

# Guidebook on Nigeria's Energy Transition

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## Introduction

This guidebook serves as a comprehensive reference tool for the government, as well as an accountability tool that enables civil society to track the government's implementation of its commitments to the energy transition.

This guidebook assesses the frameworks that the Nigerian government has designed to transition from fossil fuels—oil, gas and coal—to renewable energy technologies, including institutional, policy, legal and fiscal frameworks.

It is informed by engagements with state and non-state actors including representatives of the government, the private sector, communities, youth and women's groups, and by their views of the strengths and weaknesses of Nigeria's energy transition plans. Accounting for Nigeria's unique context and peculiarities as a fossil-fuel-dependent nation, the guidebook seeks to provide greater clarity on ways to navigate the energy transition for the Nigerian government, civil society, the media, the country's citizens and the international community. It also seeks to mitigate transition led shocks and strengthen the overall transition process in Nigeria.

The guidebook can enhance stakeholder knowledge of Nigeria's energy transition process and government action to accelerate the transition. This should encourage the adoption of a comprehensive plan aligned with the needs and realities of most Nigerians. The insights provided in the guidebook may also inspire and influence regional conversations across the African continent, creating a collective demand for a people-centered and just energy transition in multiple countries."

### Methodology

This guidebook was developed with a combination of qualitative and quantitative approaches. The Natural Resource Governance Institute (NRGI) conducted stakeholder engagements, policy dialogues, national dialogue, and community, youth and women's engagements to determine the information. A literature review of the legal and regulatory policy, and of institutional frameworks surrounding the energy transition, was conducted. NRGI colleagues conducted an internal review, and external experts reviewed the guidebook to ensure it is fit for the Nigerian audience. NRGI validated the guidebook with input from government officials, civil society actors, community representatives, youth and women's groups, and journalists.

# Background: Nigeria's energy transition

Nigeria, like many countries, committed to the international effort to combat climate change by signing the Paris Agreement in 2016 and ratifying it in 2017.<sup>1</sup> The Paris Agreement set a long-term goal to hold the increase in the global average temperature to well below 2oC above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5oC above pre-industrial levels.

As the world transitions to meet climate commitments, Nigeria faces two significant impacts on its economy and energy future. On the one hand, Nigeria stands to lose revenue from oil and gas, placing its fiscal stability at risk, both in terms of government spend and foreign exchange stability. On the other hand, Nigeria's oil and gas energy dependency is also threatened if Nigeria lacks revenues, infrastructure and human resources to exploit its fossil fuels.

Nigeria's response to the global energy transition, then, is to diversify its energy and revenue bases. However, the pace at which Nigeria can respond depends on its ability to assess its preparedness to transition and design a sustainable energy transition process that supports that transition. This guidebook seeks to provide Nigeria with the tools to do both, outlining roles for key stakeholders, including the government and civil society, to support that process. Nigeria has taken steps to respond to the global energy transition through its development plans to diversify the economy, albeit so far implemented unsuccessfully. It has attempted to diversify its energy mix in response to its commitments in its <u>Nationally</u> <u>Determined Contribution</u> to unconditionally reduce greenhouse gas (GHG) emissions by 20 percent above "business as usual" by 2030.<sup>2</sup> It made additional commitments to reduce GHGs by 47 percent with financial assistance, technology transfer, and capacity-building, acknowledging the sparse resources it possesses as a low-to-middle-income country.

To articulate an ambition to diversify the country's energy sources and meet global commitments, Nigeria's Energy Transition Office, supported by former Vice-President Yemi Osibanjo, documented that ambition in Nigeria's <u>Energy Transition Plan</u>, developed in 2021.<sup>3</sup> The adoption of this ambition by President Tinubu's administration remains unclear when weighed against pre-existing efforts to develop long-term strategies to reduce emissions across Nigeria's energy sectors by 2050 through the country's 2050 Long-Term Vision for Nigeria (LTV-250)<sup>4</sup> and <u>Climate Change Act 2021.<sup>5</sup></u>

This guidebook proposes guidelines to enable the energy transition related government institutions; power, petroleum resources, mines and minerals and other relevant stakeholders navigate the energy transition ecosystem.

United Nations Framework Convention on Climate Change (UNFCCC), *The Paris Agreement*, 2015, unfccc.int/process-and-meetings/the-paris-agreement.
 Federal Government of Nigeria, *Nigeria's Nationally Determined Contribution*, 2021, unfccc.int/sites/default/files/NDC/2022-06/NDC\_

File%2520Amended%2520\_11222.pdf.

<sup>3</sup> Nigeria Energy Transition Plan, 2021, www.energytransition.gov.ng.

<sup>4</sup> Department of Climate Change, Federal Ministry of Environment, Nigeria, 2050 Long-Term Vision for Nigeria (LTV-2050), 2021, unfccc.int/sites/default/files/ resource/Nigeria\_LTS1.pdf.

<sup>5</sup> Federal Government of Nigeria, Climate Change Act, 2021, faolex.fao.org/docs/pdf/NIG208055.pdf.

# Assessing Nigeria's preparedness to transition

As the energy transition accelerates globally, the lack of preparedness of some countries to effectively phase out fossil fuels and phase in renewable energy technologies becomes increasingly apparent. Limited access to the levers required for the transition and constraints on financial, technical and human resources threaten the speed of transition for some countries. However, as countries continue to accelerate their transition, decisions that developed and wealthier countries make impact the ability of developing countries to sustain their economies without transitioning themselves.

Low-to-middle-income countries are particularly financially and technically constrained to transition at the same pace as their wealthier counterparts. For instance, Norway's <u>USD 1.2 trillion net zero</u> <u>target<sup>6</sup></u> appears realistic given the country's huge <u>\$1.3 trillion sovereign wealth fund savings</u>.<sup>7</sup> When compared with Nigeria's projected \$1.9 trillion net zero investment ambition outlined in its Energy Transition Plan, its significantly smaller sovereign wealth seed funding investment of <u>\$1.25 billion</u><sup>8</sup> makes Nigeria's ambition appear less realistic.

Of the <u>five low-carbon technologies projected</u> <u>as the major drivers of the transition</u><sup>9</sup>—wind, electric vehicles, heat pumps, green hydrogen and solar—Nigeria has more investments in solar (off-grid, mostly rooftops) than the others. Essential investments in research and development, infrastructure, labor and manufacturing are key to scaling up the transition technologies that low-tomiddle-income countries require.

Lack of the necessary tools and resources, however, does not exempt fossil-fuel-dependent countries from meeting their international commitments. But a balance must be struck in transitioning energy systems to fulfill international commitments and in achieving and accelerating development goals, including to address pollution.

In Nigeria since 2019, oil and gas' contribution to the federal government's revenue has tended to comprise slightly less than half of the government's annual budget, as well as providing almost all foreign exchange earnings, while supporting economic development across the country. Although non-oil and non-gas revenues have played an increasingly prominent role in federal allocations since 2015, a rapid transition away from fossil fuels could still have severe economic implications if unaccompanied by a well-planned strategy for diversification and job creation in alternative energy sectors.

The implications are particularly significant for Nigeria's communities living in fossil-fuel-producing areas, who face not only potential increases in unemployment but continued environmental liabilities linked to oil production. Low production levels, divesting international oil companies and projected low fossil fuel demand continue to have a profound effect on the Nigerian economy, requiring an accelerated transition and diversification.

To accelerate Nigeria's transition, a deluge of laws, frameworks, action plans, regulations and processes have emerged relating to climate change and the energy transition. Whether or not these efforts on the part of the Nigerian government sufficiently support the country's efforts to transition to a low-carbon future while navigating a phaseout of its fossil fuel dependency will be the focus of the next section. Below are some critical questions for Nigeria's consideration.

<sup>6</sup> World Economic Forum, "Norway's massive sovereign-wealth fund sets net-zero goals," 23 September 2022, www.weforum.org/agenda/2022/09/norwaysmassive-sovereign-wealth-fund-sets-net-zero-goal.

<sup>7</sup> Bloomberg, "Norway Wealth Fund CEO Warns Days of High Returns Are Over," 27 January 2022, www.bloomberg.com/news/articles/2022-01-27/norwaywealth-fund-returns-14-5-in-2021-as-stocks-surged?leadSource=uverify%20wall.

<sup>8</sup> NSIA, Frequently Asked Questions, 'What is the source of NSIA funding?' www.nsia.com.ng/faq/

<sup>9</sup> McKinsey & Company, "Global Energy Perspective 2023: Transition bottlenecks and unlocks," 10 January 2024, www.mckinsey.com/industries/oil-and-gas/ our-insights/global-energy-perspective-2023-transition-bottlenecks-and-unlocks.

### Availability of transition data and information

### What information and data do government officials need to make informed decisions?

To determine the resources Nigeria needs to transition from a fossil-fuel-intensive energy system to a renewable-energy-based one, government officials need more information and data sets. They must develop an understanding of the energy ecosystem and its dependencies.

To phase out of fossil fuels, stakeholders and decision-makers need information on:

- Level of dependency on fossil fuels for revenue and the country's plan to reduce that dependency
- Projected country and global demand for the country's fossil fuel resources
- Contribution of fossil fuel reserves to the energy mix and alternative energy sources needed to displace them
- Fossil fuel production to determine the level of clean energy to be substituted for it, based on the government's intended energy mix

To phase in renewables, stakeholders and decision-makers need information on:

- Mineral reserves and potential of the country
- Revenue contribution of minerals to the economy
- Commercial quantities of the minerals available

This information should be made readily available by the Federal Ministry of Mines and Steel for government officials, investors, development partners, civil society actors, members of the media, and the public. Some of this information and data is available at the Federal Ministry of Mines and Steel, the Federal Ministry of Petroleum Resources and other government bodies. However, some of the information remains disputed. Other independent sources of energy-transitionrelated information would be necessary to aid the decisions of oversight actors, government institutions, legislators, investors and development actors.

#### **Transition-enabled policies and laws**

#### Are there strong policy and legal frameworks designed to hasten the phaseout of fossil fuels and phase-in of renewables?

As nations transition from fossil fuels to renewables, they require governance frameworks that can steer this shift. Conducting an audit of current laws and policies becomes essential to identifying and addressing any gaps that may impede the transition. This audit is crucial to foster a sustainable energy system that not only ensures energy security, efficiency and reliability but also helps identify potential new policies and laws that needed as Nigeria undergoes its shift from fossil fuels to renewables.

Certain countries have undertaken initiatives and legislation to disincentivize fossil fuel use and incentivize adoption of renewables. Table 1 provides examples of policies, laws and initiatives countries have adopted that signal their commitment to a low-carbon energy future and a proactive stance toward expanding renewable energy.

	Fossil fuel phaseout	Renewables phasing in
Subsidies	<u>Reducing fossil fuel subsidies</u> allows for the real cost of fossil fuels be reflected at market prices. <sup>10</sup> Renewables become more competitive, as was the case in Indonesia in 2022 when the country's reduced fossil fuel subsidies led to increased investment in renewables following implementation of the policy.	Reallocating revenues from fossil fuels to renewables speeds up the transition process while tackling economic objectives. In 2021, India adopted a <u>production-linked incentive program</u> to attract investments in domestic manufacturing of electric vehicles and components. <sup>11</sup>
Taxes	The <u>United Kingdom</u> and <u>Canada</u> set a minimum price for emitting carbon, providing a financial disincentive for high-carbon activities. <sup>12</sup>	In the United States, <u>investment tax</u> <u>credit (ITC</u> ) schemes are offered as a financial incentive for renewables projects. <sup>13</sup>
Environment	The U.S. Environmental Protection Agency implemented <u>regulations to</u> <u>reduce methane emissions</u> from the oil and gas sector, discouraging the release of potent GHGs. <sup>14</sup>	The U.S. National Environmental Policy Act 1969, Canada's Impact Assessment Act 2012 and South Africa's National Environmental Management Act 1998 all provide a framework for environmental management of minerals including critical/transition minerals.

### **Table 1.** Countries' policies, laws and initiatives adopted to hasten their energy transition, for consideration by the energy transition related institutions sectors in Nigeria,

<sup>10</sup> The Diplomat, "Why Indonesia Reduced Petrol Subsidies," 6 September 2022, thediplomat.com/2022/09/why-indonesia-reduced-petrol-subsidies.

<sup>11</sup> International Institute for Sustainable Development (IISD), "India Must Significantly Step Up Clean Energy Subsidies to Meet its 2030 Targets: CEEW–IISD," 31 May 2022, www.iisd.org/articles/press-release/india-step-clean-energy-subsidies-2030-targets.

U.K. Government, "Consultation outcome: Carbon Emissions Tax," 23 March 2021, www.gov.uk/government/consultations/carbon-emissions-tax; Government of Canada, "Canada introduces framework to cap greenhouse gas pollution from oil and gas sector," 7 December 2023, www.canada.ca/en/ environment-climate-change/news/2023/12/canada-introduces-framework-to-cap-greenhouse-gas-pollution-from-oil-and-gas-sector.html.

<sup>13</sup> Solar Energy Industries Association, "Solar Investment Tax Credit (ITC)," no date, www.seia.org/initiatives/solar-investment-tax-credit-itc.

U.S. Environmental Protection Agency, "Actions and Notices about Oi, and Natural Gas Air Pollution Standards," no date, www.epa.gov/controlling-airpollution-oil-and-natural-gas-operations/actions-and-notices-about-oil-and-0.

#### Table 1. (continued)

Divestments and investments	The Norwegian sovereign wealth fund valued at \$1.2 trillion <u>divested from fossil</u> <u>fuels</u> , signaling a shift away from oil and gas investments. <sup>15</sup> <u>Colombia</u> committed to wind down fossil fuels and accelerate economic transformation. <sup>16</sup>	Norway's <u>green energy certificate</u> <u>system</u> certifies and tracks production and consumption of renewable energy. <sup>17</sup> The certificate incentivizes businesses to use renewable energy sources. Senegal's <u>Just Energy</u> <u>Transition Partnership</u> has established a goal to reach 40% renewable energy in the electricity mix by 2030. <sup>18</sup>
Pro-green policies	Denmark passed an <u>Energy Agreement</u> <u>2018</u> which includes target to phase out oil and gas from heating in buildings by 2030. <sup>19</sup>	South Korea developed a <u>Green New</u> <u>Deal</u> policy to reduce the country's reliance on fossil fuels and promote green industries. <sup>20</sup> It involves investments in renewable energy, electric vehicles and creation of green jobs.
Inclusion and equity policies	<u>South Africa</u> provides support for former workers in the coal industry. <sup>21</sup>	Colombia's <u>approach to scaling up</u> renewable energy in communities makes energy entrepreneurs and producers in renewable energy projects. <sup>22</sup>
National oil company (NOC) transitions	NOC <u>Orsted</u> in Denmark adopted a renewable energy strategy in response to the global clean energy push. <sup>23</sup>	NOC reinvesting in renewable energy to remain relevant and respond to global shift to clean energy.

15 World Gold Council, "Norway's Sovereign-Wealth Fund Boosts Renewable Energy, Divests Fossil Fuels," 12 June 2019, www.wsj.com/articles/norwayssovereign-wealth-fund-boosts-renewable-energy-divests-fossil-fuels-11560357485.

- 16 International Energy Agency (IEA), "Colombia 2023," September 2023, www.iea.org/reports/colombia-2023.
- 17 Energy Facts Norway, "Electricity Certificates," no date, energifaktanorge.no/en/regulation-of-the-energy-sector/elsertifikater.
- 18 NRGI, "Senegal's New JETP: Four Crucial Next Steps," 22 June 2023, resourcegovernance.org/articles/senegals-new-jetp-four-crucial-next-steps.
- 19 Organisation for Economic Co-operation and Development (OECD), "The Danish Energy Agreements towards a carbon-neutral society," 6 October 2021, www.oecd.org/climate-action/ipac/practices/the-danish-energy-agreements-towards-a-carbon-neutral-society-74d30bcf.
- 20 United Nations Development Programme, "South Korea's Green New Deal in the year of transition," 8 February 2021, www.undp.org/blog/south-koreasgreen-new-deal-year-transition.
- 21 World Resources Institute (WRI), "5 Lessons from South Africa's Just Energy Transition Journey", 1 September, 2022, www.wri.org/technical-perspectives/5lessons-south-africas-just-transition-journey
- 22 Colombia Potencia de la Vida, "Comunidades Energéticas," no date, www.minenergia.gov.co/es/comunidades-energeticas.
- 23 Business Insider, "From black to green: How an oil-and-gas company pivoted to embrace wind energy—and is now raking in billions," 13 April 2023, www. businessinsider.com/renewable-energy-strategy-oil-companies-switch-to-clean-energy-2023-4?r=US&IR=T.

#### Access to transition finance

### What opportunities does Nigeria have to raise funds for its transition?

To successfully transition away from fossil fuels, countries require significant investments in renewable energy projects. Transition finance provides a vital resource to support development and implementation of renewable energy initiatives such as solar, wind and hydropower projects. It provides an alternative revenue stream that supports the transition to low-carbon energy solutions. Access to transition finance is often tied to commitments to reduce GHG emissions and meet environmental. social and governance requirements.

Due to Nigeria's already huge debt burden, <u>doubled</u> <u>from 2022 to 2023</u>,<sup>24</sup> difficulties experienced by investors in repatriating profits and <u>the instability of</u> <u>the foreign exchange market</u>,<sup>25</sup> Nigeria must make deliberate efforts to attract funding. Nigeria is not currently meeting its objective of raising \$10 billion a year to achieve net zero by 2060.

Financial support from international sources, either through international commitments made or alternatives, is vital to drive successful implementation of transition plans on the African continent. The international community, currently investing only 3 percent of renewables finance in <u>Africa</u>,<sup>26</sup> with Ethiopia, Kenya, Morocco, Senegal and South Africa as the main investment destinations, has a responsibility to increase its financing. The pledge by countries in the Global North of <u>\$100</u> billion annual investments to developing nations should be implemented to support countries such as Nigeria.<sup>27</sup> International loss and damage pledges should likewise be implemented to support.<sup>28</sup> Laws, policies and tax incentives should be adopted to create an environment attractive to the international and regional community.

Internal revenue generation and attraction of international finance are among the levers the Nigerian government could exploit.

Some steps the government should take include:

- **Domestic revenue mobilization.** Contributions from the federal and the subnational levels of government in Nigeria are required to fund the transition. The projected Energy Transition Plan's investment target of \$1.9 trillion, if adopted by the current government, is significant. Subnational governments would also be expected to contribute. However, given their dependency on fossil fuels for 50 to 80 percent of their revenues, other opportunities for revenue generation would have to be leveraged. The amended Constitution of the Federal Republic of Nigeria and the Electricity Act 2023,<sup>29</sup> decentralizing power and allowing states to directly generate and distribute their own power, provide an opportunity for states. Through these efforts, states may generate interest and attract investments.
- International public finance. These funds are important avenues to attract private investors. Investments by countries, multilateral organizations and international financial institutions de-risk projects and the cost of energy projects that private lenders are unable to bear.
  - Just Energy Transition Partnerships (JETPs).<sup>30</sup>
    Financing through JETPs provides countries with investment capital to invest in low-to-middleincome countries with a need to transition but no capital to do so.
  - <u>Multilateral international financial mechanisms</u>.<sup>31</sup> These financial mechanisms are available for governments in the form of concessionary loans and guarantees for energy projects. A variety of grants, e.g., for studies for potential projects or for expensive, hard-to-finance infrastructure such as rooftop solar panels and mini-grids, are some options available to governments. International public finance may also be useful in providing technical support to governments on energy planning, finance, etc. Taking equity positions in promoting local energy companies is also a possible application for public finance mechanisms such as these.

31 UNFCC, 'Bilateral and Multilateral Funding' July 2016, www.unfccc.int/topics/climate-finance/resources/multilateral-and-bilateral-funding-sources

<sup>24</sup> Business Day, "Nigeria's debt burden: Soaring repayment amid dysfunctional education, health sectors," 28 January 2024, businessday.ng/news/article/ nigerias-debt-burden-soaring-repayment-amid-dysfunctional-education-health-sectors.

<sup>25</sup> Politics Nigeria, "Foreign exchange crisis deepens in Nigeria as Dollar hits over N1,500 at official market," 13 February 2024, politicsnigeria.com/foreignexchange-crisis-deepens-in-nigeria-as-dollar-hits-over-n1500-at-official-market.

<sup>26</sup> National Council on Climate Change, natccc.gov.ng.

<sup>27</sup> OECD, "Climate Finance and the USD 100 Billion Goal," no date, www.oecd.org/climate-change/finance-usd-100-billion-goal.

<sup>28</sup> UNFCCC, "Approaches to address Loss and Damage associated with Climate Change impacts in developing countries," no date, unfccc.int/topics/ adaptation-and-resilience/workstreams/approaches-to-address-loss-and-damage-associated-with-climate-change-impacts-in-developing-countries.

<sup>29</sup> KPMG, "Commentaries on the Electricity Act, 2023," June 2023, kpmg.com/ng/en/home/insights/2023/06/commentaries-on-the-electricity-act-2023.html.

<sup>30</sup> IISD, "Just Energy Transition Partnerships: An opportunity to leapfrog from coal to clean energy," 7 December 2022, www.iisd.org/articles/insight/justenergy-transition-partnerships.

#### Table 2. Examples of finance models available to Paris Agreement signatories

Mainstream transition finance models		
<u>COP \$100 Billion</u> <u>Annual Goal<sup>32</sup></u>	At the 15th Conference of Parties (COP15) of the United Nations Framework Convention on Climate Change in Copenhagen in 2009, developed countries committed to a collective goal of mobilizing \$100 billion per year by 2020 for climate action in developing countries in the context of meaningful mitigation actions and transparency on implementation.	
<u>Loss and damage</u> <u>funds</u> <sup>33</sup>	The COP27 Loss and Damage Fund provides financial assistance to countries most vulnerable and impacted by the effects of climate change.	
<u>Green bonds</u> <sup>34</sup>	Green bonds are available to private-sector companies and public entities to support climate and environmental investments.	
Alternative transi	tion finance models	
<u>Just Energy</u> <u>Transition</u> <u>Partnerships</u> <sup>35</sup>	JETPs are a financing cooperation mechanism that aids fossil-fuel-dependent countries in making a just energy transition by phasing out fossil fuels and phasing in renewables. <u>Indonesia</u> <sup>36</sup> , <u>Senegal</u> <sup>37</sup> , <u>South Africa</u> <sup>38</sup> and <u>Vietnam</u> <sup>39</sup> are recent beneficiaries, attracting \$20.0 billion, Euro 2.5 billion, \$8.5 billion and \$15.0 billion respectively.	
<u>Debt-for-climate</u> <u>swaps</u> 40	Debt-for-climate swaps aim to free up resources to fund climate action by channeling funds earmarked to repay debt.	

32 OECD, "Climate Finance."

33 United Nations Environment Programme (UNEP), "What you need to know about the COP27 Loss and Damage Fund," 29 November 2022, www.unep.org/ news-and-stories/story/what-you-need-know-about-cop27-loss-and-damage-fund.

34 World Bank, "What Are Green Bonds?" 1 December 2015, www.worldbank.org/en/topic/climatechange/brief/what-are-green-bonds.

35 NRGI, "Senegal's New JETP."

U.K. Government, "Indonesia Just Energy Transition Partnership Launched at G20," 15 November 2022, www.gov.uk/government/news/indonesia-just-energy-transition-partnership-launched-at-g20.

U.K. Government, "Senegal and the International Partners Group announce Just Energy Transition Partnership," 23 June 2023, www.gov.uk/government/ news/senegal-and-the-international-partners-group-announce-just-energy-transition-partnership.
 U.K. Government, "South Africa Just Energy Transition Investment Plan: joint statement," 7 November 2022, www.gov.uk/government/news/joint-transition Transition Investment Plan: joint statement, "7 November 2022, www.gov.uk/government/news/joint-transition Partnership.

statement-south-africa-just-energy-transition-investment-plan.

39 U.K. Government, "Vietnam Just Energy Transition Partnership: joint statement," 1 December 2023, www.gov.uk/government/news/viet-nam-just-energytransition-partnership-joint-statement.

40 Guardian (Nigeria), "Debt-for-climate swaps may reduce Nigeria's debt by \$3.7b yearly," 7 September 2023, guardian.ng/business-services/debt-for-climate-swaps-may-reduce-nigerias-debt-by-3-7b-yearly.

#### Mitigating economic, environmental and social impacts

#### Can the government manage the impacts of the energy transition?

#### **Economic impacts**

#### Economic impacts on federal government revenues

The energy transition poses severe risks to fossil-fueldependent economies heavily reliant on oil exports as the global energy landscape shifts. The global shift toward cleaner and more sustainable energy sources could lead to a <u>decline in demand for fossil fuels</u><sup>41</sup>—oil, gas and coal—if climate assumptions hold. As countries adopt renewable energy technologies and electric vehicles, the decrease in demand for oil and gas in the large energy-consuming countries of the world will <u>adversely impact</u> oil- dependent economies that rely heavily on oil and gas export revenues.<sup>42</sup>

Nigeria falls within the subset of sub-Saharan African countries dependent on fossil fuels for petrodollars. Its dependency <u>exposes it to risks</u> of revenue losses and foreign exchange instability.<sup>43</sup> As energy-related policies across the world tend to decarbonization and renewable energy adoption, Nigeria's revenues are threatened by these shifts and commitments as its trade partners decarbonize their domestic energy systems.

Without sufficient revenue diversification from fossil fuels or import substitution, the lives and livelihoods of the population would be at risk as dependent economies like Nigeria's face revenue decline. <u>International oil companies' divestments of fossil</u> <u>fuel assets</u><sup>44</sup> put pressure on national oil companies to produce crude at the same pace and meet Organization of the Petroleum Exporting Countries targets.<sup>45</sup> The impact of failure could put the Nigerian economy at further risk. Also in the case of Nigeria, the consequences of its fossil fuel dependency, its current low oil production and its fluctuating currency continue to harm its citizens, reducing their standard of living and driving the <u>skilled workforce and youth to relocate for</u> <u>better opportunities</u>.<sup>46</sup> Government action is necessary to accelerate diversification from fossil fuels, to build the non-oil sector and to wean Nigeria off its dependency to defray these transition-related risks.

#### Revenue impacts at the subnational level

Subnational governments in fossil-fuel-dependent economies are at risk economically. In Nigeria, out of the 36 states, only Lagos and Rivers State can generate income internally to drive their economy and deliver public services such as roads, hospitals and education. Oil-producing subnational governments are particularly at risk given their reliance on Federal Account Allocation Committee funds, the 13 percent derivation accrued as oil-producing states, and other oil revenue benefits from the Niger Delta Development Commission and the Nigerian Content Development and Monitoring Board. More broadly, as fossil fuels are phased out, local economies are threatened with loss of formal and informal employment opportunities.

Economic impacts		
Phaseout/ phase-in	Impacts	
Fossil fuel phaseout	Loss of livelihoods as oil companies divest interests; loss of indirect jobs including those in the hospitality and healthcare sectors; increased domestic violence as men lose fossil-fuel- related jobs; loss of opportunities for gainful employment and to thrive and innovate as opportunities shrink in general; increased violence as unemployed youth turn to crime.	
Renewables phase-in	Greater employment opportunities for women and youth in mineral- producing areas. Greater investment opportunities and technological advancements in the sector as interest grows in mining globally.	

#### Table 3. Economic impacts to be mitigated amid energy transition

41 IEA, "World Energy Outlook 2022 shows the global energy crisis can be a historic turning point towards a cleaner and more secure future," 27 October 2022, www.iea.org/news/world-energy-outlook-2022-shows-the-global-energy-crisis-can-be-a-historic-turning-point-towards-a-cleaner-and-more-secure-future.

42 NRGI, "Ending Nigeria's Oil Dependency: Not If, But When...and How," 9 March 2022, resourcegovernance.org/articles/ending-nigerias-oil-dependency-not-ifwhenand-how.

43 NRGI, "Ending Nigeria's Oil Dependency."

46 CNN, "Many talented young Nigerians are leaving. Halting the exodus will be a task for the next president," 27 February 2023, edition.cnn.com/2023/02/24/ africa/nigeria-japa-exodus-trend-election-intl-cmd/index.html.

<sup>44</sup> Stakeholder Democracy Network, "As International Oil Companies are Leaving Onshore Oil Fields, What are the Consequences for Nigeria and the Niger Delta?" 25 April, 2022, www.stakeholderdemocracy.org/ioc-divestment.

<sup>45</sup> Financial Times, "Nigeria's oil sector hit by an exodus of foreign companies," 12 December 2021, www.ft.com/content/36e72b4b-6895-4915-8c6f-6db95e65dd39.

#### **Environmental impacts**

As fossil fuels are phased out, there is a risk of legacy oil and gas pollution being neglected and ignored. Since the United Nations Environment Programme (UNEP) Environmental Assessment of Ogoniland Report in 2011,<sup>47</sup> the Hydrocarbon Pollution Remediation Project has not made significant progress. A shift from fossil fuels to renewables puts at risk priorities to environmentally remediate fossil-fuel-polluted regions in the Niger Delta as the significance of crude oil to the economy depreciates. A key action the government should take is to prioritize remediation of the Niger Delta and other polluted locations before the economic shift reduces political action and support for environmental remediation.

Further, as international oil companies reduce their petroleum portfolios in Nigeria, transferring those petroleum assets to national oil companies, environmental standards and liabilities are at risk of being improperly adhered to and managed.<sup>48</sup> With no provisions to manage environmental impacts from the transfer of petroleum assets from international to national oil companies, provisions in the Petroleum Industry Act 2021 for contributions to decommissioning and abandonment funds may be insufficient or no longer applicable when international companies exit.

As Nigeria seeks to phase in renewables, a review of the mining architecture and governance is imperative. Global demand for transition minerals to resource clean energy technologies is rising significantly. If countries wish to benefit from transition revenues by supplying minerals for the clean technology value chain, strategic decisions must be made to create environmental and socioeconomic safeguards that ensure extraction is done sustainably.

Nigeria must also determine the quantum of the minerals needed to achieve its own energy requirements and consider adding value to the minerals to amplify revenues from exports and advance employment opportunities in country. Furthermore, it should craft specific policies and laws to safeguard financial returns for the government, enhance socioeconomic opportunities for transition minerals communities, ensure responsible mining practices and protect the environment.

**Table 4.** Environmental impacts to be mitigated as fossil fuels are phased out and renewables phased in

Environmental impacts		
Phaseout/ phase-in	Impacts	
Fossil fuel phaseout	Persistent legacy environmental pollution as companies divest without remediation plans or commitments in oil-producing areas.	
Renewables phase-in	Increased environmental devastation as mining activities increase and demand for transition minerals grows.	

47 OUNEP, Environmental assessment of Ogoniland, 2011, wedocs.unep.org/20.500.11822/7947.

48 SOMO, "Shell's reckless divestment from Niger Delta" 27 February 2024, www.somo.nl/shells-reckless-divestment-from-niger-delta

#### **Social impacts**

While the shift toward clean energy is crucial for mitigating climate change impacts and reducing environmental harm, it also brings about changes in people's well-being, community dynamics and environmental prospects.

Although the emergence of the renewable energy sector generates new employment opportunities such as in solar and wind power, energy efficiency and green technologies, the decline of fossil-fuel-related industries can lead to job losses. Addressing the consequent social impacts will require the government to design initiatives to retrain and transition affected workers to new industries. Traditionally fossil-fuel-benefiting communities, such as those entitled to the 13 percent derivation, would experience shifts in their revenues and economies. While the development of renewables can support some economic diversification, where these opportunities do not match fossil fuel benefits, it is important for subnational governments to design responses to their national transitions to support local economic diversification.

Affordability and accessibility of energy for the energy poor are also an important consideration for the transition. Governments should design policies to prevent energy poverty and ensure that vulnerable populations have access to affordable and clean energy.

Social impacts		
Phaseout/ phase-in	Impacts	
Fossil fuel phaseout	Diminished recourse to international jurisprudence as national oil companies take over from international oil companies; limited to no involvement in energy- transition-related decisions at the federal, state or local levels.	
Renewables phase-in	Loss of land rights as mining for renewables expands and the energy transition is prioritized over community interests.	

**Table 5.** Social impacts to be mitigated as fossil fuels are phased out and renewables phased in

# Designing a sustainable energy transition process: basic tools to consider

### Clear strategic vision, goals, objectives, targets and metrics

A clear vision with specific objectives and goals is essential in designing a comprehensive roadmap to guide successful implementation of an energy transition plan. These elements provide a sense of direction to help guide the transition process effectively. Disjointed plans and priorities create chaos, which could lead to government institutions, private actors and the international community working at cross-purposes.

A broad-based consultative visioning process resulting in a shared and inclusive vision is key. Objectives should be specific, measurable, achievable, realistic and time-bound—qualities for lack of which some current plans, such as Nigeria's Energy Transition Plan, have been critiqued. The Energy Transition Plan fails to provide a sufficiently detailed roadmap for how the articulated objectives are to be achieved. Even though it is a bold statement of ambition intended as policy, its limitations introduce loopholes in the policy space where failure is likely to occur. Well-defined goals and objectives are essential to provide clarity to stakeholders.

#### Information Disclosure And Transparency In The Transition

Information disclosure and transparency are crucial to the design and transition of domestic energy systems. They foster trust, engagement, accountability, public buy-in, participation and oversight. One important obstacle to the adoption of domestic energy transitions is the lack of accurate, credible and relevant information about plans from governments and companies. Data about fiscal dependency at national and subnational levels, fossil fuel and renewables subsidies, investment opportunities, energy market structures, energy access, mine or oil field closures, environmental management plans, projected community impacts and investment opportunities are important for private investors, collaborating government institutions and the public.

Available information is key to maintaining consistent and sustained communication with stakeholders and the wider public at federal, state and local levels. The <u>National Council on Climate</u> <u>Change should prioritize</u> clear and consistent communications on key government policies, especially on the country's energy transition to all levels of government and citizens.<sup>49</sup> The new <u>EITI</u> <u>Standard 2023</u> is relevant;<sup>50</sup> it makes provisions to support disclosures by empowering the Nigeria Extractive Industries Transparency Initiative to shed light on relevant policies as well as on the revenues the country can expect to receive from oil, gas and minerals under different market scenarios.

Once disclosures are made, decision-makers, other stakeholders and the wider public have access to accurate and comprehensive information. Informed decision-making leads to the development of effective policies, strategic investments and the avoidance of potential pitfalls in the energy transition. Accurate and detailed information encourages informed public debate and discussion about the energy transition, leading to more robust and well-rounded energy transition plans.

<sup>49</sup> National Council on Climate Change, natccc.gov.ng.

<sup>50</sup> Extractive Industries Transparency Intuitive (EITI), *EITI Standard 2023*, June 2023, eiti.org/sites/default/files/2023-06/Explainer\_EITI%20Standard%20 2023\_%20Summary%20of%20changes.pdf.

#### **Inclusivity and participation**

### Citizens and communities' voice and participation

A growing number of energy transition plans are being developed on the African continent in response to the global energy transition. <u>Nigeria</u> was one of the first countries to develop such a plan,<sup>51</sup> followed by <u>Ghana<sup>52</sup></u> and, more recently, at COP28, <u>Uganda</u>.<sup>53</sup>

Increasingly, these plans appear to have one characteristic in common. The plans appear to be non-consultative and to exclude citizens' voices and concerns, despite the major impacts these transition plans stand to have on citizens' lives and livelihoods, especially for marginalized groups. Energy transition plans need to be inclusive, and the process should be conducted to foster equity and justice.

Achieving a just energy transition will require processes and policies that:

- recognize citizens', communities' and vulnerable groups' rights and ensure impacts are avoided or compensated
- equitably distribute opportunities and benefits and consider communities' wellbeing
- enable and guarantee communities voice and influence in decision-making

It is important that countries with stakeholder groups as diverse as Nigeria's, each facing different challenges and opportunities, integrate their unique perspectives to deliver a robust energy transition plan. Impacted groups cut across government institutions, private businesses, small to medium business interests, oil and gas and mining industry experts, investors, local communities, women and youth. Without the inclusion or provision of platforms for these groups to meaningfully contribute to the energy transition process, any energy transition plan would lack the comprehensiveness and context to address important issues. Relevant engagement will help ensure that energy transition projects gain the required social license to operate, which is built on trust and transparency. Openly sharing information about project plans, environmental assessments and community engagement efforts facilitates inclusive dialogue.

Some notable groups are consistently marginalized in the development and implementation of plans. In Nigeria, given the concentration of fossil fuel exploitation predominantly in the southern region and the Niger Delta states, these groups are unfairly marginalized and excluded.

In order to foster inclusion and participation, the country could consider:

- Consultation mechanisms for nationwide energy transition strategies with meaningful participation of impacted communities, women, youth and other marginalized groups and clarity on contributions from different groups to decision-making processes, implementation and monitoring
- Stakeholder dialogue at local level to establish just transition agreements in and around extractive-resource-producing areas impacted by the transition and with meaningful participation of impacted communities, women, youth and other marginalized groups
- Specific dialogue among trade unions, employers and the government at national and subnational levels to define just transition agreements, including with meaningful participation of women workers
- Consultation mechanisms (free, prior and informed consent, participatory environmental impact assessments, etc.) through which the public can provide input related to the assessment of socioenvironmental impacts generated by extractive projects prior to the approval process; also collaborative mechanisms through which the public can contribute to the decision-making processes related to the management of environmental, economic and social impacts

<sup>51</sup> Nigeria Energy Transition Plan.

<sup>52</sup> Ghana Energy Transition and Investment Plan, 2023, www.seforall.org/our-work/initiatives-projects/energy-transition-plans/ghana.

<sup>53</sup> Uganda Energy Transition Plan, 2023, www.iea.org/reports/uganda-energy-transition-plan.

- Concrete actions to ensure the meaningful participation of communities, women, youth and other marginalized groups in consultation and collaborative decisionmaking processes
- Consultation mechanisms to identify possible social and environmental liabilities prior to authorizing the transfer of assets from one company to another and decommissioning of projects

### Collaboration, coordination and policy coherence

#### **Collaboration and coordination**

The need to integrate plans across the energy sector—transportation, oil and gas, and power sectors, for example—and manage GHG emissions from industries and homes involves a complicated process. Collaboration and coordination among government institutions are necessary to address these interrelated components' complexity in a comprehensive and coherent manner. Government institutions play a central role in shaping the strategic direction, setting energy policies and regulations and ensuring alignment with policies and development plans.

It is essential that all components—institutional, legal and policy—align with the broader objectives and goals committed to globally and nationally. Nigeria's Energy Transition Plan envisions a transition to renewables; however, notably, integration of the mining sector is missing. Rare earth minerals and transition minerals such as lithium and cobalt are key raw materials needed to develop the renewables value chain. Policy is needed to articulate the government's position on transition minerals to resource regional and global supply chains for renewable energy infrastructure and equipment, value addition to aid national and regional energy security mechanisms, and advance jobs. Proper integration of all components end to end, from the phaseout of fossil fuels to phasing in renewables, is needed to ensure sustainable implementation of Nigeria's Energy Transition Plan.

#### Policy coherence

Achieving policy consistency across legal, institutional and fiscal frameworks is crucial for the coherent implementation of overarching goals. Discrepancies among key institutional bodies and governance frameworks pose a threat to the sustainable implementation of Nigeria's Energy Transition Plan. It is essential for the government to ensure that decisions regarding the energy transition align with broader national objectives, fostering harmony in Nigeria's pursuit of economic development, environmental sustainability and energy security.

There is no shortage of policies and plans in Nigeria. However, what may be lacking is policy coherence across all the relevant energy- and non-energy-related sectors and direction by the government. The <u>2021 Energy</u> <u>Transition Plan</u> articulates a decarbonization strategy targeting sectors that contribute 65 percent of Nigeria's total carbon emissions to achieve net zero by 2060.<sup>54</sup> The <u>Nationally</u> <u>Determined Contribution 2021</u> outlines climate actions until 2030 in service of global commitments to the Paris Agreement.<sup>55</sup>

<sup>54</sup> Nigeria Energy Transition Plan.

<sup>55</sup> Government of Nigeria, *Nigeria's Nationally Determined Contribution*.

The Long-Term Low Emissions Development Strategy (LT-LEDS) outlines the government's ambition to reduce current level of emissions by 50 percent.<sup>56</sup> Nigeria's <u>Climate Change Policy</u> 2021,<sup>57</sup> <u>National Development Plan 2021-2025</u>,<sup>58</sup> <u>Medium-Term Expenditure Frameworks</u>,<sup>59</sup> <u>Renewable Energy Roadmap</u>,<sup>60</sup> and petroleumand power-sector-related laws all articulate specific aims of the government to energize Nigeria and spur economic growth and development. A deep dive into these policies and plans may reveal that the priorities and objectives do not necessarily align. Policy coherence between federal, state and local governments is also critical for a just energy transition that leaves no community behind.

Collaboration, coordination and policy alignment are foundational for the successful design and implementation of energy transition plans in Nigeria. A holistic and integrated approach, involving all relevant institutions, laws and policies, is necessary to address the complexities of the energy sector and to ensure a smooth, sustainable and inclusive transition.

Policy/plan	Developed by	Misalignment
Nationally Determined Contribution (NDC)	Federal Ministry of Environment	Short time horizon with 2030 as target. Uses International Renewable Energy Agency (IRENA) National Energy Balance 2019 as baseline. <sup>61</sup>
Energy Transition Plan (ETP)	Energy Transition Office supported by Sustainable Energy for All <sup>62</sup>	NDC guided scenario leveraging gas more prominently and ambitious renewables target. ETP baseline figures are significantly lower than others.
Long Term Low Emissions Development Strategy (LT-LEDS)	Federal Ministry of Environment	Beyond energy to include agriculture and waste. Leverages local data; Central Bank of Nigeria data for baseline.
Nigerian Energy Emission Calculator (NECAL2050)	Energy Commission of Nigeria	Energy focused but does not align with higher-ambition renewables scenarios in ETP and LT-LEDS.

#### Table 6. Instances of misalignment across government policies and mandates

62 SeforALL, Nigeria Energy Transition Plan, www.seforall.org/our-work/initiatives-projects/energy-transition-plans/Nigeria

<sup>56</sup> Department of Climate Change, Federal Ministry of Environment, Nigeria, 2050 Long-Term Vision.

<sup>57</sup> Federal Ministry of Environment (Department of Climate Change), National Policy on Climate Change, 2021, www.climatechange.gov.ng/wp-content/ uploads/2020/09/national-climate-change-policy-1-1.pdf.

<sup>58</sup> Federal Ministry of Finance, Budget and National Planning, National Development Plan (NDP) 2021-2025, vol. 1, national planning.gov.ng/wp-content/ uploads/2021/12/NDP-2021-2025\_AA\_FINAL\_PRINTING.pdf.

<sup>59</sup> Budget Office of the Federation, MTEF, various dates, budgetoffice.gov.ng/index.php/resources/internal-resources/policy-documents/mtef.

<sup>60</sup> Energy Commission of Nigeria and International Renewable Energy Agency, *Renewable Energy Roadmap: Nigeria*, 2023, www.irena.org/Publications/2023/ Jan/Renewable-Energy-Roadmap-Nigeria.

<sup>61</sup> IRENA, Renewable energy statistics 2019, www.irena.org/publications/2019/Jul/Renewable-energy-statistics-2019.

#### **Revenue management strategies**

Fossil-fuel-dependent economies generally rely heavily on revenues from oil, gas or coal exports. If global oil demand declines in response to climate change mitigation efforts, fossil fuel revenue receipts will decline. Managing declining revenues requires fossil-fuel-dependent economies such as Nigeria to manage their vulnerability to fluctuations in fossil fuel prices and demand and to diversify their income sources. The finite nature of fossil fuels implies that revenues should be more efficiently invested in other sectors that will sustain the economy and contribute to a just transition.

The imperative to shift away from fossil fuels puts revenues at risk at the federal and subnational levels. Strong revenue management strategies will help ensure that the federal government diversifies reliance on petrodollars for currency stability.

State governments could be instrumental in managing impacts and supporting Nigeria's energy transition. They can do this by embracing cleaner energy solutions as they implement the Electricity Act. Socially, state governments can prioritize access to clean energy for the population and create skills for a more sustainable economy through education and embracing technology.

As the government balances meeting its climate commitments and its development needs, it should be mindful of the socioeconomic implications of poor revenue management. Weak revenue management strategies could fracture the social and economic well-being of the population if adequate investments are not made in education, healthcare, infrastructure and technology. Strong revenue management strategies will help ensure that the federal government diversifies reliance on petrodollars for currency stability.

#### Strengthening fiscal buffers

Sovereign wealth funds and savings mechanisms are useful instruments that countries can adopt to build reserve funds to bridge low financial returns in instances of economic downturn. Norway, which has one of the better performing sovereign wealth funds, can provide useful benchmarks for successfully implementing such a fund. Strong, adequately governed funds serve as <u>useful fiscal</u> <u>buffers</u> during economic downturns such as the coronavirus pandemic.<sup>63</sup> By comparison, in Nigeria, the pandemic exposed the weaknesses in the country's economic structure.

This is also evident in Nigeria's neglect of its <u>sovereign wealth fund</u>,<sup>64</sup> which boasts strong governance frameworks but remains significantly underfunded compared to the less rigorously governed Excess Crude Account. Indiscriminate withdrawals such as expenditure on counter-insurgency depleted Nigeria's safety net from \$2.319 billion in December 2018 to \$72.4 million in May 2021.<sup>65</sup>

#### Strengthen loopholes in tax laws

It is necessary to establish tax laws where none exist and tighten regulations to maximize revenues for the transition. Tax incentives need to be imposed to strike a balance between attracting investors into the mining sector to facilitate phase-in of renewables and ensuring the country receives an adequate level of revenues for beneficiation of mining communities and investments needed to accelerate the energy transition.

64 Nigeria Sovereign Investment Authority, nsia.com.ng.

65 BudgIT, "The Sovereign Wealth Fund—Has Nigeria Lost the Chance?" 16 May 2022, budgit.org/the-sovereign-wealth-fund-has-nigeria-lost-the-chance.

<sup>63</sup> Reuters, "Norway wealth fund rides out pandemic with diverse portfolio," 6 January 2021, www.reuters.com/business/finance/norway-wealth-fund-ridesout-pandemic-with-diverse-portfolio-2021-01-06/.

### Regional and international cooperation and collaboration

The energy transition presents countries with complex challenges and opportunities that cannot be resolved without leveraging regional and international support. Technological and human resource capacity and financial investments are limited in many countries, especially on the African continent. Leveraging Africa's competitive advantage in ownership of the raw materials needed to power global renewables expansion to combat climate change, and alternative sources of investments, are emerging pathways being explored to bridge the Global North/Global South resource deficit.

#### **Technology transfer**

The clean energy technology deficit on the African continent is shrinking as countries advance clean energy solutions in the race to decarbonize and phase out fossil fuels. Nigeria's own technological expertise in solar energy systems is growing with support from the African Development Bank and the World Bank. But there are other energy sources, such as hydrogen and wind, that Nigeria either has committed to transitioning to or mentions having major resources of in its Energy Transition Plan.

Technology transfer from more advanced countries could reduce the learning curve in adoption of these energy sources.

The following are necessary:

 Conduct a comprehensive assessment of Nigeria's energy needs, identifying specific technology gaps and areas where technology transfer can have the most significant impact.

- Develop clear and supportive policies and regulations that encourage technology transfer. Create an enabling environment that attracts investments, protects intellectual property rights, and ensures a fair and transparent process for technology acquisition.
- Foster collaboration with international organizations, governments and the private sector that can facilitate technology transfer. Engage in partnerships to leverage expertise, financial support and access to cutting-edge technologies.
- Provide incentives for innovation and the adoption of new technologies by the private sector and by Nigeria's growing youth population including tax incentives, subsidies and other means to encourage businesses and industries to invest in and adopt cleaner technologies.
- Encourage and invest in local research and development to adapt and innovate technologies to suit local conditions and leverage cultural solutions.

#### **Financial support**

Regional and international cooperation enhances Nigeria's access to financing and investments. Collaborative projects often attract international funding, grants and investments, which are essential for implementation of largescale renewable energy initiatives. Regional cooperation could serve countries such as the Democratic Republic of the Congo and Zambia with their comparative advantage in transition minerals. Nigeria should ascertain and leverage its comparative advantage to obtain investment. Regional frameworks promoting regional market integration, such as the African Continental Free Trade Area Agreement of 2019, can be leveraged to create renewable infrastructure hubs to secure greater energy access in Africa.

The Federal Ministry of Finance, Budget and National Planning in collaboration with the National Council on Climate Change must undertake the following to attain financial support:

- Clearly outline energy transition goals, priorities and investment needs in a comprehensive plan. The plan will serve as a basis for engaging local, regional and international investors and financial institutions.
- Actively participate in international platforms, agreements and initiatives related to the sustainable energy transition and climate change. These forums increase visibility and open avenues for financial support.
- Build relationships with international and regional financial institutions, development banks and private financiers. Explore partnership opportunities and understand financial instruments available. Explore nontraditional sources of funding including climate funds, green bonds, public-private partnerships and other innovative financing mechanisms.
- Strengthen institutional capacity for energy planning, project development and financial management to inspire confidence in international and regional partners.
- Develop and implement policies that create a favorable environment for investments in clean energy. Clear and stable regulatory frameworks attract investors and make it easier to secure financial support.
- Ensure energy projects are well prepared, economically viable and bankable. This involves conducting feasibility studies, risk assessment and project structuring to make them attractive to investors and financial institutions.

#### Institutional capacity-building

Transitioning to renewable energy sources requires the development of new technologies, regulatory frameworks and market structures. Building institutional capacity enables governments to navigate the complexities of integrating renewable energy into existing systems. Building institutional capacity also ensures that governments have the expertise to design and implement policies that promote the responsible phaseout of fossil fuels and responsible phase-in of renewables.

All energy-transition related government institutions must ensure transition:

- Conduct a comprehensive assessment of the government's current institutional capacity related to energy transition governance.
   Identify strengths, weaknesses and areas that require improvement.
- Develop a strategic plan for each government institution's capacity-building, outlining specific goals, timelines and resource requirements. Align the plan with the broader energy transition objectives and roles of each institution.
- Implement training programs to enhance the skills of government officials involved in energy planning, policy development and project management. Collaborate with industry experts and educational institutions.
- Establish robust monitoring and evaluation mechanisms to assess the progress of institutional capacity-building initiatives. Regularly review and update capacity-building strategies based on evolving needs and circumstances.

# Recommended roles of different actors in ensuring successful implementation of the energy transition

This section provides an illustrative list of important roles identified in the guidebook that the government, the private sector, civil society organizations, the international community and impacted communities should play.

#### Nigerian government

- The federal government should harmonize all energy-transition-related laws and policies with clear and delineated roles and responsibilities for the relevant government institutions outlined.
- All relevant data needed for investors and the private sector to participate in the energy transition should be made easily accessible and available for them and for the public.
- The federal government should formulate policies, regulations and guidelines to guide companies on the environmental and social standards to be adhered to as petroleum assets are transferred.
- Subnational governments in oil-producing areas should develop their responses to national energy transition plans, outlining their plans to mitigate the environmental, social and economic costs of the fossil fuel phase-out.

#### **Private-sector companies**

- Mining companies should adopt responsible mining practices in the mining of critical minerals.
- International oil companies should adhere to the strictest environmental, social and governance standards in divesting their petroleum assets to national oil companies.

#### **Civil society actors**

- The media should disseminate energytransition-related data and information to the public and interrogate the government's approach to the energy transition.
- Civil society actors should use the guidebook to raise public awareness, promote greater transparency and hold the government more accountable.

#### **International community**

- Bilateral donor organizations should provide financial and technical and capacity-building support to communities to enable them to engage with all levels of government to achieve a just energy transition.
- Philanthropic institutions should de-risk renewables projects to unlock and attract investment capital from transitional financial institutions.

#### **Impacted communities**

- Communities, women and youth groups should demand that state governments design and implement energy transition plans that provide social safety nets and build fiscal resilience to mitigate the impacts of the energy transition on the lives and livelihoods of communities.
- Traditional rulers and communities should ensure inclusive and participatory decisionmaking that involves women and youth groups.



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#### About NRGI

The Natural Resource Governance Institute is an independent, non-profit organization that supports informed, inclusive decision-making about natural resources and the energy transition. We partner with reformers in government and civil society to design and implement just policies based on evidence and the priorities of citizens in resource-rich developing countries. Learn more at **www.resourcegovernance.org** 



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