

**SIMPLIFIED ANALYSIS OF THE REGULATORY CONTEXT OF
FISCAL INCENTIVES FOR GAS INVESTMENTS IN NIGERIA**

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ABSTRACT

Nigeria is endowed with significant natural gas reserves and has strategically positioned itself to use these resources to promote economic growth and development. This article provides a critical analysis of the legal and regulatory framework that governs fiscal incentives intended to encourage investments in gas within the energy sector of Nigeria. This article provides a comprehensive examination of the complexities associated with tax incentives, investment guarantees, and regulatory frameworks that are specifically designed to stimulate both domestic and foreign investments in Nigeria's gas sector, by conducting a thorough analysis of pertinent legislation and regulatory structures. This article provides an analysis of the historical progression of fiscal incentives in Nigeria, situating them within the wider framework of economic policies. Moreover, it examines the complexities of recent legislative changes and their consequences for gas investors, providing valuable perspectives on the efficacy and efficiency of existing incentive frameworks. The text delves deeper into the opportunities and challenges that are intrinsic to the execution of fiscal incentives. It examines concerns including the lack of regulatory clarity, administrative constraints, and policy coherence. Through the integration of empirical data and jurisprudential analysis, this study offers a comprehensive examination of the legal mechanisms that support gas investments in Nigeria. Additionally, it provides policymakers with recommendations that can improve the effectiveness of fiscal incentives and promote sustainable development in the Nigerian gas sector.

Keywords: Investment, Petroleum Industry, Natural Gas, Laws, Nigeria.

JEL Classifications: E22, F21, G11, G21, P28, Q4, Q43,

1. INTRODUCTION

In the past decades within the Nigerian Petroleum Industry, there has been a growing focus on gas, as evidenced by deliberate policy measures implemented at various points in time. This measures, culminated in the Petroleum Industry Act¹ which provides better framework gas regulation when compared to its precursor the Petroleum Act.² This focus on gas is due to recognition of gas as a panacea for both economic advancement as well as a cleaner, cost efficient bridge energy form for energy transition. Several regulatory measures have been put in place to incentivize investment in the gas sector. These include the enactment of the NLNG fiscal act in 1989, the introduction of the Associated Gas Framework Agreement (AGFA) provision in the PPTA in 1998, the provision of incentives for gas utilisation projects in the Corporate Income Tax Act (CITA) in 1998 and 1999, the implementation of Flare Gas Regulations in 2018, and most recently, the PIA 2021.³

2. EVOLUTIONARY TRAIL OF GAS UTILIZATION POLICIES IN NIGERIAN

In Nigeria, there have been gas policies which have targeted the different components of the gas value chain – upstream production, market sector development, pricing, off-take, and related downstream utilization. These policies have sought to fulfil the twin objectives of using gas as a foreign exchange earner and spurring economic growth. The export gas sector has been more successful than the domestic gas sector, due to the infrastructural deficit which has largely resulted in flares and consequently GHG emissions and failure to improve energy security.

The thrust of this article is to review the provisions for market-based incentives which are contained under tax regimes, with a primary focus on that which promotes domestic gas utilization. Before delving into the incentives, it is important to mention that under a tax regime, companies operating in the sector are required to pay various taxes and royalties, some of which are earmarked for the development of gas infrastructure and other social and economic development projects in Nigeria. Therefore, the funding for gas infrastructure is expected to come from the taxes and royalties paid by the companies operating in the upstream petroleum sector, as well as from other sources of government revenue.

Fiscal incentives are deemed more appealing and advantageous when the amount of output is proportionate to the optimal returns that can be obtained.⁴ Fiscal incentives may play a significant role in the effort to prevent gas flaring in the petroleum

¹ Petroleum Industry Act, 2021.

² Petroleum Act 1969.

³ Kaase Gbakon and Lolo Ojaraida, *The Nigeria Gas Landscape: Implications for Economic Development* [2020] *SPE Nigeria Annual International Conference and Exhibition*. 1

⁴ OA Oyewunmi and A E Oyewunmi. "Managing Gas Flaring and Allied Issues in the Oil and Gas Industry: Reflections on Nigeria." [2016] (7)(4) *Mediterranean Journal of Social Science*. 643.

industry. As a result, the major stakeholders bear the associated responsibility for complying with the consequences of the relevant tax system and numerous changes that may be imposed owing to the vagaries of the operating environment.

2.1 Nigerian Liquefied Natural Gas (Fiscal Incentives, Guarantees and Assurances) Act 1990 Cap N87 LFN

The Nigerian Liquefied Natural Gas (Fiscal Incentives, Guarantees, and Assurances) Act was formed as Decree No. 39 of 1990, with a retroactive start date of April 24, 1989. The Act awarded the Nigerian LNG Firm pioneer status for tax purposes and 10 years of tax exemption beginning on the date of the first commercial delivery of LNG generated by the company to a purchaser.⁵ The Act aimed at offering incentives for initiatives and investments involving the development and use of Nigeria's natural gas deposits.⁶ In addition to fiscal incentives, the Act provides for the stabilization of such incentives, established a suitable legal system aimed at protecting the IOC's investments, and authorizes ICSID to arbitrate any investment disputes arising thereunder.⁷

The Act's goal was to codified in the fiscal incentives, guarantees, and assurances provided by the federal government of Nigeria to the Nigerian Liquefied Natural Gas (LNG) Company and its shareholders to persuade the company's foreign shareholders that their investments in the development of liquefied natural gas plants in Nigeria were well protected from government interference and that neither the legal regime nor the government's fiscal commitments would be subject to unilateral political tussles.⁸ The Act also exempts the company and its contractors from paying import duties and value-added tax (VAT) on all necessary imports of machinery, equipment, and materials for the construction of the LNG plant and ancillary facilities used by the company.⁹ The Act stipulates that the fiscal regime contained in the Act shall not be unilaterally amended without the consent of the parties to the LNG investment (the government, the company, and the shareholders); that the company and its shareholders shall not be subject to new laws, regulations, taxes, duties, or charges that are not generally applicable to Nigerian companies and their shareholders; and that the Act's assurances shall not be suspended.¹⁰ In addition to

⁵ NLNG Act, s1-2.

⁶ U J Orji, 'Moving from Gas Flaring to Gas Conservation and Utilisation in Nigeria: A Review of the Legal and Policy Regime' [2014] *OPEC Energy Review*. 149-183

⁷ C E Emole, 'Nigeria's LNG Fiscal Incentives, Investment-Protection Schemes and ICSID Arbitration' [1996] (8) *African Journal of International and Comparative Law*, 169.

⁸ NLNG Act Second Schedule, s 9; C E Emole, 'Nigeria's LNG Fiscal Incentives, Investment-Protection Schemes and ICSID Arbitration' [1996] (8) *African Journal of International and Comparative Law*, 169.

⁹ NLNG Act, s 7.

¹⁰ NLNG Act, Second Schedule.

these guarantees, the government agreed to submit to the International Centre for the Settlement of Investment Disputes any dispute emerging under the Act (ICSID).

The provisions of the Act have been described as "a bold attempt to create attractive circumstances for international oil companies' (IOC) participation in Nigeria's liquefied natural gas venture by shifting from gas flaring to gas conservation and utilization."¹¹ The fundamental purpose of these financial incentives and their codification was to create a conducive environment for gas-related investments. This is because gas projects often have a longer investment incubation period; they tend to have a longer lifespan and slower investment payback compared to most oilfield advancements.¹²

To identify gas markets and reach sales terms, it is common for gas exploitation ventures to stipulate that the operator and the government would negotiate financial conditions acceptable for gas field development. With all these incentives one might wonder what the impact is on reducing or stopping gas flaring and translating to gas utilization in Nigeria. It has been said that although the Act was highly effective at encouraging investments in the exploration and utilization of natural gas, it had little effect on reducing the flaring of associated gas in oil fields.¹³

Another energy research study has found that the issue with LNG facilities in Nigeria is that "they have mainly utilised non-associated gas" and, as a result, have little effect on reducing the flaring of associated gas in Nigeria.¹⁴ It must be mentioned that the Nigerian LNG company is still the main consumer of associated gas in the Nigeria gas project.¹⁵ Multiple sources have also indicated that the development of more LNG Trains would strengthen the Nigerian LNG company's ability to process associated gas feedstock and reduce gas flaring by a considerable amount. In this regard, it is important to highlight that the Nigerian LNG firm began operations in 1999 with only two production trains; now, the company has six trains, and a seventh train is currently under construction.¹⁶

¹¹ Organization of the Petroleum Exporting Countries [2014] *OPEC Energy Review*.

¹² U J Orji, 'Moving from Gas Flaring to Gas Conservation and Utilisation in Nigeria: A Review of the Legal and Policy Regime' [2014] *OPEC Energy Review*. 149-183.

¹³ *Ibid.*

¹⁴ B Buzcu-Guven, 'Gas Flaring and Venting: Extent, Impacts and Remedies' [2010] *James A. Baker III Institute for Public Policy* 45-46.

¹⁵ M N Idris, 'Review on Global Investment on Liquefied Natural Gas (LNG) Projects and Development: Targeting on Reduce Flaring, Cleaner and Energy Efficiency' [2012] (2)(8) *Journal of Petroleum and Gas Exploration Research*, 148-149.

¹⁶ EIA, Country Analysis Briefs—Nigeria (16 October 2012) 15; U J Orji, Moving from Gas Flaring to Gas Conservation and Utilisation in Nigeria: A Review of the Legal and Policy Regime [2014] *OPEC Energy Review*

The current rate of flaring, however, suggests that the installation of more LNG Trains may not have significantly reduced flaring.¹⁷ This may be attributed to the ownership structure of the NLNG. So, the first phase of the NLNG project was completed in September 1999, with NNPC (49%), Shell (25.6%), Total (15%), and Agip /Eni (10.4%) as partners.¹⁸ Their interests and exposures are limited by their percentage of interest in the NLNG. Partnership in the venture naturally gives them the right to send their associated gas to the NLNG. Considering that only associated gas from these three IOCs contributes to NLNG feedstock, it is not surprising that significantly associated gas would continue to be flared by other producers who are not partners in the NLNG project.

2.2 Incentives for Gas Utilization under the Petroleum Industry Act

Though the Petroleum Industry Act (PIA) contains provisions for Hydrocarbon Tax (HT),¹⁹ the HT applies only to crude oil, condensates, and liquid NGLs produced from upstream oil fields (before the Hydrocarbon tax this was under the PPTA). This is not the focus of this article as HT is directly collected on income generated from petroleum produced from onshore and shallow water fields,²⁰ and does not apply to the production of natural gas, NGLs, or condensates from non-associated gas wells or processing plants, nor to the production of petroleum from frontier or deep offshore areas, which is subject to the Companies Income Tax Act (CITA).

Before the PIA, the full range of fiscal incentives for gas in Nigeria was consolidated in Sections 11 & 12 of the Petroleum Profit Tax Act (PPTA) (Upstream Gas Terms) and Section 39 of CITA (Mid-stream Gas Terms).²¹ Tax consolidation and cost recovery from oil in upstream gas projects for associated and non-associated gas is allowed under the PPTA.

The Petroleum Profit Tax Act is one of the repealed Acts under the PIA²² However its repeal date applies from the effective date of any new acreage and upon the voluntary conversion of an oil prospecting licence to a petroleum licence or mining lease to a petroleum mining lease.²³ It appears its scope is covered under the Hydrocarbon Tax

¹⁷ U J Orji, Moving from Gas Flaring to Gas Conservation and Utilisation in Nigeria: A Review of the Legal and Policy Regime [2014] *OPEC Energy Review*. 149-183; M N Idris, Review on Global Investment on Liquefied Natural Gas (LNG) Projects and Development: Targeting on Reduce Flaring, Cleaner and Energy Efficiency [2012] (2)(8) *Journal of Petroleum and Gas Exploration Research* 148-149.

¹⁸ *Ibid*

¹⁹ PIA s 260

²⁰ PIA, s260

²¹ Kaase Gbakon and Lolo Ojaraida, The Nigeria Gas Landscape: Implications for Economic Development Paper presented at the SPE Nigeria Annual International Conference, Virtual, August 2020. 6

²² PIA. S310(g)

²³ PIA, s 92

Act under the PIA²⁴ however with a joint reading of section 92. Which makes provision for the voluntary conversion of an oil prospecting licence to a petroleum prospecting licence or an oil mining lease to a petroleum mining lease.

The PPTA is a 1999 modification to the original legislation, it specifies that 'all capital investments connected to gas-to-liquids facilities should be recognised as chargeable capital allowance and recovered against the crude oil income.'²⁵ Furthermore, it goes on to provide that "gas transferred from the natural gas liquid facility to the gas – to – liquid facilities shall be at zero per cent tax and zero per cent royalty"²⁶

Section 11(2-f) is highly noteworthy when compared to Section 11(2-d) of the PPTA, which says that "expenses identified as being incurred exclusively in the use of associated gas shall be regarded as gas expenses and be allowable against the gas income and profit to be taxed under the Companies Income Tax Act." It would seem that costs made only for a gas utilisation project would be accounted for as gas expenses, deducted from gas revenue, and taxed under CITA, except for "the" GTL project. The Escravos Gas-to-Liquids (EGTL) Project is reported to have been financially enabled by a combination of provisions included in Section 39 of the CITA and Section 11 of the PPTA, and the anticipated cost of the EGTL plant is \$10.30 billion.²⁷

2.3 Incentives for Gas Utilization under the Companies Income Tax Act (CITA)

The full range of fiscal incentives for gas in Nigeria is contained in Section 39 of CITA (Mid-stream Gas Terms). Notably, the CITA defines "gas utilisation" as "...the marketing and distribution of natural gas for commercial purposes and includes power plants, liquified natural gas, gas-to-liquid plants, fertiliser plants, and gas transmission and distribution pipelines"; a gas-to-liquid plant is, therefore, a gas utilisation project. The CITA provides tax incentives for companies engaged in gas utilization. These incentives include tax holidays, accelerated capital allowances, tax-deductible interest, and reduced tax rates.²⁸

A tax holiday of up to five years may be granted to companies involved in the discovery and production of natural gas. A first tax-free term of three years, which might be extended by another two years based on the company's performance.²⁹ For the timespan indicated, they will not be required to pay income tax on their income.

²⁴ PIA, s260

²⁵ PPTA, S11(2-f)

²⁶ PPTA S 11(2-g)

²⁷ (Oil Industry News, 2016)

²⁸ CITA s39

²⁹ CITA s39(1)(a)

The goal of this incentive is to attract private sector investment in the exploration and production of Nigeria's natural gas reserves.

The cost of production of associated gas is claimed under the Companies Income Tax Act (CITA).³⁰ In addition, capital allowances may be expedited for businesses that engage in gas pipelines and related gas infrastructure. This implies that a higher percentage of their capital expenditures may be deducted from their taxable income, resulting in a lower effective tax rate. In tune of; an annual allowance of ninety per cent with ten per cent retention, for investment in plant and machinery; and an additional investment allowance of fifteen per cent which shall not reduce the value of the asset. Furthermore, Interest on loans obtained with Ministerial approval is eligible for a tax deduction.³¹ As well as Tax-Free Dividends³² during the tax-free period, where the investment for the business was in foreign currency; the introduction of imported plant and machinery during the period was not less than thirty per cent of the equity share capital of the company.³³ Finally, companies that use natural gas in their operations might benefit from a 20% tax rate rather than the normal 30% rate. ³⁴The goal of this incentive is to have businesses transition from using fossil fuels to using natural gas, which produces less pollution.

The provisions of Section 39 of the CITA are intended to encourage investment in Nigeria's natural gas industry. By giving tax holidays, lower tax rates, and expedited capital allowances, the government aims at increasing investment in the exploration and development of natural gas reserves and infrastructure. These incentives are also intended to encourage the use of natural gas as a cleaner alternative to fossil fuels, which may aid in reducing greenhouse gas emissions and improving air quality. It should however be mentioned that this Act and its provisions have been in operation since 1998, yet the progress on gas utilization and carbon reduction has been minimal.

While certain businesses may be encouraged to engage in gas utilization by these laws, they may be criticized for being insufficiently broad to effectively promote gas utilization in Nigeria.³⁵ One of the key problems is that the incentives are mostly geared toward natural gas exploration and production rather than its use in other sectors like transportation, industry, and power generation. Furthermore, the tax incentives provided may not be sufficient to offset the high costs associated with gas

³⁰ PIA s260(2)

³¹ CITA s39(1-e)

³² CITA s39(1-d)

³³ CITA s39(1-d)

³⁴ CITA s39

³⁵ A Hassan and R Kouhy, 'Gas Flaring in Nigeria: Analysis of Changes in its Consequent Carbon Emission and Reporting [2013] (37)(2) *Accounting forum*. 124-134.

infrastructure development and utilization, which may discourage companies from investing in these areas.³⁶

Another issue is that the Nigerian government has historically been slow to invest in and develop the necessary infrastructure to support gas utilization, such as pipelines, processing facilities, and storage facilities. This has created significant challenges for companies seeking to utilize natural gas and may discourage further investment in the sector. Overall, while the Companies Income Tax Act provides some incentives for gas utilization, there is room for improvement in terms of comprehensiveness and effectiveness in encouraging further investment in this important sector.

3. NON- MARKET BASED INCENTIVES TO GAS UTILIZATION

It is also noted that Nigeria has some unique and peculiar challenges. These peculiarities warrant more than financial incentives for the gas industry to thrive. From the previous section, it can be seen that the incentives given to the NLNG have made the export gas market thrive accounting for the substantial utilization of gas towards exports. Though the CITA³⁷ contains similar fiscal incentives, the domestic export market has not shared similar success in terms of gas utilization. It is therefore imperative that there is a recommendation for the examination of non-Market based incentives towards the security of pipelines, and gas infrastructure.

The non-profitability of the domestic gas market retards gas utilization. It has also been said that zero flaring in Nigerian oil fields seems to be impossible soon, despite the implementation of many legal and administrative frameworks to address gas flaring and encourage investments in gas utilisation schemes.³⁸ Fiscal incentives do not seem to have had a substantial influence on motivating oil-producing businesses to engage in an associated gas collection and use or associated gas conservation via re-injection programmes.

It has previously been established that encouraging gas utilization, in Nigeria will require not only the prohibition of flaring or the imposition of flaring fines to oil and gas companies but also the provision of attractive fiscal and non-fiscal incentives, to guarantee profitability the oil and gas business which will encourage oil companies to invest in zero-carbon technologies to enjoy continued profitability.

³⁶ *Ibid*

³⁷ CITA, s39.

³⁸ Orji UJ, 'Moving from Gas Flaring to Gas Conservation and Utilization in Nigeria: A Review of the Legal and Policy Regime' [2014] 38(2) *OPEC Energy Review* 149 – 183. 162

Oyewunmi³⁹ in assessing the institutional and regulatory framework for domestic gas access and supply stated that the challenge seems to be with regulatory efficiency which has the ability to serve as a means towards realizing sustainable economic and policy objectives. Hence the key areas to input nonmarket-based incentives are where the problems, hindrances and bottlenecks lie. Some of the problems which militate against the gains to be harnessed from these fiscal incentives include Institutional inefficiencies, oil theft, pipeline vandalism, insecurity, to mention a few.

4. CHALLENGES TO GAS UTILIZATION IN NIGERIA

There are some obstacles impeding the efficiency of gas utilization in Nigeria. Some of the impediments are linked to the non-effectiveness of the extant laws. Others are closely associated with the institutional designs and the laxity in enforcing the relevant laws by the regulatory agencies of the State. It is therefore important to present some of the most perverse challenges herein.

4.1 Institutional Inefficiency

Due to arbitrariness, over-politicization, inability to fend off industry capture, and a lack of accountability, these difficulties have sometimes resulted in incidents of regulatory failures such as underregulating, regulatory response failure, creative compliance, and enforcement shortcomings. In this sense, creative compliance refers to the adherence to the letter of the law while undermining the spirit of the law or de facto compliance, which results in regulatory inconsistencies because of ambiguities and discretion in the interpretation and implementation of the law. In this context, regulatory capture refers to the process by which regulatory bodies ultimately come to be controlled by the exact industries or operators they were established to supervise. This happens mostly as a result of gaps in the relevant laws and regulations, which foster even greater institutional inefficiencies. The Federal Government only recently actively made changes to separate its duties in policymaking, regulation, and commerce.⁴⁰

4.2 Security of Investment

Although the government has a duty to secure lives and property and including the protection of investment. This has not been the case when it comes to investment in the upstream sector as the industry has had its fair share of downturns attributable to incidents of bunkering, which has resulted in lower production despite the record

³⁹T Oyewunmi, Examining the Legal and Regulatory Framework for Domestic Gas Utilization and Power Generation in Nigeria [2014] (7)(6) *The Journal of World Energy Law & Business*, 538-557. 548

⁴⁰ T Oyewunmi, Examining the Legal and Regulatory Framework for Domestic Gas Utilization and Power Generation in Nigeria [2014] (7)(6) *The Journal of World Energy Law & Business*, 538-557. 548

of higher flare between 2011 and 2021.⁴¹ The erratic nature of production which results in an inability to recoup estimated profits is capable of discouraging further investment which would lead to gas utilisation.

It is important to reiterate the role of strengthening institutions responsible for enforcing criminal sanctions as this by extension provides the much-needed incentive for continued business in Nigeria and the promise of further profits will encourage compliance and further investment. Alternative uncertainty in business discourages further investment.

4.3 Absence of Infrastructure

Gas production is characterised by the need for substantial investments in gas transport infrastructure and every country needs a boost in infrastructure to harness this gain. For example, in Norway, the first major pipelines were constructed in the early 1970s, and since then, the Norwegian gas transport system has been expanded to meet growing demand. It has evolved from dedicated gas transport solutions for isolated fields to an integrated infrastructure serving the majority of the Norwegian continental shelf. This is a cost-effective and reliable method of transporting gas, and it provides Norwegian gas with a significant competitive advantage.⁴²

In Nigeria, the lack of crucial infrastructure necessary to re-inject or collect and transport gas from diverse oil fields to gas utilisation facilities is a significant issue that has prevented oil firms in Nigeria from achieving zero gas flaring. This includes the lack of gas pipes and networks that connect gas hubs and gas collection facilities to gas processing and utilisation facilities. The assertion of non-compliance is based on the claim that the inability to fulfil obligations is attributable to constraints in the gas infrastructure, sub-optimal pricing for gas deliveries, and other limiting factors.⁴³ In the past, there have been several gas projects that have not been successful some of which are, Olokola LNG, OK LNG Badagry LNG and Brass LNG. Though there are several reasons for their failure a recurrent reason is the insecurity challenges. For example, the Brass LNG project, a proposed liquefied natural gas (LNG) export project failed for several reasons. The difficult operating environment in the Niger Delta area was one of the key causes of the Brass LNG project's failure. Political instability, security issues, and environmental concerns in the area made it difficult for project developers to acquire finance and recruit investors.⁴⁴

⁴¹ World Bank, Global Gas Flaring Tracker Report [2022] *Global Gas Flaring Reduction Partnership*.

⁴² Stefan Bouzarovski, 'Making Territory Through Infrastructure: The Governance of Natural Gas Transit in Europe' [2015] (64) *Geoforum* 217-228.

⁴³ Chijioke Nwaozuzu, Gas Production and Utilisation in Nigeria: Problems & Prospects, 20 May 2018.

⁴⁴ J S Ovadia, The Challenges of Developing Liquefied Natural Gas Infrastructure In Nigeria, [2019] *Oxford Institute for Energy Studies* <<https://www.oxfordenergy.org/publications/the-challenges-of-developing-liquefied-natural-gas-infrastructure-in-nigeria/>>

Though in addition to external influences, problems with internal management and governance also contributed to the project's collapse. There were internal conflicts among the project consortium's members, which caused delays and increased the project's final cost. These concerns finally led to the project's termination in 2018.⁴⁵ The security issues in the Niger Delta have been responsible for the inability to utilize gas, especially in the form of pipeline vandalism. Oil theft and pipeline vandalism have had significant negative impacts on the country's oil and gas sector more broadly, including its ability to utilize natural gas resources.

4.4 Insecurity

In addition to the aforementioned factors, the Niger Delta region is confronted with significant security challenges stemming from the actions of militant factions, criminal elements, and issues arising from oil-producing communities. During the period spanning from December 2005 to 2009, the Niger Delta region experienced a significant surge in acts of piracy and other illicit activities, including but not limited to vandalism of oil infrastructure, kidnapping, and the forcible seizure of oil infrastructure by militant and criminal factions. The prevailing circumstances led to the retreat of certain oil service companies from the nation, and several multinational oil corporations were compelled to curtail their production and invoke force majeure with regard, to oil deliveries. The current situation, along with the vulnerability of human resources resulting from frequent abductions of personnel employed in the oil and gas sector in the Niger Delta area, continues to serve as a significant disincentive to the establishment of gas initiatives.⁴⁶

4.5 Pipeline Vandalism

The perpetration of acts of vandalism directed towards pipeline infrastructure continues to impede the operational capacity of the industry within the region in a significant manner. During the period spanning from 2008 to 2009, Shell was compelled to cease operations at one of its primary gas facilities for approximately eighteen months. The facility was initially shut down to facilitate the repair of damages caused by acts of vandalism, and subsequently for reasons related to security concerns. The current state of affairs appears to be intractable, as evidenced by the staggering number of 60 vandalised pipelines in January 2017 alone. This situation is perpetuated by the unresolved political grievances of the Niger Delta populace, which has resulted in the persistence of numerous highly motivated armed groups engaged

⁴⁵ S Onapajo and A Adejumobi, Political Economy of Liquefied Natural Gas Projects in Nigeria: Brass LNG and OK LNG. [2021] *Energy Policy*, 153 <<https://doi.org/10.1016/j.enpol.2021.112254>>

⁴⁶ Orji UJ, 'Moving from Gas Flaring to Gas Conservation and Utilization in Nigeria: A Review of the Legal and Policy Regime' [2014] (38)(2) *OPEC Energy Review* 149 – 183

in a protracted low-level insurrection. It is worth noting that this insurrection has proven to be a lucrative enterprise for those involved.⁴⁷

4.6 Crude Oil Theft and Illegal Refineries

The theft of crude oil products from the pipelines of international oil firms is known as oil theft. About 150 thousand barrels of oil per day are lost in Nigeria, costing the country over \$4 billion annually.⁴⁸ There are extensive interruptions in oil production. Also recently, in October of 2022, NNPC discovered a loading port in Delta State that had been in operation for the previous nine years and was located four kilometres from Forcados.⁴⁹ Nigerian Agip Oil Company (NAOC) gas export plans from the Bayelsa oil fields were disrupted after an assault and vandalism on a 24-inch Ogboinbiri/OB-OB gas pipeline. Because of this, output is at an all-time low.⁵⁰ Research by Falode and Oyinloye examined the effect of pipeline damage on Nigeria's gas supply. The research discovered that pipeline vandalism has resulted in gas supply interruptions, which may have substantial effects on businesses that depend on gas as a fuel source, such as power production and manufacturing.⁵¹ From the foregoing, it can be seen that the development of a resilient gas industry has been impeded by significant security challenges. The domestic gas industry has been significantly threatened by acts of kidnapping, pipeline vandalism, and other forms of sabotage. One potential strategy for promoting gas utilisation in addition to the fiscal incentives, is to implement non-market incentives.

5. NON-MARKET-BASED INCENTIVES

Non-market incentives do mitigate the previously discussed challenges are likely the main concerns of the investors. These incentives if addressed could encourage gas utilization in Nigeria. There are several examples of these non-market-based incentives that have been employed in other countries to encourage gas utilization, which Nigeria could adopt. Some of these examples are:

5.1 The implementation of community policing programmes.

This entails forging alliances with indigenous communities to furnish security measures for oil and gas operations. The implementation of this methodology has demonstrated efficacy in mitigating security issues within the extractive sector in

⁴⁷ Giovanni Occhiali and Giacomo Falchetta, *The Changing Role of Natural Gas in Nigeria a Policy Outlook for Energy Security and Sustainable Development* 23rd February 2018.

⁴⁸ Uche Peters Adiola, *Oil Exploration and Production in Nigeria: From Bottom to Top and Beyond* [2022] (83) *Inaugural Lecture Series Rivers State University*. 55

⁴⁹ *Ibid*

⁵⁰ U P Adiola, 57

⁵¹ O Falode and O Oyinloye, *An Assessment of the Impacts of Pipeline Vandalism on the Nigerian Economy*. [2020] (22)(3) *Journal of Sustainable Development in Africa*, 54-66.

various nations, including Colombia and Peru.⁵² The initiative entails the training and engagement of indigenous youths to furnish protection services for the natural gas sector. The community youth could be equipped with various skills such as security strategies, conflict management, and fostering positive relationships within the community, among other areas of focus. Adopting community policing security programmes as an incentive creates the following benefits; Employment opportunities, Involvement in the community, Economic benefits and Capacity building.

5.2 Employment and Capacity building

The programme can provide local youths with employment opportunities, thereby reducing the region's unemployment rate. This can decrease the incentives for young people to engage in illicit activity. The programme could include partnerships with local communities, which can foster improved community relations. This can decrease the number of conflicts and acts of subversion in the region. Also, it could provide local communities with economic benefits. For example, the programme can facilitate the growth of small and medium-sized businesses in the region. It could offer training and capacity-building opportunities to local students, thereby enhancing their employability and skills.

The programme could provide security for the natural gas industry, which can encourage investment in the sector. The implementation of a community-policing security programme may give several incentives to promote gas utilization in the Niger Delta area. A similar programme has been cited as successful, the authors provide an instance of the Niger Delta Vigilante Force, which was founded in 2007 and has effectively mitigated criminal activities and acts of sabotage within the area.⁵³ Emphasis is suggested on the training in community policing as a means of mitigating prospects of a future problem that might occur from community policing.

5.3 Education and Awareness Campaigns

Furthermore, another nonmarket-based incentive would be the investment in Education and awareness campaigns. This could come under the duty of the NCCC under the Climate Change Act.⁵⁴ Part of the duty of the council is to develop national plans and programmes. An awareness campaign could encourage natural gas utilization. In the United States, the Department of Energy launched the Natural Gas STAR program to educate companies about the benefits of natural gas utilization and

⁵² P S Orogun, Resource Control, Revenue Allocation and Petroleum Politics in Nigeria: The Niger Delta Question [2010] (75) *GeoJournal*, 459-507.

⁵³ E.O. Onyeagba and C.M. Osondu. 'The Nigeria Gas Master Plan: Addressing the Security Challenge in the Niger Delta Region' [2013] (15)(2) *Journal of Sustainable Development in Africa*.

⁵⁴ CCA, s4.

provide them with technical assistance.⁵⁵ Nigeria could adopt a similar approach to educate the public and private sectors about the benefits of natural gas utilization.

Furthermore, there could be more sought-out Public-private partnerships: In Indonesia, the government has collaborated with private companies to develop gas utilization projects. For instance, the government worked with a consortium of private companies to develop a gas-fired power plant in Bali.⁵⁶ Nigeria could establish similar public-private partnerships to encourage gas utilization in the upstream industry.

In furtherance of the above, the government could also invest in Capacity building and training programs. In Canada, the government provides training and capacity-building programs for companies and individuals involved in the upstream industry. For instance, the Petroleum Human Resources Council of Canada provides training programs for workers in the natural gas industry.⁵⁷ Nigeria could establish similar capacity-building and training programs to support the development of the local gas industry.

Consequently, there needs to be investment in Research and development programs. In Norway, the government invests in research and development programs that focus on the development of new technologies to enhance the utilization of natural gas. For instance, the Norwegian University of Science and Technology conducts research on carbon capture and storage technologies.⁵⁸ Nigeria could invest in research and development programs to support the development of a local gas industry.

Simply put, non-market-based incentives such as regulatory measures, public-private partnerships, education and awareness campaigns, capacity building and training programs, and research and development programs have been employed in other countries to encourage gas utilization. Nigeria could adopt similar measures to support the development of the domestic gas industry.

6. RECOMMENDATIONS

Nigeria needs to go beyond the fiscal incentives it provides for gas utilization, by taking steps to invest in non-market incentives which promote security as well as safety of investment. Incentives in this area might take the form of community

⁵⁵ U.S. Department of Energy, Natural Gas STAR Program (2020) <<https://www.epa.gov/natural-gas-star-program>>

⁵⁶ Asian Development Bank, Bali's New Gas-Fired Power Plant to Boost Electrification and Reduce Emissions. (2019) <<https://www.adb.org/news/balis-new-gas-fired-power-plant-boost-electrification-and-reduce-emissions>>

⁵⁷ Petroleum Human Resources Council of Canada PHRCC (2021) <<https://www.petrohrsc.ca/>>

⁵⁸ Norwegian University of Science and Technology, NTNU. Gas technology (2021). <https://www.ntnu.edu/gastech> Accessed 20 November 2023

policing programmes, grants for universities and research institutes, to research carbon technology; endowments for academic institutions to fund and promote research on carbon technologies. Investment in new carbon technologies might be encouraged by rules that investigate the Clean Development Mechanism (CDM) which is contained in chapter two. Regulations for carbon technologies produced with the help of research and development (R&D) grants and innovation endowments should contain financial and fiscal incentives.

As Nigerian decision-makers aim to encourage greater utilisation of natural gas, the following recommendations may prove useful for effective promotion:

- a) It is recommended that incentives be provided to encourage natural gas utilization. These should go beyond the already tax rebates, grants, and other financial incentives for businesses and individuals, who implement natural gas technologies or invest in natural gas infrastructure. It should be sufficiently robust to cover the nonfiscal incentives. It could further go on to encourage the use of natural gas in power generation, transportation, and other sectors, and provide funding for natural gas technology research and development.
- b) The implementation of community policing programmes. This entails forging alliances with indigenous communities to furnish security measures for oil and gas operations. The implementation of this methodology has demonstrated efficacy in mitigating security issues within the extractive sector in various nations, including Colombia and Peru.⁵⁹ The initiative entails the training and engagement of indigenous youths to furnish protection services for the natural gas sector. The community youth could be equipped with various skills such as security strategies, conflict management, and fostering positive relationships within the community, among other areas of focus. Adopting community policing security programmes as an incentive creates the following benefits; Employment opportunities, Involvement in the community, Economic benefits and Capacity building.
- c) There needs to be developed a comprehensive energy policy that outlines specific goals and targets for the increased utilisation of natural gas in Nigeria. The policy ought to take into account the environmental, social, and economic advantages of natural gas, in addition to its potential to mitigate greenhouse gas emissions. The policy document ought to include a comprehensive plan for advocating the use of natural gas across diverse industries, including power production, transportation, and industrial applications.

⁵⁹ P S Orogun, Resource Control, Revenue Allocation and Petroleum Politics in Nigeria: the Niger Delta question, [2010] (75) *GeoJournal*, 459-507.

- d) There needs to be raised awareness and education of the general public, key stakeholders, and policymakers about the potential of natural gas as a more environmentally friendly fossil fuel option. Inform the public about the benefits of natural gas in the fight against climate change, the enhancement of air quality, and the maintenance of steady economic growth. Campaigns, conferences, and seminars should be held to educate policymakers and the general public about the benefits of natural gas.
- e) As a matter of urgency and necessity, educational and training institutions must construct and organise their academic curricula to reflect the contemporary challenges of gas flaring in the extractive industry. To address this recurring issue, a wide variety of specialists are required, and retraining and development must be given respective consideration. As the oil and gas industry evolves, processes have experienced corresponding changes. It has been said that it is crucial to continually create research techniques that are ecologically beneficial and sustainable, in line with the philosophy of sustainable development.⁶⁰
- f) There needs to be measures to encourage collaborations among the government, private sector, and international organisations to facilitate the heightened adoption of natural gas. Engage in stakeholder collaboration with entities such as natural gas corporations, nearby communities, and environmental advocacy groups, to formulate and execute plans aimed at augmenting the utilisation of natural gas. Promote the involvement of private enterprises in the development of natural gas infrastructure, exploration, and production, while also creating structures for collaborations between the public and private sectors that foster the expansion of the natural gas industry.
- g) It is recommended to allocate resources towards the enhancement of natural gas infrastructure, encompassing the construction of pipelines, storage facilities, and distribution networks. Develop and sustain a dependable and effective natural gas infrastructure capable of accommodating heightened utilisation of natural gas across diverse industries. Formulate strategic plans aimed at expanding the natural gas infrastructure and allocate resources towards the requisite infrastructure for the transportation and dissemination of natural gas to the ultimate consumers.

⁶⁰ Olabode Oyewunmi, and A E Oyewunmi, Managing Gas Flaring and Allied Issues in the Oil and Gas Industry: Reflections on Nigeria [2016] (7)(4) *Mediterranean Journal of Social Sciences MC SER Publishing*, 643- 648.

- h) There is a need to facilitate global collaboration and alliances to enhance the utilisation of natural gas in Nigeria. It is recommended to engage in collaborative efforts with foreign nations and international entities to exchange optimal methodologies, technological innovations, and insights on the exploration and utilisation of natural gas resources. Engage in worldwide endeavours, such as the Global Gas Flaring Reduction Partnership, to diminish gas flaring and foster the utilisation of associated gas for constructive objectives.

- i) Finally, there is the need to strengthen the regulatory frameworks that oversee the natural gas industry, encompassing regulations for exploration, production, transportation, and distribution. It is imperative to establish regulations that are transparent, and efficient, and promote investment in natural gas infrastructure. Efficiently facilitate the permitting procedure for natural gas initiatives and establish an unambiguous regulatory structure that fosters the utilisation of natural gas while upholding environmental preservation and safety.

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