

Equipping the Nigerian National Petroleum Corporation (NNPC) for the Low-Carbon Transition

How Are Other National Oil Companies Adapting?

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Key messages

- The energy transition and long term low oil prices raise existential questions for the future of national oil companies (NOCs).
- NNPC must seize the energy transition as a business opportunity to save itself as well as Nigeria from its dangerous oil dependence.
- To do this, NNPC must pursue deep structural reform to:
 - diversify away from oil and invest in clean energies; and
 - improve its poor governance record.
- Five NOCs (Equinor, Petronas, Petrobras, Saudi Aramco, and Sonatrach) have taken meaningful steps to become players in the low-carbon energy transition.
 - They can serve as sources of inspiration.



Outline

- 🔥 What are the implications of the energy transition for NNPC and Nigeria?
- 🔥 Why is reform essential?
- 🔥 What should be done?

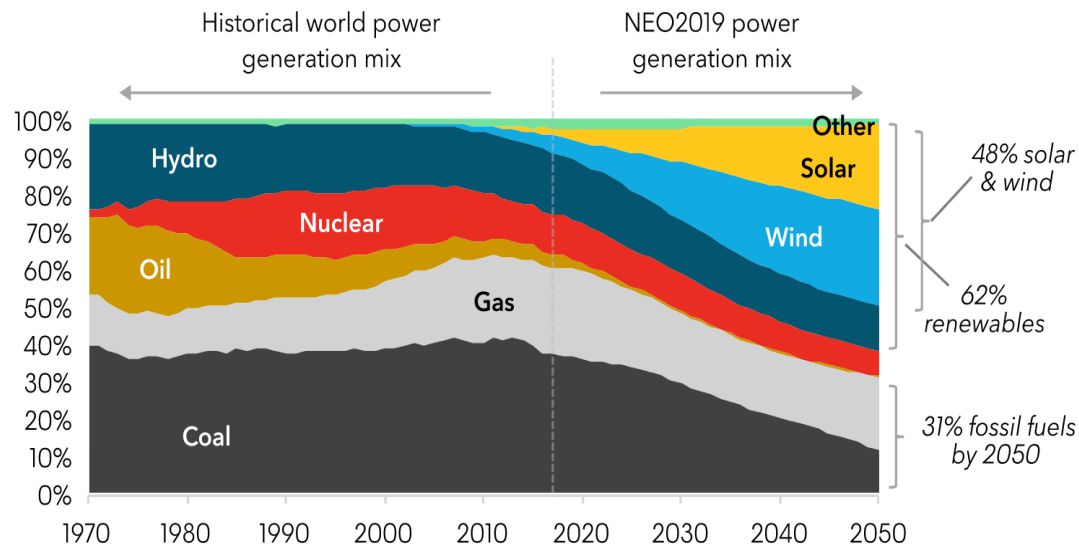


Global context: implications for NNPC and Nigeria



As the world moves forward, the oil industry is becoming a reminder of the past

- 🔥 The oil industry is now one of the **worst-performing sectors** in the financial market.
- 🔥 Hit hard by the current **COVID-19 crisis**, the industry may never recover: **pessimistic** scenarios predict that both oil prices and demand will remain depressed.
- 🔥 In the **post-Paris Agreement** world, **renewables play a leading role**, whereas the prominence of oil is set to diminish.



Source: Bloomberg BNEF

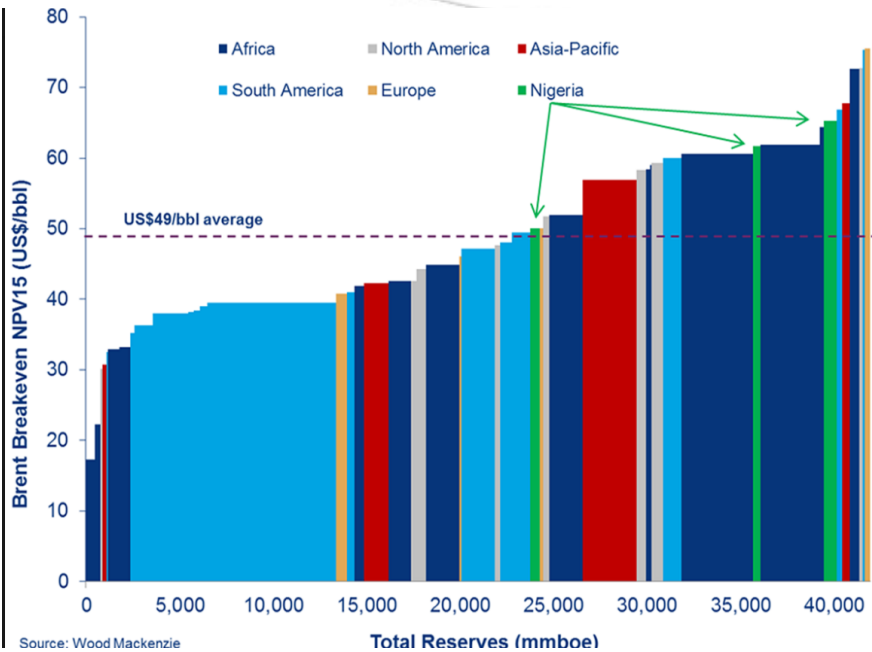


Nigerian Minister of State for Petroleum Timipre Sylva:

"Forecasts in oil industry circles indicate that oil will play less and less role in the global economy. Specifically, by the year 2040 which is 20 years away, the relevance of oil in the global economy will reduce by 50 per cent. ... The days of oil are numbered; deposits of coal did not run out before the world moved away from it. Today the world is talking about alternative energy and we should also move; we should take advantage of making hay while the sun shines."

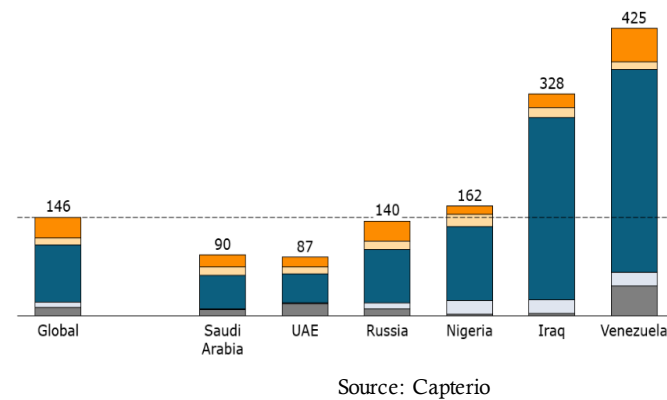


Nigeria is in trouble: its oil dependency is unsustainable

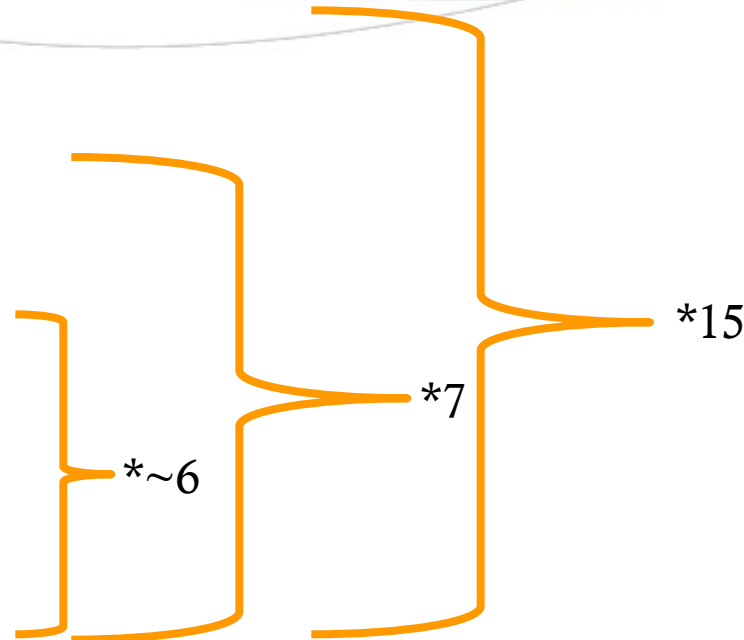


- Oil prices tend to remain below NNPC's production cost.
- Nigerian oil's carbon intensity is above average.
- NNPC's **inefficient** refineries are draining public money.
- Public and private **debt** in Nigeria is **indexed on oil prices**.
- These circumstances are **compromising** Nigeria's ability to borrow to face the challenges of the current health, economic, and climate crises.

Well to fuel tank emissions intensity of oil production and processing in selected countries (kg CO₂e/ boe)



The oil crisis looms large due to Nigeria's heavy dependence on revenues from the sector



Source: NRG1

- Because of the scale of NNPC revenues, the Nigerian government's largest **spending decisions are associated with the oil sector** rather than the low-carbon energy transition and associated public goods.



Why is reform essential?



The climate change agenda and the COVID-19 crisis force a transition role for NOCs

- 🔥 Countries, including Nigeria, have had differing objectives for their NOCs that are often difficult to reconcile:
 - 🔥 Maximizing fiscal revenues transferred to the country's treasury;
 - 🔥 Achieving commercial effectiveness to extend the company's oil portfolio;
 - 🔥 Delivering public goods and services;
 - 🔥 Providing public employment, infrastructure or energy; or
 - 🔥 Promoting the local private sector.
- 🔥 The climate change agenda and the COVID-19 crisis force a reconciliation of these objectives:

No NOC will be able to maximize fiscal transfers or commercial effectiveness without embracing the energy transition, which in turn represents the most critical public service to be delivered to citizens.



NOCs have taken meaningful steps to become players in the low-carbon energy transition

- 🔥 Five NOCs, in particular, have stepped up: Norway's Equinor, Brazil's Petrobras, Malaysia's Petronas, Saudi Arabia's Saudi Aramco, and Algeria's Sonatrach.
- 🔥 They have focused on research and investment in renewables; green hydrogen; and carbon capture, utilization, and storage (CCUS) technology, *while targeting a sharp reduction of their carbon footprint.*

To play an effective role in the energy transition, NOCs need to be financially robust and operationally sound:

- 🔥 The five NOCs have undergone reforms of various aspects of their corporate governance.



What should be done?

Critical reforms should focus on strengthening the governance of NNPC to position it as a credible actor in the energy transition



Fundamentally reform NNPC, or privatize

- 🔥 Eliminate political interference at all operational and management levels.
- 🔥 Reduce opportunities for corruption; enshrine transparency, internal and external oversight in NNPC's governance framework.
- 🔥 Legally clarify its funding mechanism and revenue retention model.
- 🔥 The government could also sign a management contract with NNPC that includes clear performance indicators (as is done in the utility sector).
- 🔥 Consider publicly listing NNPC on a stock exchange.

If such profound reform is not feasible for lack of political champions inside the government or within NNPC, a better avenue would be to privatize NNPC or at least some of its subsidiaries.



The Natural
Resource
Charter's SOE
Governance
Benchmark can
serve as guidance
for governance
reform

6.1 SOE ROLE AND FUNDING

6.1.1 Does the government clearly define a commercial role for the NNPC that reflects the company's actual financial and technical capacity?

6.1.2 Does the government clearly define the company's non-commercial roles? Does this definition limit conflicts of interest?

6.1.3 Does the government ensure that the NNPC has a workable funding mechanism?

6.2 SOE CORPORATE GOVERNANCE

6.2.1 Does the government clearly establish the identity and role of state shareholders in the NNPC?

6.2.2 Does the NNPC have an empowered, professional, and independent board?

6.2.3 Does the NNPC invest in staff integrity and capacity?

6.3 SOE TRANSPARENCY AND ACCOUNTABILITY

6.3.1 Does the NNPC disclose key operational and payment data?

6.3.2 Does the NNPC subject itself to independent financial audits and publish the results?

6.3.3 Does the legislature oversee NNPC performance without unduly constraining its decision making?

How do the five other NOCs perform on the Natural Resource Charter Benchmarking Framework for SOEs?



Does the government clearly define the NOC's role and establish a working funding mechanism for the company?

(Precept 6.1)

- While some of them are under some political control and still undertake non-commercial roles (quasi-fiscal), *all five governments are at least formally committed to the policy that the NOCs are to be run as enterprises with profit-seeking objectives with substantial administrative, commercial, technical, and operational decision-making autonomy.*
- Following international best practices, all reviewed NOCs but one have transitioned out of the regulatory roles given to them historically.
- Most of the NOCs are listed on stock exchanges, and some can issue bonds in the international financial market to finance their capital expenditures.

NNPC engages in commercial, regulatory, and policy functions, without clearly delineating between commercial and non-commercial roles.

NNPC's broad discretion in defining its mandate has led to the creation of 17 wholly-owned subsidiaries, 16 partially-owned subsidiaries or associated companies, and 7 corporate service units.

NNPC's funding mechanism does not facilitate predictable revenue flows to fund its operations.



Do the NOC's corporate governance systems limit political interference in the company's technical decisions, while ensuring effective oversight? (Precept 6.2)

- 🔥 The five NOCs provide clarity on the identity and role of state shareholders.
- 🔥 In most of them, corporate governance systems are in place that limit political interference in the company and ensure effective oversight.
- 🔥 The NOCs are professionally run by technically competent management, following corporate governance structures and practices comparable to the OECD Principles of Corporate Governance.
- 🔥 The NOCs operate with clear rules and institutional frameworks for the recruitment process, staff development and integrity.

NNPC is a wholly owned state enterprise, and the President of Nigeria exercises decision-making power, with few checks and balances to temper political interference in NNPC's operations.

A survey of NNPC staff reveals difficulties in translating training into practical technical capacity and integrity performance.



Are NOCs decision-making and operations transparent and accountable? (Precept 6.3)

- 🔥 The NOCs analyzed disclose key operational and payment data, including, in some cases, details about their subsidiaries to varying degrees.
- 🔥 Of the five NOCs, the two privatized or partially privatized ones—Petrobras and Equinor—subject themselves to independent financial audits. Petronas and Saudi Aramco, which remain largely government owned, prepare and publish financial statements according to international financial reporting standards, but without engaging independent external auditors to prepare them. Sonatrach subjects its financial reports to internal audits only.
- 🔥 All five international NOCs analyzed are subject to Parliamentary oversight in some way. In all companies, in exceptional cases the legislature can intervene.

For the first time, in 2020, NNPC published the audited statement of its accounts included disaggregated by subsidiaries.

Under EITI, a certain amount of information is disclosed but information on non-commercial roles, beneficial ownership of off-takers and cost of operations is missing.




Hire experts to develop an energy transition plan for Nigeria

- 🔥 Assess how to phase out the exploitation of oil and gas.
- 🔥 Assess how to avoid the asset-stranding risk.
- 🔥 Develop a feasible and bankable roadmap for the exploitation of associated gas.
- 🔥 Analyze the type of renewable energy generation needed to satisfy the country's energy needs (utility scale, home systems, mini grid, among others).



Run an institutional analysis of the role of key public or private institutions in the energy transition

- 🔥 Understand the roles of the other key actors, including:
 - 🔥 national power utilities,
 - 🔥 the ministry of energy,
 - 🔥 private investors in power generation,
 - 🔥 technology and research institutions,
 - 🔥 international donors, and
 - 🔥 international and national banks.
- 🔥 Then define what role NNPC could usefully play in the energy transition.

 *Responsibilities should be clearly allocated and institutions' roles defined accordingly.*



Consider setting up a separate strategic division of NNPC or, if privatized, an independent entity – Objectives

- Establish clearly delineated objectives and responsibilities focused on the low-carbon energy transition, such as:
 - Reducing carbon emission from existing and future oil and gas projects;
 - Planning how to limit the number and type oil and gas projects to facilitate the low-carbon transition;
 - Developing new business in renewable energy;
 - Coordinating with private investors or with other government agencies;
 - Ensuring alignment of activities with the objectives of the Paris Agreement and Nigeria's climate commitments; among others.

To prevent vested interests from stalling progress, the division or entity should be staffed with new hires with relevant skills and experience.



Consider setting up a separate strategic division of NNPC or, if privatized, an independent entity – Processes

- ✦ Establish clear target metrics that are closely tied with the objectives of the entity and its role in the energy transition.
 - ✦ Results should be made publicly available, independently audited, and used in evaluating effectiveness
- ✦ Establish a compliance timeline for existing fields to stop gas flaring, control methane leaks, eliminate the use of diesel to power operations and facilities.
 - ✦ Mandate the use associated gas or renewable energies, and establish carbon emission standards.
- ✦ Assess the stranded asset risk and on this basis, establishing strict criteria for approvals of new oil and gas projects.
- ✦ Establish an independent oversight agency for contracting processes and awards, subjected to public disclosure requirements.

Organizational processes should reflect robust organizational governance and climate governance.



Consider setting up a separate strategic division of NNPC or, if privatized, an independent entity – **Funding**

- 🔥 The following options could be considered:
 - 🔥 Establishing a formula for a specific source of funding from oil exploitation but with that source declining over time in order to avoid incentivizing more oil production. Funding from oil revenues would be replaced over time as self-sustainability is reached through other activities.
 - 🔥 Establishing joint ventures or funding mechanisms with Niger Delta Power Holding Company (NDPHC), NNPC's RED and Gas and Power divisions, the International Finance Corporation (IFC), the African Development Bank (AfDB), the European Union, USAID's Power Africa and private investors to assist with new energy transition projects and to assist smaller Nigerian oil companies with carbon emission compliance.

Funding sources for this new division or entity should be identified in advance and in ways that incentivize desired results.



Include principles of climate change governance in the NNPC reform agenda using the TPI's framework

Level 0: Unaware of Climate Change as a Business Issue

1. Does the company acknowledge climate change as a significant issue for the business?

Level 1: Acknowledging Climate Change as a Business Issue

2. Does the company recognize climate change as a relevant risk and/or opportunity for the business?

3. Does the company have a policy (or equivalent) commitment to action on climate change?

Level 2: Building Capacity

4. Has the company set greenhouse gas emission reduction targets?

5. Has the company published information on its Scope 1 and 2 greenhouse gas emissions?

Level 3: Integrating into Operational Decision Making

6. Has the company nominated a board member or board committee with explicit responsibility for oversight of the climate change policy?

7. Has the company set quantitative targets for reducing its greenhouse gas emissions?

8. Does the company report on Scope 3 emissions?

9. Has the company had its operational (Scope 1 and/or 2) greenhouse gas emissions data verified?

10. Does the company support domestic and international efforts to mitigate climate change?

11. Does the company disclose its membership and involvement in trade associations engaged in climate issues?

12. Does the company have a process to manage climate-related risks?

13. Does the company disclose Scope 3 use of product emissions?

Level 4: Strategic Assessment

14. Has the company set long-term quantitative targets for reducing its greenhouse gas emissions?

15. Does the company's remuneration for senior executives incorporate climate change performance?

16. Does the company incorporate climate change risks and opportunities in their strategy?

17. Does the company undertake climate scenario planning?

18. Does the company disclose an internal price of carbon?

19. Does the company ensure consistency between its climate change policy and the positions taken by trade associations of which it is a member?



How do the five other NOCs perform on climate change governance and the energy transition agenda?



Does the NOC address the transition risk and seize the transition opportunity?

- All five NOCs analyzed have committed to reducing their carbon intensity and have 2030 as a flare-out date.
- All five NOCs are turning the climate change imperative into a business opportunity, and three of them—Equinor, Petronas, and Sonatrach—even contemplate shifts in business models to substantially increase the share of renewable energy installed capacity in their portfolios.
- To seize the transition opportunity, the five NOCs may (1) build on their competitive advantages, (2) aim at transforming the market by pioneering and demonstrating solutions, and (3) dedicate a sizeable R&D budget and venture capital to low-carbon solutions.

NNPC lacks a strategy to address the transition risk and decrease the carbon intensity of its production. How NNPC seizes the transition opportunity is unclear beyond what is reported by its Renewable Energy Division: it builds on NNPC's existing capacity in making oil products to specialize in biofuels, it is developing plans for on-grid and off-grid solar energy PV technology, for deployment in retail stations and NNPC facilities, and it is gathering data for CDM Opportunities in the Oil and Gas Sector as well in the solar sector.



As Nigerian policymakers focus on mitigating the fallout from the painful recession triggered by the COVID-19 pandemic, reform of NNPC should fall near the very top of the agenda.

Such efforts will position NNPC to sustainably contribute to Nigeria's economy and energy independence in the long term.

