-baleine-field-2023-08-28/>.
6. Stanley Reed, “Angola to Quit OPEC in Dispute over Oil Production Levels,” *New York Times*, December 21, 2023, <https://www.nytimes.com/2023/12/21/business/angola-oil-opec.html>;

- “Angola’s OPEC Exit Opens Way for More Chinese Investment,” Reuters, December 22, 2023, <https://www.reuters.com/business/energy/angolas-opec-exit-opens-way-more-chinese-investment-2023-12-22/>.
7. “France’s TotalEnergies to Invest Billions in Nigeria,” Radio France Internationale, December 19, 2023, <https://www.rfi.fr/en/africa/20231219-france-s-totalenergies-to-invest-billions-in-nigeria>.
 8. Aanu Adeoye and Tom Wilson, “Nigeria’s Dangote Refinery Closer to Production after Years of Delay,” *Financial Times*, December 8, 2023, <https://www.ft.com/content/4de46180-4199-44ff-91ef-522e7b8ff66a>.
 9. Timothy Obiezu, “Nigerian Analysts Skeptical about Oil Refinery Deals with Saudi Arabia,” VOA, November 16, 2023, <https://www.voanews.com/a/nigerian-analysts-skeptical-about-oil-refinery-deals-with-saudi-arabia/7358101.html>.
 10. Leon Usigbe, “Nigeria Ends Oil Subsidy to Invest Savings in Infrastructure Development,” *Africa Renewal*, August 17, 2023, <https://www.un.org/africarenewal/magazine/august-2023/nigeria-ends-oil-subsidy-invest-savings-infrastructure-development>.
 11. Arne Delfs and Petra Sorge, “Germany Eyes Imports of Nigerian Natural Gas in Scholz Visit,” Bloomberg, October 29, 2023, <https://www.bloomberg.com/news/articles/2023-10-29/germany-eyes-imports-of-nigerian-natural-gas-in-scholz-visit>; “Nigeria and Germany Agree Deal on Gas and Renewables,” Deutsche Welle, November 21, 2023, <https://www.dw.com/en/nigeria-and-germany-agree-deal-on-gas-and-renewables/a-67513753>.
 12. Acha Leke, Peter Gaius-Obaseki, and Oliver Onyekweli, “The Future of African Oil and Gas,” McKinsey & Company, June 2022, <https://www.mckinsey.com/industries/oil-and-gas/our-insights/the-future-of-african-oil-and-gas-positioning-for-the-energy-transition>. On oil-gas production and impact linkages in the Nigerian context, see also Stakeholder Democracy Network, “Gas Expansion and the Energy Transition in Nigeria and the Niger Delta,” April 2023, <https://www.stakeholderdemocracy.org/wp-content/uploads/2023/04/SDN-Gas-Expansion-and-the-Niger-Delta.pdf>.
 13. Jesse Salah Ovadia, *The Petro-Developmental State in Africa: Making Oil Work in Angola, Nigeria and the Gulf of Guinea* (London: Hurst, 2016).
 14. See, for instance, Remarks by Minister Gwede Mantashe at the Africa Oil Week 2023, Cape Town ICC, October 10, 2023, <https://www.gov.za/news/speeches/minister-gwede-mantashe-africa-oil-week-2023-10-oct-2023>; “Stopping the Construction of EACOP Unjust—Uganda Energy Minister,” *Energy Capital & Power*, November 2, 2022, <https://energycapitalpower>.



- [com/stopping-the-construction-of-eacop-unjust-uganda-energy-minister/](https://www.gov.za/news/speeches/deputy-minister-nobuhle-nkabane-southern-african-oil-and-gas-conference-13-sep-2023); Remarks by the Honourable Deputy Minister of Mineral Resources and Energy Dr. Nobuhle Kkabane, Southern African Oil and Gas Conference, September 13, 2023, <https://www.gov.za/news/speeches/deputy-minister-nobuhle-nkabane-southern-african-oil-and-gas-conference-13-sep-2023>; Wendell Roelf, “Energy-Staved Africa Needs Fairer Climate Treatment: OPEN Sec Gen,” Reuters, October 17, 2023, <https://www.reuters.com/sustainability/climate-energy/global-climate-challenges-should-be-addressed-fairly-africa-opec-sec-gen-2023-10-17/>.
15. See interview with Ruth Nankabirwa Ssentamu, Minister of Energy and Mineral Development in Uganda, 1:40 onward, <https://www.youtube.com/watch?v=uZyl-ZgAQCUC>.
 16. World Bank, “World Bank Group Announcements at One Planet Summit,” December 12, 2017, <https://www.worldbank.org/en/news/press-release/2017/12/12/world-bank-group-announcements-at-one-planet-summit>.
 17. “Museveni Accuses Europe of Hypocrisy on its Climate and Energy Policy,” Africanews, December 13, 2023, <https://www.africanews.com/2022/12/13/museveni-accuses-europe-of-hypocrisy-on-its-climate-and-energy-policy/>.
 18. Energy access and affordability crises have dominated elections, such as when Ghana stood on the precipice of becoming a petroleum exporter in 2008 and, as one scholar noted, “voters correlated their right to vote with the right to receive a continuous, reliable supply of energy.” Stephanie Rupp, “Ghana, China, and the Politics of Energy,” *African Studies Review* 56, no. 1 (2013): 113, <https://www.jstor.org/stable/43905122>.
 19. African Petroleum Producers’ Organization, “The Africa Energy Bank Is Open to All / La Banque Africaine de l’Energie est ouverte à tous,” October 2023, <https://apposecretariat.org/2023/10/22/the-africa-energy-bank-is-open-to-all-la-banque-africaine-de-lenergie-est-ouverte-a-tous/>.
 20. E.g., Brian Min, *Power and the Vote: Elections and Electricity in the Developing World* (Cambridge, UK: Cambridge University Press, 2015); Douglas F. Barnes and Willem M. Floor, “Rural Energy in Developing Countries: A Challenge for Economic Development,” *Annual Review of Energy and the Environment* 21, no. 1 (1996): 497–530, <https://www.annualreviews.org/doi/abs/10.1146/annurev.energy.21.1.497>; Morgan Bazilian et al., “Oil, Energy Poverty and Resource Dependence in West Africa,” *Journal of Energy & Natural Resources Law* 31, no. 1 (2013): 33–53, <https://biblioteca.olade.org/opac-tmpl/Documentos/hm000073.pdf>; Jim Krane, “Stability Versus Sustainability: Energy Policy in the Gulf Monarchies,” *Energy Journal* 36, no. 4 (2015), <https://www.jstor.org/stable/24696045>.

21. Statista, “Proved Crude Oil Reserves in Africa in 2021, By Country,” <https://www.statista.com/statistics/1178147/crude-oil-reserves-in-africa-by-country/>.
22. World Bank Data, “Chad,” accessed January 11, 2023, <https://data.worldbank.org/country/TD>.
23. Claudia Noumedem Temgoua and Aboudrahyme Savadogo, “Chad’s Economic Recovery: Navigating Challenges and Building Resilience to Floods?,” World Bank Blogs, July 2023, <https://blogs.worldbank.org/africacan/chads-economic-recovery-navigating-challenges-and-building-resilience-floods>.
24. Sam C. Nolutshungu, *Limits of Anarchy: Intervention and State Formation in Chad* (Charlottesville: University of Virginia Press, 1996); Mirjam De Bruijn and Han Van Dijk, “The Multiple Experiences of Civil War in the Guéra Region of Chad, 1965–1990,” *Sociologus* 57, no. 1 (2007): 61–98, <https://www.jstor.org/stable/43645589>.
25. Ketil Fred Hansen, “A Democratic Dictator’s Success: How Chad’s President Deby Defeated the Military Opposition in Three Years (2008–2011),” *Journal of Contemporary African Studies* 31, no. 4 (2013): 583–599, <https://doi.org/10.1080/02589001.2013.840974>; Roland Marchal, “An Emerging Military Power in Central Africa? Chad Under Idriss Déby,” *Sociétés Politiques Comparées* 40 (2016): 2–20, <https://www.almendron.com/tribuna/wp-content/uploads/2021/05/an-emerging-military-power-in-central-africa-chad-under-idriss-deby.pdf>.
26. Martin Welz, “Omnibalancing and International Interventions: How Chad’s President Déby Benefitted from Troop Deployment,” *Contemporary Security Policy* 43, no. 2 (2022): 382–406, <https://doi.org/10.1080/13523260.2022.2067968>.
27. Jonathan Fisher and David M. Anderson, “Authoritarianism and the Securitization of Development in Africa,” *International Affairs* 91, no. 1 (2015): 131–151, <https://doi.org/10.1111/1468-2346.12190>.
28. Human Rights Watch, “Chad: Déby Leaves Legacy of Abuse,” April 20, 2021, <https://www.hrw.org/news/2021/04/20/chad-deby-leaves-legacy-abuse>.
29. “Minister’s Head Rolls over Failure of N’Djamena Emergency Electricity Supply Plan,” *Africa Intelligence*, November 8, 2023, <https://www.africaintelligence.com/central-africa/2023/11/08/minister-s-head-rolls-over-failure-of-n-djamena-emergency-electricity-supply-plan.110085649-art>.
30. Evelyne Taryam, “Accès Énergie Tchad: Un Frein au Développement,” *Thinking Africa*, January 2021, <https://www.thinkingafrica.org/V2/laces-a-lenergie-au-tchad-un-frein-au-developpement/>.



31. World Bank Data, “Access to Electricity (% of Population) – Mali,” accessed November 16, 2023, <https://data.worldbank.org/indicator/EG.ELC.ACCS.ZS?locations=ML>; World Bank Data, “Access to Electricity (% of Population) – Niger,” accessed November 16, 2023, <https://data.worldbank.org/indicator/EG.ELC.ACCS.ZS?locations=NE>.
32. US Department of Commerce, International Trade Administration, “Chad – Renewable Energy and Electricity Infrastructure,” September 7, 2020, <https://www.trade.gov/country-commercial-guides/chad-renewable-energy-and-electricity-infrastructure>.
33. World Bank, “Chad Country Economic Memorandum: Boosting Growth and Reducing Vulnerability,” World Bank Group, 2023, <https://documents1.worldbank.org/curated/en/099110723141052687/pdf/P1772530f4c3270c30ac45088b973c1a8e6.pdf>.
34. “Loupe sur L’Electricité, Une Denrée Rare au Tchad,” Tchad Infos, April 2022, <https://tchadinfos.com/loupe-sur-lelectricite-une-denree-rare-au-tchad%EF%BF%BC/>.
35. Mbainaissem Peurdoum Richard, “Rapport National du Tchad,” UNDP Special Report, 2018, 7, https://www.seforall.org/sites/default/files/Chad_RAGA_FR_Released.pdf.
36. Republic of Chad, Ministry of Mines, “Project Uranium of Chad,” https://unece.org/fileadmin/DAM/energy/se/pp/unfc/unfc_ws_U.Th_Luxor.Oct.2015/12_Chad.pdf.
37. Mbainaissem Peurdoum Richard, “Rapport National du Tchad,” 50.
38. E.g., “Consortium Signs \$34 Billion MoU for Hydrogen Project in Mauritania,” Reuters, March 2023, <https://www.reuters.com/business/energy/german-uae-egypt-consortium-sign-34-bln-deal-hydrogen-project-mauritania-faz-2023-03-08/>.
39. Yunus Kemp, “Angola Leads the PV Way, as Africa Increases Solar Energy Capacity – Report,” ESI Africa, February 24, 2023, <https://www.esi-africa.com/renewable-energy/solar/angola-leads-the-pv-way-as-africa-increases-solar-energy-capacity-report/>.
40. Pat Davis Szymczak, “Chad Nationalizes Doba Project, Derails Exxon’s Asset Sale to Savannah Energy,” *Journal of Petroleum Technology*, March 2023, <https://jpt.spe.org/chad-nationalizes-doba-project-derails-exxons-asset-sale-to-savannah-energy>.
41. J. Anyu Ndumbe, “The Chad–Cameroon Oil Pipeline—Hope for Poverty Reduction?” *Mediterranean Quarterly* 13, no. 4 (2002): 74–87, <https://read.dukeupress.edu/mediterranean-quarterly/article-abstract/13/4/74/1431/The-Chad-Cameroon-Oil-Pipeline-Hope-for-Poverty>; Scott Pegg, “Can Policy Intervention Beat the Resource Curse? Evidence from the Chad–Cameroon Pipeline Project,” *African Affairs* 105, no. 418 (2006): 1–25, <https://www.jstor.org/>

[stable/3518786](#).

42. Matthew S. Winters and John A. Gould, “Betting on Oil: The World Bank’s Attempt to Promote Accountability in Chad,” *Global Governance* 17 (2011): 229–245, <https://www.jstor.org/stable/23033732>.
43. Confidential (online) personal communication with a senior official in the international financial institutions, January 2022.
44. World Bank, “Le Tchad Accélère son Accès à L’Energie,” March 2022, <https://www.banquemondiale.org/fr/news/press-release/2022/03/24/afw-tchad-accelere-son-acces-a-energie>.
45. International Monetary Fund, “IMF Staff Completes Mission to the Republic of Chad for Discussions on the Third Review of the Extended Credit Facility Arrangement and the 2023 Article IV Consultation,” press release no. 23/143, May 10, 2023, <https://www.imf.org/en/News/Articles/2023/05/10/pr23143-chad-imf-staff-completes-mission-discussions-3rd-review-ecf-arr-2023-art-iv>. The IMF noted that “reforms should notably aim at...improving governance and transparency in the energy sector,” but this was expressed as an aspiration rather than tied to possible conditionality in the context of debt restructuring and IMF-led refinancing of Chad.
46. World Bank, “Avis General de Passation des Marches du PAAET,” <https://documents1.worldbank.org/curated/en/099010224084534903/pdf/P174495178366d009195741a3886fcdce8b.pdf>. Delays have ensured that many “milestones” remain “in process,” “under study,” or at the phase of “signing.”
47. Marchal, “An Emerging Military Power in Central Africa? Chad Under Idriss Déby.”
48. International Crisis Group, “New Challenges for Chad’s Army,” January 2021, <https://www.crisisgroup.org/africa/central-africa/chad/298-les-defis-de-larmee-tchadienne>.
49. World Bank, “Chad Economic Update: Harnessing Agriculture and Livestock Value Chains to Foster Economic Diversification and Increase Potential Growth,” June 2022, <https://www.worldbank.org/en/country/chad/publication/chad-economic-update-agriculture-livestock-value-chains-economic-diversification-growth>.
50. World Bank and INSEED, “Socio Economic Impacts of COVID-19 in Chad,” bulletin no. 2, October 2020, <https://microdata.worldbank.org/index.php/catalog/3792/download/50201>; UN Development Programme and Economic Community of West African States, “Socio-Economic Impact of COVID-19 and the Role of Disaster Risk Governance in Western Sahel and Lake Chad Basin,” October 24, 2022, <https://www.undp.org/africa/publications/socio-economic-impact->



[covid-19-and-role-disaster-risk-governance-western-sahel-and-lake-chad-basin.](#)

51. Andrea Shalal, “Chad Becomes First Country to Ask for Debt Overhaul under G20 Common Framework,” Reuters, January 2021, <https://www.reuters.com/article/us-chad-debt/chad-becomes-first-country-to-ask-for-debt-overhaul-under-g20-common-framework-idUSKBN29X0Q5>.
52. Alexandre Marc, “The Death of Chadian President Idris Déby Itno Threatens Stability in the Region,” Brookings, April 2021, Brookings, <https://www.brookings.edu/blog/order-from-chaos/2021/04/29/the-death-of-chadian-president-idris-deby-itno-threatens-stability-in-the-region/>.
53. Katie Nodjimbadem, “Chad’s Coup Leader Stops Democracy in Its Tracks,” *Foreign Policy*, December 2022, <https://foreignpolicy.com/2022/12/06/chad-deby-coup-leader-democracy/>.
54. Confidential (in-person) personal communication with Paris Debt Club official, February 2022. See also Ryadh M. Alkhareif and Emmanuel Moulin, “What the Chad Deby Deal Means,” Finance for Development Lab, April 19, 2023, https://findevlab.org/news_and_event/what-the-chad-debt-deal-means/.
55. International Monetary Fund, “IMF Staff Concludes Visit to Chad,” press release no. 22/99, March 2022, <https://www.imf.org/en/News/Articles/2022/03/30/pr2299-imf-staff-concludes-visit-to-chad>. See also International Monetary Fund, “IMF Staff Completes Mission to the Republic of Chad for Discussions on the Third Review of the Extended Credit Facility Arrangement and the 2023 Article IV Consultation.”
56. Confidential (online) communication with senior IMF and World Bank officials, December 2021, February 2022, August 2022.
57. Harry Verhoeven, “Q&A: The Political Economy of Conflict and Energy in Sudan,” Energy Explained, Center on Global Energy Policy, Columbia University, April 20, 2023, <https://www.energypolicy.columbia.edu/qa-the-political-economy-of-conflict-and-energy-in-sudan/>.
58. UNHCR, “Chad – Populations,” accessed November 16, 2023, <https://reporting.unhcr.org/chad#toc-populations>.
59. Declan Walsh, Christoph Koettl, and Eric Schmitt, “Talking Peace in Sudan, the U.A.E. Secretly Fuels the Fight,” *New York Times*, September 29, 2023, <https://www.nytimes.com/2023/09/29/world/africa/sudan-war-united-arab-emirates-chad.html>.
60. Présidence de la République du Tchad, “Visite D’Amitié et de Travail à Abu Dhabi: Plusieurs

Accords de Coopération Signés,” <https://presidence.td/visite-damitie-et-de-travail-a-abu-dhabi-plusieurs-accords-de-cooperation-signes/>.

61. Temgoua and Savadogo, “Chad’s Economic Recovery: Navigating Challenges and Building Resilience to Floods?”
62. Sam Mednick, “Chad Nationalizes Assets by Oil Giant Exxon, Says Government,” AP, March 2023, <https://apnews.com/article/exxon-mobil-chad-oil-f41c34396dff247ca947019f9eb3f62>; Charlie Mitchell, “Interview: Chad Hits Out at Exxon and Savannah Energy in Doba Oil Field Dispute,” S&P Global Commodity Insights, May 2023, <https://www.spglobal.com/commodityinsights/en/market-insights/latest-news/oil/053023-interview-chad-hits-out-at-exxon-and-savannah-energy-in-doba-oil-field-dispute>.
63. Helga Dickow, “Chad Picks a Fight with Germany – What’s Behind It and What the Consequences Are,” The Conversation, April 2023, <https://theconversation.com/chad-picks-a-fight-with-germany-whats-behind-it-and-what-the-consequences-are-203946>.
64. Ed Reed, “Savannah Battered by Chad, Focuses on South Sudan,” Energy Voice, March 2023, <https://www.energyvoice.com/oilandgas/africa/ep-africa/493663/savannah-battered-by-chad-focuses-on-south-sudan/>.
65. Fulbert Tchana Tchana, Claudia Noumedem Temgoua, Aboudrahyme Savadogo, and Landry Kuate Fotue, “Six Charts to Understand Chad’s Food Security Crisis,” World Bank, June 2022, <https://blogs.worldbank.org/africacan/afw-six-charts-understand-chads-food-security-crisis>.
66. International Energy Agency et al., “Tracking SDG 7 – Angola,” <https://trackingsdg7.esmap.org/country/angola>.
67. International Energy Agency et al., “Tracking SDG 7 – Nigeria,” <https://trackingsdg7.esmap.org/country/nigeria>.
68. Nigeria Extractive Industries Transparency Initiative, “NEITI 2020 Oil and Gas Industry Report,” 2022, 117, <https://neiti.gov.ng/cms/wp-content/uploads/2022/03/NEITI-OGA-2020-Report.pdf>.
69. Prudence Dato, “We Analysed Climate Research on Africa. Here’s What We Found,” African Arguments, June 2023, <https://africanarguments.org/2023/06/we-analysed-climate-research-on-africa-heres-what-we-found/>.
70. US Energy Information Administration, “Emerging Hydrocarbon Producers in Africa,” December 2023, https://www.eia.gov/international/analysis/special-topics/Emerging_Hydrocarbon_Producers_in_Africa.



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