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Enabling Energy: Optimizing Nigerian Oil and Gas Policies for Enhanced Efficiency and Job Creation

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ABSTRACT

Energy is an essential need of mankind and is a necessary instrument for job creation. Nigeria relies mostly on energy from fossil fuel. Though the country is blessed with abundance of oil and gas, a large percentage of the population are jobless. There is also limited economic growth while the vast potentials in the oil and gas industry are not effectively harnessed. Over the years, several policies, laws and regulations have been enacted as part of the strategic effort to enhance energy delivery in the country, drive efficiency in the oil and gas industry and create employment for the teeming population. This study, focused on the critical review and analysis of the policies, laws and regulations, indicated the laws, regulations, and policies have not effectively stimulated the investment required in the petroleum industry to drive energy availability and create the required jobs. Unlocking the vast potentials in the sector requires addressing existing security issues, enhancing infrastructural development, driving policy inconsistencies, and removing regulatory bottlenecks hampering the efficient monetization and utilization of Nigeria's oil and gas resources. With continued policy reforms, insulation of the oil and gas sector from political interference and effective collaboration between government agencies and stakeholders in the industry, Nigeria can harness her abundant oil and gas potentials to diversify the economy, meet domestic energy needs and create the required employment opportunities for the teeming youths. With some international oil companies divesting from the country lately, the country may face the challenge of limited capacity of local companies to attract the required funding, hence the need to consider stakeholders concerns in policy formulation to sustain investment in the sector.

Keywords: Oil and gas, job creation, unemployment, energy, regulations, policy

INTRODUCTION

Nigeria has huge petroleum potentials [1][2]. She dominates Africa as the largest producer of crude oil, with a proven reserve of about 37.5 billion barrels and a production capacity of about 2.19 million barrels per day (mbpd) [2]-[4]. Currently, she produces about 1.6mbpd, is the 14th largest petroleum producing nation in the world and the 6th largest exporter of LNG [4][5]. She has a proven combined reserves of crude oil and condensate of about 37.5 billion barrels, while the reserves of associated gas and non-associated gas is about 209.26 trillion cubic feet [6]. She occupies an enviable position as the 9th largest gas reserve holder in the world [3][4][7]. The oil and gas industry plays a significant role in the development of the Nigerian economy [7] and is responsible for about 90% of her foreign exchange earnings and about 60% of her total income [8][9].

Though energy is essential for the development of any nation and the economic growth of business ventures [10]-[13], Nigeria currently struggles with energy delivery and youth unemployment [14][17]. Since Nigeria has vast reserves of oil and gas, over the years, several policies, laws and regulations have been introduced to stimulate investments and growth in the industry as a means of economic growth, job creations and poverty alleviation [1][18]. However, the growth in the industry is still limited as there is a concern that policies, laws

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and regulation, though helpful in driving growth in some contexts, may also be limiting investment in the industry in other contexts.

A key feature of the policies, laws and regulations in the Nigerian oil and gas sector is inconsistency [18][19]. Recognizing that investment in the oil and gas sector is capital intensive with long-term projections before breaking even, having effective policies, laws and regulations are necessary to drive investment and bring about the required economic and social gains [18][19].

In this article, we present a comprehensive review of past and present policies, laws and regulations and discuss how they have enhanced or limited growth in the industry and the actions required to drive efficiency in the oil and gas sector to grow the Nigerian economy, create job opportunities, and reduce unemployment.

Aim Of Study

Considering the challenges of effectively harnessing the vast potentials in the oil and gas sector to drive the Nigerian economy and create meaningful jobs for the teaming population, the aim of this study was to review existing policies, laws and regulations in the oil and gas industry,

i. Identify the progress made through the different policies, laws and regulations
ii. Discuss the limitations of the existing policies, laws and regulations
iii. Recommend actions to transform the oil and gas sector to positively drive the Nigerian economy and create meaningful employment through effective policy and regulatory frameworks

METHODOLOGY

The study adopted critical review of literature on different studies on oil and gas policies in Nigeria. The literature reviewed were retrieved through search of different reputable research databases such as Google Scholar, and general searches of different internet sites. The authors' experience in the oil and gas industry guided in the selection of relevant literature and government publications. The design provided a holistic means to review the status and challenges of the different policies, laws and regulations and to examine what needs to be done to optimize the policies, laws and regulations to drive energy delivery and job creations.

Nigeria Unemployment Rate

Nigeria has a huge unemployment rate (see Figure 1) and, as at first quarter (1Q) 2024, recorded a third consecutive quarterly rise [20][21]. The country's misery index (that is, the sum of unemployment and inflation rates), according to the Nigeria Economic Summit Group (NESG), rose from 30.5% in 3Q2022 to 36.9% in 1Q2024 [20]. The misery index rose to 38.3 percent in 2024Q2 from 26.7 percent and 36.9 percent in 2023Q2 and 2024Q1, respectively [22]. This suggests that many Nigerians are still experiencing a cost of living crisis, with more than half of the population living in poverty [22]. According to [23], certain policies of the Nigerian government are at best employment neutral and in some instances destroy rather than create jobs. The country, though blessed with the abundance of oil and gas that could be harnessed to improve the living standards of the citizenry [1]-[7], has one of the world's highest misery indices, with many of her citizens facing crisis in living standard and struggling with weak purchasing power in the face of rising inflation [20][21].

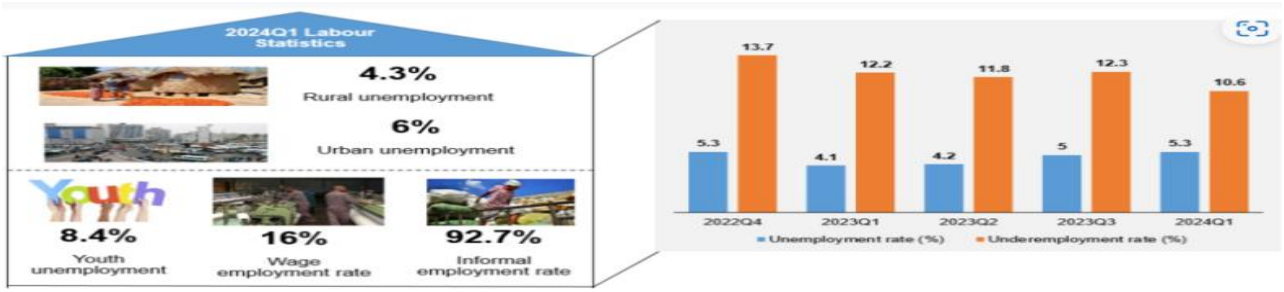

Figure 1: Nigeria Unemployment Rate: 4Q2022 -1Q2024

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The employment-to-population ratio still indicates that there is a huge percentage of unemployed Nigerians (see Figure 2) [18][24]-[25]. With optimized policies to enhance efficiency in the oil and gas industry, the unemployed youths are potential labour for the industry [23].

Figure 2: Employment-to-Population Ratio: 4Q2022 -1Q2024

Even among the employed, a huge percentage are self-employed [24]-[26]. With effective policy framework, the oil and gas industry can drive industrial revolution that can result in step change in percentage of employees vs self-employed.

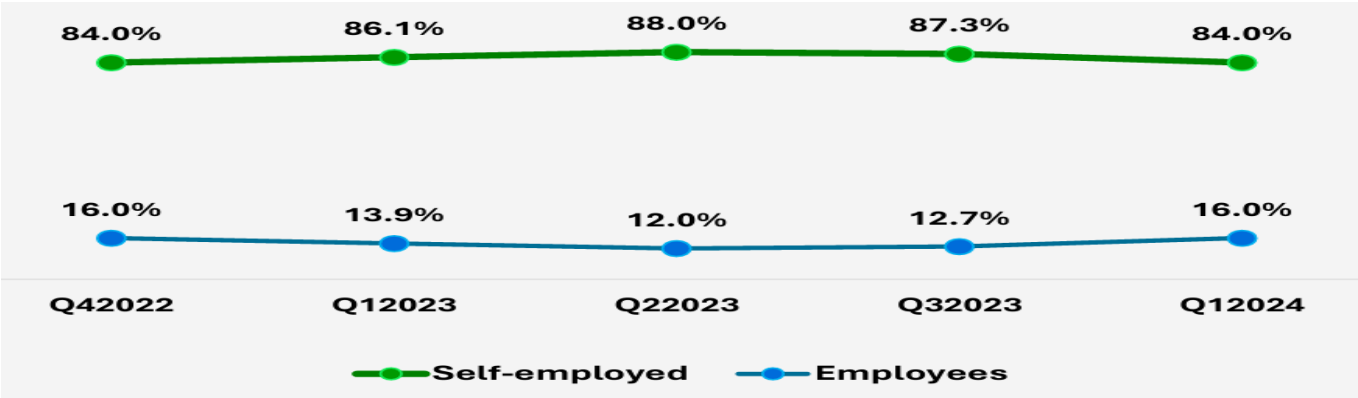

Figure 3: Status of Employment: 4Q2022 -1Q2024 (Source: NBS).

Oil and Gas Policies, Laws and Regulations – The Journey from Yesterday to Today Over the years, several policies, laws and regulations have been implemented in the petroleum industry with differing results [18][27]. As [27] noted, Nigeria has many laws and policies but the implementation to achieve the goals is weak due to political interests by the key stakeholders involved in oil and gas development in Nigeria. In the context of this article, similar to the perspective of [27], policy refers to a plan of action agreed or chosen by a political party or, government to achieve a defined objective. Similarly, law refers to the body of rules, standards and principles enacted by an act of parliament to govern activities and practices across all sectors of the economy, including the oil and gas industry. As per the petroleum sector, it includes the aggregate of legislation, judicial precedents, and accepted legal principles relevant to the petroleum industry and the penalties for deviation from the defined rules, standard and principles. Regulation refers to the defined level of quality, safe work procedures and acceptable practices made by an agency of government to streamline, regulate and guide operations in the petroleum sector. Let's review some of the policies, regulations and laws.

Pre-2009

Associated Gas Reinjection Act, 1979*:* Nigeria is considered as the seventh largest gas flaring country globally [28]. The Associated Gas Reinjection Act, 1979 was promulgated to compel International Oil Companies to submit a plan on their gas utilization and re-injection programme. Such Act was necessary to mitigate the environmental pollution and wastage associated with gas flaring. It has been repealed by Section

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310 of the Petroleum Industry Act, 2021 (PIA). A typical product of the act was the Belema Gas Injection Project executed by the NNPC/SHELL joint venture [27]. Despite the presence of laws, [28] noted that gas flaring seems to still be a major problem in Nigeria.

The Associated Gas Framework Agreement, 1992*:* This introduced a package of fiscal incentives for the utilization of natural gas [27]. The different options for utilizing the gas were potential sources of employment. The incentives were subsequently incorporated into the Petroleum Profit Tax Act of 2004 (PPTA) [27]. As [27] noted, "the PPTA Sections 11 and 12, provide that (a) investment required to separate crude oil and gas from the reservoir into usable products shall be considered as part of the oil field development; (b) capital investment on facilities equipment to deliver associated gas in usable form at utilization or designated custody transfer points shall be treated for tax purposes, as part of the capital investment for oil development; (c) capital allowances, operating expenses and basis of tax assessment shall be subject to the provisions of this Act and the tax incentives under the revised memorandum of understanding."

The incentives triggered increased investments in the oil and gas sector by multinational oil companies such as Chevron Nigeria Limited and Mobil Producing Nigeria Unlimited [27]. As [27] noted, "Escravos Gas Project represents the first significant associated gas recovery project in Nigeria. It is a product of the joint venture between the NNPC and Chevron Nigeria Limited with the objective of exploiting associated gas produced from the joint venture's oil fields in the Escravos area of the Niger Delta for power generation and general industrial demand." The Oso Condensate project was another manifestation of the focus on associated gas [27] and a source of employment creation. The project facilitated by then Mobil Producing Nigeria Unlimited (now Seplat Energy Producing Nigeria Unlimited) and NNPC joint venture was situated offshore in Akwa Ibom State and enabled the development of a field which was discovered in 1967 but remained undeveloped for twenty-four years due to economic factors [27]. The gas reinjection facilities installed as part of the project did not only further the objectives of the Associated Gas Reinjection Act, 1979 but helped to maximize condensate recovery [27].

National Domestic Gas Supply and Pricing Regulations, 2008*:* This segmented the domestic gas market into three divisions for gas supply and pricing: gas-to-power, gas-as-feedstock, and gas-as-alternative fuel. The different pricing regime for gas for the different sectors had the potential to drive local utilization of gas and attract investments thereby enhancing opportunities for gainful employment.

The Nigerian Gas Master Plan, 2008*:* The Gas Master Plan was intended to provoke an entirely different vista of opportunities for Nigeria to launch herself as a mature domestic gas market. The Plan adopted the Domestic Gas Supply Obligation (DGSO) - a mandate for every gas producer to allocate a portion of their production for domestic use before they could allocate any gas to other commercial obligations [28]. Unfortunately, the dream of industrialization intended by the gas master plan, at best, is still a figment of imagination as other variables within the industry, for example, security challenges, have adversely impacted the operating environment.

Fairly Recent (2009 – 2018).

The Nigerian Gas Flare Commercialization Programme, 2016: This was designed to eliminate gas flaring through technically and commercially sustainable gas utilization projects developed by competent third-party investors [27][28]. Successful bidders were announced in 2023 with 49 flare sites awarded to 42 companies. Investment in this will not only reduce environmental pollution due to gas flaring but can be a source of employment for many teeming youths [28][29].

National Gas Policy (NGP), 2017: The policy clearly articulated the goals, strategies, and implementation plan to reposition Nigeria as an attractive gas-based industrialized nation by prioritizing gas supply for domestic use, similar to the Nigerian Gas Master Plan 2008 [30]. The Policy defined the direction for gas infrastructure ownership and prescribed full legal separation of gas infrastructure ownership, operations and trading. The Policy exhibited a strong focus on strengthening the capacity of the Ministry of Petroleum Resources to provide leadership to the gas industry in terms of policy making and surveillance capabilities

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[30]. Unfortunately, in our opinion, with the Ministry of Petroleum typically controlled by the government in power, the NGP was subject to real or perceived political interference.

Though the NGP recognized the need to finalize commercial terms for gas development under the Production Sharing Contracts (PSC), an avenue that would have resulted in step changes in investment in gas, creating lots of job opportunities, it is obvious that the needed gain is yet to be made. The challenge in making the required progress may not be unconnected with the unpredictable political environment in Nigeria with challenges in forecasting the likely impacts on the economy and returns on investment. Additionally, there is no clarity over the terms of the PSC to motivate investment. The PSC merely provides that in the event of the discovery of a viable quantity of natural gas, the contractor shall investigate the discovery and submit proposals to the Nigerian National Petroleum Corporation (NNPC) for the development of the gas. Then would a separate agreement be negotiated between NNPC and the contractor for gas development. This is vague and may not encourage huge investment in gas discovery without clarity on the likely terms of the agreement on what happens thereafter.

National Petroleum Policy, 2017*:* The Federal Executive Council approved the National Petroleum Policy (NPP) with a vision for Nigeria to become a Nation "where hydrocarbons are used as a fuel for national economic growth and not simply as a source of income." The Policy recognizes that Nigeria "… must…develop a petroleum industry where the value added in oil stream is realized, combined with a move towards a gas based industrial economy" and that "…the future for oil producers lies in …developing a value-added sector of refining and petrochemicals" given the volatility in oil and gas prices [34].

The policy recognized the pitfalls of previous policies and specifically articulated objectives to address the pitfalls to drive national development, promote local refining of petroleum, insulate the country from the volatility of oil prices in international market, and harness the full value of petroleum through value-adding activities such as refining, petrochemical industries and gas-based industrialization [34].

Part of the policy thrust included actions to enhance efficiency and drive job creation. These included divesting non-performing Government owned refineries whilst encouraging private refineries and focusing on human capital development as a means of increasing local content, amongst others. Unfortunately, as at today, the value-chain, efficiency thrust and opportunities for job creation expected from the policy are yet to fully manifest. None of the government refineries has been divested though they continue to attract huge overheads with no clear economic benefit.

Gas Flare (Prevention of Control) Regulation, 2018*:* This provided a legal framework to support the government's plan to reduce greenhouse gas emissions from gas flaring [28]. The Regulations 2018 prohibited gas flaring and venting, and imposed a fine of $2.00 per 28.317 standard cubic metres of gas flared by any Producer from any Oil Mining Lease area or marginal field that produced 10,000 barrels or more of oil per day, $0.05 per 28.317 standard cubic metres of gas flared on a Producer from any Oil Mining Lease area or Marginal Field that produces less than 10,000 barrels of oil per day [27]. As [27] observed, the technicalities inherent in Nigerian laws and policies against gas flaring have been used as escape routes by interest groups to avoid punishment for breaches of the laws.

As an indication of another inconsistency in government thrust, the Gas Flare (Prevention of Control) Regulation, 2018 was revoked by the Gas Flaring, Venting and Methane Emission (Prevention of Waste and Pollution) Regulations, 2023. While the revocation may be well-intended, the policy inconsistency is indicative of unpredictability in the industry, hence might have been a potential threat to prospective investors in the gas sector [27][31].

Nigerian Oil and Gas Industry Content Development Act, 2010: The National Petroleum Policy recognizes the need to develop Nigerian human resources, encourage indigenous participation at competitive prices, build competencies across the gas industry, and institutionalize human capacity building for the public sector and industry [30][32]. As [32] noted, there was a marked absence of indigenous players involved in the oil and gas business, where about 90% of the goods and services used in the industry were imported into Nigeria. The intent of the local content law was to increase indigenous participation in the oil and gas sector by

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defining minimum thresholds for the use of local services and to promote the employment of Nigerian staff in the industry [30][32].

The Nigerian Content Policy, was therefore a lovely initiative to promote a framework that guaranteed active participation of Nigerians in oil and gas activities without compromising standards [30][32]. The initiative has the potential to transform the teeming youth population from being unemployed to being employable and/or gainfully employed.

Since the enactment of the Nigerian Oil and Gas Industry Content Development Act in 2010, there has been gradual improvement in local content involvement in the oil and gas industry [38]. For instance, some Nigerians have developed competence in jobs that were previously dominated by expatriates, with some job previously executed outside Nigeria now being executed in-country. According to an energy analyst, local content grew from 5% in 2010, to 28% in 2017, and 31% in 2022 [33]. This has not only helped in preserving foreign exchange but enhanced employment opportunities and growth of Gross Domestic Product (GDP) [33]. The Act has also enhanced the participation of local exploration and production companies in the industry in addition to the

growth of fabrication yards for major construction projects, development of world-class pipe mills, increase in local service companies, growth in number of rigs, barges and service boats owned by Nigerians, etc. The creation of a $50m Nigerian Content Research and Development Fund has also been a good avenue to enhance indigenous technological innovations [33].

However, one of the challenges facing the Act in actualizing its complete goal is the limited financial capacity of indigenous companies [30][33]. Since the oil and gas industry is capital-intensive, without adequate financial capacity, there is limitation in what indigenous companies can do. This may impact growth in the sector. With limited financial capacity to harness the Act to develop local contents, some local organizations prefer to serve as middle men for foreign companies in procurement of parts, provision of manpower and rendering of services required in the industry. The implication, in such instances, is that services are still done by expatriates who come in through their local partners, which benefit through rate increases. The outcome is increase in the cost of services and limited opportunities for local content development [30][33]. Having a structured programme for knowledge transfer for jobs currently done by experts and enforcing limitations in how long an expert can work in the country may drive development of local capacity to enhance employability. The participation of indigenous companies in the oil and gas sector have also been hampered by the complicated pre-qualification and entry requirements, ineffective monitoring and control by regulatory authorities [30].

In a world where most services can be outsourced and delivered online, the Act does not have clear framework for ensuring that jobs (such as cyber-related jobs, accounting, tele-maintenance, remote monitoring, payroll, etc.) that can be done by Nigerians are not outsourced to foreign companies. The lack of clear definition for some terms in the Acts (e.g. management position, intermediate cadre) also leaves it open for multiple interpretations with potential to limit opportunities for Nigerians.

Current (2020 – 2024).

The Nigerian Gas Transportation Network Code, 2020*:* The Code is intended to ensure fair and non-discriminatory access to gas transportation infrastructure; promote gas trading; and deepen domestic gas penetration in the country [35]. The code is also intended to ensure that the wrong quality gas does not go into the pipeline in addition to guaranteeing gas pipeline integrity, open access to pipeline and common understanding on metering [35]. With a uniform platform in terms of guidelines for agreements between buyers and sellers, the code drives transparency and eliminates existing bottlenecks to unlock the potentials of gas as a resource and revenue earner for the country [35]-[37]. While this is a welcome initiative, optimization of policies impacting gas utilization is necessary to unlock the potentials of the code and create the platform for gainful employment.

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The Petroleum Industry Act (PIA), 2021*:* After years of suspense, the PIA repealed about ten laws including the Associated Gas Reinjection Act, Hydrocarbon Oil Refineries Act, Motor Spirit Act, NNPC (Projects) Act, NNPC Act (when NNPC ceases to exist), PPPRA Act, Petroleum Equalization Fund Act, PPTA, and Deep Offshore and Inland Basin PSC Act [28][39]. The Act provides the legal, governance, regulatory and fiscal framework for the Nigerian oil and gas industry. However, as a source observed, the PIA still falls short of aspirations for comprehensive environmental standards and for establishing a rigorous supervision and enforcement regime [39][40]. With the Minister of Petroleum responsible for formulation of policy and overseeing the industry in general, the industry faces the potential for possible political interference [28][30]. Such fears may limit the level of long-term investment adversely impacting the opportunities for job creation.

Though the Act makes provision for NNPC to be restructured and fully corporatized to enable its operation in a liberalized commercial environment, it is left to be seen how the organization can be fully detached from the control of government and become a major player in the industry.

Another area that may impact efficiency is that while the PIA appears to confer considerable powers on the operating companies, NUPRC and NMDPRA, it is not clear on the role of the Ministry of the Environment and associated agencies such as NOSDRA in relation to enforcement of existing environmental guidelines [32]. This leaves room for possible inter-agency rivalry or role conflict between federal and state agencies [40].

Though the Act makes provision for host community development trust fund, a trigger of hope in improving the condition of lives for the local communities and reducing rural-urban migration, the Act did no define what constitutes host communities and so leaves room for possible conflicting adoption of the standards for selecting a host community [39].

While the PIA was expected to revolutionize the petroleum industry, of recent, some international oil and gas companies such as Shell, Exxon and TotalEnergies are divesting from shallow water to deep water operations. While this may create opportunities for increase in the participation of local companies in the oil and gas sector, the challenge is that local companies may have limited capacity to attract the huge finances required to revolutionize investments in the industry, drive efficiency and create the much-desired job opportunities.

Domestic Gas Delivery Obligation Regulation, 2022: The Domestic Gas Delivery Obligation Regulation mandates gas producers to allocate a percentage of their total gas production for sale to the domestic market. The obligation is aimed at increasing the supply of natural gas to the domestic market and particularly, achieving the government's objective of gas-to-power and generally encouraging the utilization of natural gas. While this can help drive industrialization and create jobs, it requires other policy thrusts that can make the business environment investor-friendly. Additionally, with the drive for domestic gas supply, the gas re-injection policy is no longer economically viable [30].

Gas Flaring, Venting and Methane Emission (Prevention of Waste and Pollution) Regulations, 2023: The Regulation seeks to reduce environmental and social impact associated with gas flaring and venting; prevent and protect the environment; prevent waste of natural resources; enhance energy transition in Nigeria; create socio-economic benefits from gas flaring and venting; set out the procedure for the Nigerian Upstream Petroleum Regulatory Commission to exercise its rights to take gas at flare points in accordance with the PIA [41][42]. Such regulation, aligned with other policies, can drive new projects that will utilize the gas that would have been flared thereby enhancing the economy and creating job opportunities [41]-[43].

Gas Distribution Systems Regulations, 2023: The Regulation's objective is to establish the procedure for the grant of gas distribution license for gas distribution system in a local distribution zone; and to provide sanctions, penalties and administrative fines for failure to comply with the provisions of the Regulation [44][45]. Well harnessed, this can be a means to drive economic growth is certain areas of the nation through effective distribution of gas to end users through gas distribution hubs that feed particular zones.

Gas Trading and Settlement Regulations, 2023*:* The objectives of these Regulations include regulation of the establishment and operations of gas trading and settlement exchange platforms; establishing the principles for secure, reliable and efficient trading and settlement of natural gas and other gas commodities; and

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promotion and sustenance of efficient and robust gas trading, exchange and settlement of natural gas and other gas commodities [46][49].

The challenges with this regulation include:

- Complexity of managing multiple participants - producers, distributors, traders, and consumers.
- Dealing with market transparency issues especially where trading activities are opaque or dominated by a few large players.
- Handling cross-border trading, regulatory harmonization
- Standardization of contracts among multiple parties, sometimes across regional borders

Natural Gas Pipeline Tariff Regulations, 2023: The objectives of these regulations are to provide a regulatory framework to determine a sustainable gas transportation pipeline tariff regime in accordance with the PIA; and to establish a tariff methodology for the transportation and transmission of natural gas through gas transportation pipelines, and gas transportation networks [47]. Recognizing that gas is mostly used in areas different from where they are produced, this regulation can be an instrument to streamline gas transportation to grow the Nigerian economy and create employment opportunities.

Gas Pricing and Domestic Demand Regulations, 2023*:* These regulations seek to regulate the process of marketable natural gas of the strategic sectors under the PIA and to identify the unregulated markets and make provisions for such market [48][49]. While the government on one hand claims subsidy removal and campaigns for increased investment in the oil and gas sector, regulation of natural gas price may limit investments in the sector and negatively impact creation of job opportunities.

Gas for Growth Initiative 2023/Presidential CNG Initiative*:* The Initiative prescribes 0% import duty rate on importation of all equipment related to CNG and LPG [49]. It also prescribes 0% Value Added Tax (VAT) on items such as feed gas for all processed gas; Compressed Natural Gas (CNG); imported liquefied petroleum gas; CNG equipment components, conversion and installation services; LPG equipment components, conversion and installation services; all equipment and infrastructure related to the expansion of CNG, LPG and the Presidential CNG Initiative, including conversion kits [49]. This is expected to grow CNG use, reduce cost of energy and grow the economy particularly as CNG is a cheaper option to petrol and diesel, the major fuels used by many medium- and small-scale enterprises [27][49]. Additionally, the CNG initiative is expected to be a source of gainful employment to many teeming youths.

Though CNG constitutes a good and cheaper source of fuel for the road transportation sector, it is more environmentally friendly compared to existing sources of fuel and is expected to positively improve the domestic utilization, the technology is fairly new and most vehicles in Nigeria are not designed to use CNG [27]. The conversion process and associated safety issues are still subjects of debate. Hence investment in the sector may still be limited [27]. Additionally, the limited refueling infrastructure may hamper the growth of the sector [27]. Creating the enabling environment that allows the public and private sector investment, formulating regulations that will encourage multinational oil companies to invest in gas-utilization infrastructure may fast track the development of the sector [27].

Nigerian Gas Domestic Base Price*:* In line with the PIA, the Nigerian Midstream and Downstream Petroleum Regulatory Authority(NMDPRA) determines domestic base price for gas. With a base price of $2.42/MMBTU for power plants and $2.92/MMBTU for the “Commercial Sector,” there is the concern that the pricing is not favorable to promote investment in the gas sector particularly as power plants consume over 70% of domestic gas [49].

Gas producers frequently contend that the current price levels constitute an effective subsidy to consumers and are insufficient to justify their investment in gas development and production in addition to maintenance of operating equipment [27][49]. Of particularly concern is the fact that the main driver for domestic gas sales is the power sector [49]. With the power sector utilizing over 70% of the gas produced in Nigeria, the current gas prices and electricity tariffs are not economically viable to attract the levels of investment necessary to drive

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gas utilization and create the needed job opportunities [27][49]. This can be a major hindrance to the development of the gas sector.

The Oil & Gas Companies (Tax Incentives, Exemption, Remission, etc.) Order 2024*:* The Executive Order is aimed at encouraging Non-Associated Gas (NAG) greenfield projects for onshore and shallow waters [49]-[51].

Some of the highlights of the Executive Order include:

- Gas Projects with first gas production date on or before January 1, 2029 to enjoy gas tax credits.
- Gas Projects with first gas production date after January 1, 2029 to enjoy gas tax allowance.
- A new category of incentive called "Gas Utilization Investment Allowance" for new and ongoing projects.
- Possible "Claw Back" of Gas Utilization Investment Allowance [49].

Other Innovations

Many other innovations have been introduced to drive efficiency in the oil and gas industry. These include:

- Advanced Cargo Declaration (ACD) Regulation: This ensures no crude oil is exported without proper accounting and assignment of a unique identification number (UIN) to each cargo [52]
- Upstream Metering Regulation: This mandates reliable metering systems to account for all hydrocarbon production and exports, and real-time cargo tracking and digital documentation to improve visibility and efficiency in cargo operations [53].
- Fuel subsidy removal: Over the years, Nigeria operated a subsidy regime on petroleum products supplied for local consumption [54]-[56]. The subsidy was first introduced in the 1970s to mitigate oil price shock in 1973 and was partially removed in 1986 [54]. The subsidy remained in place until 2012 when the federal government abruptly removed it, triggering series of massive protests that forced the government to reinstate the fuel subsidy [54]. The subsidy regime experienced accusations and counter-accusations of fraud associated with it [57][58]. As [57] noted, "Refineries that supply fuel and other petroleum products to the people have been deliberately crashed, resulting in the exportation of crude oil and the importation of refined petroleum products. This phenomenon necessitated the subsidization of fuel to make it affordable for ordinary citizens. The country spent over N15 trillion (US$34,443,168,000.00) in fuel subsidies between 2009 and 2021 and was expected to spend about N6.7 trillion (US$15,384,615,040.00) in 2022 and the first two quarters of 2023 alone [59]. Attempts to remove subsidy, particularly on petrol, was resisted by some citizens and political forces until 29th May 2023 when President Bola Tinubu declared an end to the petroleum subsidy regime as part of his presidential inaugural address [60]. As [30] noted, fuel subsidy removal has been a controversial fiscal policy with impacts on national energy demand and supply. Removal of government subsidy on petroleum products has been encouraged by world monetary organizations policy as an austerity measure to boost national income and drive investment in the oil and gas sector [30]. However, the removal has raised many economic and ethical issues and has particularly resulted in worsening cost of living, escalating inflation, increased cost of doing business and negative impact on job creation [60].

Offshore Safety Permit (OSP): OSP was designed as a Personnel Accountability System (PAS) service for oil and gas operators and contractors in Nigeria for personnel tracking at onshore and offshore installations [61][62]. It is a mandatory requirement to work on an offshore installation [61][62]. Though the benefits were expected to include enhanced safety and security, enforcement of rest periods, enablement of operators to efficiently plan, monitor and control personnel movement to and from offshore facilities, and hold details of persons to contact in case of emergency [61][62], it is left to be seen how this initiative has positively impacted the oil and gas industry.

The cost implication of obtaining the passport also seems disconnected from the reality in the country and may not promote involvement of low-income earners in oil and gas jobs. For instance, first time registration for the passport attracts a cost of $580 with a yearly renewal of $135, and a one-time flyer – $200 [62]. In a

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country struggling with high exchange rate, it remains debatable why the cost of the passport was pegged in foreign currency. Also in an economy where minimum wage, until lately, was ₦30,000, the implication is that even two years minimum wage was not enough to obtain the passport to grant one the opportunity to work on an offshore installation. Though one of the advertised rationales for OSP is "Ensure that basic safety/survival training is obtained prior to deployment," the reality is that workers requesting for the permit have to pay differently for the required trainings (e.g. basic offshore safety induction and emergency training) and medical certification required to obtain the permit. This questions the morality of the cost of the permit considering the poverty level in the country and the high rate of unemployment. There is also questions concerning government's sincerity in developing local content in line with the Nigerian Oil and Gas Industry Content Development Act, 2010.

CONCLUSION

The Nigerian oil and gas industry has vast potentials. The country stands at a critical juncture in revolutionizing the sector. However, she faces significant challenges with promising prospects. Over the years, several policies, laws, regulations and executive orders have been implemented with some gains. Unlocking the vast potentials in the sector requires addressing existing security issues, enhancing infrastructural development, driving policy consistencies, and removing regulatory bottlenecks hampering the efficient monetization and utilization of Nigeria's oil and gas resources.

With continued policy reforms, insulation of the oil and gas sector from political interference and effective collaboration between government agencies and stakeholders in the industry, Nigeria can harness her abundant oil and gas opportunities to diversify the economy, meet domestic energy demands and create employment opportunities for the teeming youths. With some international oil companies divesting from the country, the country may face the challenge of limited capacity of local companies to attract the required funding, hence the need to consider stakeholders concerns in policy formulation to sustain investment in the sector.

By embracing the opportunities in the oil and gas sector and dealing with the discussed challenges, Nigeria can position herself as a leading player in the global energy industry, and utilize oil and gas as a true driver to enhance economic growth, create job opportunities and generate sustainable development for the benefit of her citizenry.

RECOMMENDATIONS

The Nigerian oil and gas industry has huge potentials if the policy framework is optimized to enhance productivity. The following recommendations are hereby made to drive increased value gains from the Nigerian petroleum industry.

- A team consisting of representatives of industry players, government agencies and other stakeholders in the oil and gas industry should be formed to take a holistic evaluation of the different policies with the mandate to identify inefficiencies and inconsistencies and streamline the policies to drive effectiveness and efficiency
- There is the need to re-evaluate the current framework and cost implication of obtaining offshore safety passport to make it more effective in addressing the essence of the passport without making the cost burdensome for prospective youths seeking jobs in the oil and gas sector
- Government should motivate industrial development through liberal tax incentives, opportunities for loans at low interest rates and support for local players in the oil and gas industry to harness the full potentials of the local content policy
- There should be a developed road map and action plan to ensure the implementation of the National Petroleum Policy are properly monitored. There must also be a periodic evaluation of the short to long term targets/strategies proposed in the policy. This will ensure that potential issues are proactively identified and timely addressed.
- Key decision-making bodies in the petroleum industry should be separated from organs of government subject to political interference. A consideration can be the headship of Petroleum Ministry by

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technocrats with no political colouration rather than the continual appointment of politicians as the minsters of petroleum, as has been the case for many years now.

- Clear commercial and fiscal terms should be provided in Production Sharing Contract (PSC) for gas development to remove uncertainty and drive investors' commitment in gas discovery and exploitation.
- To encourage more investment in gas resources to create more jobs, government should increase the penalty for gas flaring while providing more incentives for investment in gas development and growth of downstream oil sector
- Each policy should be followed by focused and consistent implementation to show commitment. For instance, the Gas Flare Commercialization Programme was first published in 2016 whereas publication announcement of successful bidders did not come until 2023 – a clear 7 years after
- While price control for the domestic gas market may favour local consumers, there is the need for a balance between favourable pricing for local consumers and competitive pricing to promote investment that will generate job opportunities
- There is the need for more collaboration between regulators and stakeholders in the industry. Particularly, it may be necessary to investigate the observed divestment of international oil and gas companies from some sectors of the oil and gas business. Recommendations from the investigation should be implemented to drive increased investment in the oil and gas sector
- Transparency should be increased in the subsidy/no subsidy regime in the oil and gas sector. The current practice of claiming no subsidy but voting some money for under-recovery does not seem to create a level playing ground in the industry for the different players
- NNPC limited should align her role with the PIA and create an environment that allows free entry and exit for other players.

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