



“Low-carbon transition strategies: which paths are available to resource-rich developing and emerging economies?” The Nigerian Perspective

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Low Carbon Transition in Nigeria – General Principles

- Nigeria has 40bbls of oil and 203TCF of gas proven reserves
- Government recognizes the global aspiration to transit to renewables
- However, that transition has to take into cognisance the resource reserves base stated above, especially gas
- In Nigeria, gas is at the heart of the energy transition and represents the first step in the journey to renewables away from oil
- To ensure that the transition to gas occurs seamlessly, the following enablers are being structured:
 - Regulatory
 - Policy
 - Finance
 - Investment
 - Technology



Regulatory - The Petroleum Industry Bill (PIB)

1. The pivotal message remains that Nigeria needs to diversify the non-oil economy and diminish reliance on crude oil to pave way for gas.
2. A regulatory agency has been created to give special focus to the Midstream and Downstream sectors.
3. The Midstream and Downstream sectors will open enormous opportunities to investors.
4. Attractive fiscal incentives to produce and transport natural gas
5. Incentives target significant growth in power generation
6. PIB creates a wide range of industrial clusters around fertilizer, petrochemicals, manufacturing and agro-business among others
7. Massive job opportunities will be created for our growing population.



Regulatory - Specific Incentives for Gas Utilisation in the PIB



- The total fiscal package is designed to encourage investors to develop and produce natural gas.
- For non-associated natural gas, the terms are 5% royalty (except for onshore gas that is exported) and companies income tax, which is currently 30%. These terms also apply to the related condensates.
- For associated gas the royalty is also 5% (except for onshore gas that is exported).
- There is no production sharing for gas, while gas costs can be taken as cost oil.
- Midstream Infrastructure Fund is created.
- Permits producer, supplier and consumer pipelines
- Definition of a gas network code setting out the rights to enter and exit gas pipelines by any shipper
- Implementing strong domestic gas delivery obligations for all producers.

Policy – National Gas Policy and National Gas Expansion Programme

2017 National Gas Policy

- Vision: *“To be an attractive gas-based industrial nation, with a significant presence in national and international markets”*
- Mission: *“To move Nigeria from a crude oil export-based economy to an attractive gas-based industrial economy”*
- The Ministry of Petroleum Resources pursuing an aggressive Gas Expansion programme has declared 2020 as the “Year of Gas”.
- Consequently, the National Gas Expansion Program (NGEP) was designed to aid the Government in realising its environmental, economic, fiscal and social objectives using Gas.
- **NGEP Structure:** The Programme is structured into 3 Project streams:
 - The Gas Based Industries Revitalization
 - The Compressed Natural Gas (CNG) Adoption for Vehicles and Power
 - The Liquefied Petroleum Gas (LPG) Expansion
- Auto-gas programme rolled out by Mr. President on 1st December 2020.



Finance – Central Bank Facility and Other Interventions

- The Central Bank of Nigeria (CBN) has created a ₦250B (circa \$500M) intervention facility to help stimulate investments in the domestic gas value chain.
- Intervention targets the development of infrastructure to optimize the domestic gas resources for economic development
- Aims to fast-track the adoption of CNG as the fuel of choice for transportation and power generation, as well as LPG as the fuel of choice for domestic cooking, transportation and captive power.
- Development of gas-based industries, particularly petrochemical (fertilizer, methanol, etc.) to support large industries, such as agriculture, textile, and related industries.
- The initial sum of ₦250B may be increased depending on availability of funds to the Government



Investment – AKK Pipeline Project & Gas Network Code

- On June 30th 2020, Mr. President Flagged off the Construction of the 614km Ajaokuta-Kaduna-Kano (AKK) Gas Pipeline
- At completion, the AKK gas pipeline will deliver gas to the planned Abuja (1350MW), Kaduna (900MW) and Kano (1350MW) Power Plants which would generate additional 3,600MW to the National grid
- This will significantly improve power generation while resuscitating several moribund industries along the pipeline route.
- The AKK project will create massive direct and indirect jobs.
- Project is expected to be completed in 2023
- On 10th August 2020, we launched the “Go-live” of the Nigerian Gas Transportation Network Code, which essentially, is a set of rules and guidelines for gas transportation in the country.
- This will go a long way in deepening the domestic gas market while impacting positively on the growth and economic development of the country.
- The implementation of the code would provide more confidence to invest in the domestic gas market and enable Nigeria consolidate on the multiplier effect of gas on the economy.



Investment – Gas Delivery Obligation

- On June 30th 2020, Mr. President Flagged off the Construction of the 614km Ajaokuta-Kaduna-Kano (AKK) Gas Pipeline
- The PIB provides for a domestic gas **delivery** obligation based on the domestic gas demand requirement.
- The domestic gas demand requirement is the marketable natural gas demand for all wholesale customers of the Strategic Sectors.
- Based on the domestic gas demand requirement the Commission determines the domestic gas delivery obligation of each Lessee based on Regulations.
- The Lessees are obliged to deliver the marketable natural gas to a wholesale customer based on a gas purchase order determined by the Domestic Gas Aggregator.
- Failure to deliver the gas is subject to a penalty of \$ 3.50 per MMBtu or such amount as provided for in a gas purchase and sale agreement.
- Lessees are thus required to make the necessary investments which enable them comply with this obligation
- Other interested investors can invest in pipelines for which they would be issued licenses



Technology – Off-Grid Solar Systems and Biofuels

- The Federal Government has commenced installation of off-grid solar systems across the country
- Other private sector organisations have also commenced off-grid systems, especially in Northern Nigeria
- Nigeria also has a Biofuels Policy hinged on the automotive biomass ethanol programme
- Nigerian National Petroleum Corporation (NNPC), the National Oil Company (NOC) has stated the intent to transform to an energy company and is proposing investments in the joint ventures for this purpose



Way Forward on the Transition Journey

- It is possible to achieve that transition but recognize that it is an ongoing process.
- Nigeria has to transit from an oil-based economy to a cleaner economy. We need to look at gas as a transition fuel that needs financing.
- What is the optimal energy mix balance for Nigeria? The transition has to take cognisance of the peculiarities of our country.
- Covid has put a lot of strain on global credit sources, many energy projects are struggling to attract capital because of all the associated risks - political, environmental, performance etc.
- But it is still possible to attract finance for multi-billion dollars' renewable projects. What is required is a regulatory & policy framework that support that transition.
- Development of bankable projects which can benefit from available funding. The global economic climate is already constrained by a lot of financiers stating that they are no longer going to finance hydrocarbons project. So, for those that still have appetite for gas project, we need to do a lot more work to attract them.
- Development of a holistic Transition Plan which details how and when Nigeria intends to achieve carbon neutrality subject to the factors already considered.





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