

**AN ANALYSIS OF LEGAL FRAMEWORK REGULATING GAS FLARING IN
NIGERIA'S UPSTREAM PETROLEUM SECTOR:
HOW SUSTAINABLE?**

By

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Abstract

One of the largest exploration and production of the oil and gas deposit in Africa is undertaken in Nigeria. The constant burning off of gases or the release of same directly into the atmosphere through gas flaring have become a usual sight in Nigeria till date. The irony of the matter is that the parent organizations of the vast majority of the international oil companies operating in Nigeria have totally restricted the flaring of related gas back at their nations of origin, yet they find it helpful to degrade the environment host communities in different nations by constantly flaring gas. It is noted that gas flaring disregards the essential right to life and human dignity of the residents of Nigeria. Also, oil and gas exploration and production has the potential to cause severe environmental degradation, not only to the physical environment, but also to the health, culture, and economic and social structure of the communities where it is produced. The flaring of gas which by and large includes the consuming off of related flammable gas toward the finish of a flare stack or blast delivers mostly carbon dioxide discharge. There is therefore the need to stop gas flaring by replicating the approaches used in the relatively advanced petroleum countries like Norway and Canada (Alberta) to tackle the menace. Hence this article is an analysis of legal frameworks regulating gas flaring in Nigeria's Upstream Petroleum Sector. It is a doctrinal legal research that adopts a library based research approach. Weak enforcement and ambiguity of some anti-gas flaring laws are largely identified as the key factors responsible for the menace. It recommends the use of more advanced technologies, sophisticated mixture of regulations and none-regulatory incentives such as fiscal policies, gas market restructuring and proffer practical suggestions.

Key Words: *Best Practice, Oil and Gas, Environmental Degradation, Production, Legal Enforcement*

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Introduction

Oil and gas matters are contained in the exclusive legislative list, and thus fall within the purview of the federal government.¹ This means that the National Assembly, which is the highest legislative body in Nigeria, has exclusive legislative powers in respect of oil and gas matters. Several pieces of legislation currently exist in Nigeria and are expressly and impliedly aimed at regulating and or prohibiting the flaring of gas. These include the Constitution of the Federal Republic of Nigeria 1999 (as amended) (CFRN 1999), Petroleum Industry Act 2021 (PIA 2021), Petroleum Act 1969, National Environmental Standards and Regulations Enforcement Agency (Establishment) Act 2007, Environmental Guidelines and Standards for the Petroleum Industry in Nigeria 1991, Climate Change Act 2021 (CCA 2021), African Charter on Human and People's Rights (Ratification and Enforcement) Act 1983 (ACHPRA 1983) and Flare Gas (Prevention of Waste and Pollution) Regulation 2018 as well as relevant regional and foreign legal framework for gas flaring.

Conceptual Clarifications

Under this subheading, this article reviews literature and concepts used in the article. These are gas flaring, oil and gas, black soot, acid rain, sustainable development, pollution, environment and environmental degradation.

Gas Flaring

Gas flaring is the burning of gas in the field as a means of disposal, either because there is no market for the gas or the operator does not elect (or cannot) use the gas for a non-wasteful purpose.² Such disposal of gas is in most cases done systematically or in a controlled manner. Little wonder gas flaring gas flaring is also defined as controlled burning of natural gas in the course of routine oil and gas production operation.³ Gas flaring has also been defined as the process whereby gas is burnt off as unusable waste gas or flammable gas, which is released by pressure relief valves

¹ Part I of the Second Schedule of the 1999 Constitution.

² G Nurakhmet, 'Gas Flaring and Venting: What Can Kazakhstan Learn From the Norwegian Experience?' [2006] (17)(9) *Oil, Gas and Energy Law Journal*, 29.

³ J Kearna, 'Flaring and Venting in the Oil and Gas Exploration and Production Industry: An Overview of Purpose, Qualities Issues, Practices and Trend' [2000] (12)(4) *OGP Publication*, 1.

during unplanned over-pressuring of plant equipment.⁴ It must be noted that the associated gas that is being flared is found underneath the sub soil alongside the crude oil. It is during the course of bringing the crude oil to the surface that the gas is being flared. In line with this thought, gas flaring has also been further defined as the practice of burning off natural gas when it is brought to the surface in a place where there is no infrastructure to make use of it.⁵ Some scholars have posited that the gas flared are either unusable or uneconomically recoverable,⁶ or flared for safety, emergencies or during routine maintenance.⁷ From these definitions above, one can thus comprehensively, define gas flaring as the process of disposing of some associated gas during oil production as a result of either non-availability of the needed equipment to properly harness the gas for positive use, or for safety reasons. It can be described as the process of causing environmental, economically recoverable gas for safety reasons.

Environmental Degradation

Environmental degradation is the degradation of the environment through depletion of resources such as air, water and soil; the destruction of the ecosystem; habitat destruction; the extinction of wildlife; and pollution. It is any change or disturbance to the environment perceived to be deleterious or undesirable.⁸

Accordingly, a contaminated environment due to human activities could cause malnutrition and diseases, morbidity and shortening of life span.⁹The I=PAT equation states that environment impact (I) or degradation is caused by the combination of an already very large and increasing human population (P), Continually increasing economic

⁴ B Gervet 'Gas Flaring Emission Contributes to Global Warning' (Unpublished LL.M Dissertation, Lurlea University of Technology Sweden 2007) 2.

⁵ O T Oghifo, 'Gas Flaring/Power Plants in Nigeria: Social-Economic and Environmental Impact on the People of Niger Delta' (Unpublished Ph.D Thesis, University of Nordland Norway 2001) 22.

⁶ I Okukpon, 'Phasing-out Gas Flaring in Nigeria: A Critical Assessment of the Regulatory Regime' (Unpublished LL.M Dissertation, University of Cape Town 2010) 5.

⁷ R Okere, 'Nigeria Burns Off \$5 Billion Resources Yearly from Gas Flaring'. *The Guardian* (Lagos, 6 November, 2015) 28.

⁸ D L Johnson and Others, 'Meanings of Environmental Terms' [1997] (26) *Journal of Environmental Quality*, 58.

⁹ F I Sajini, 'Population Growth, Environmental Degradation and Human Health in Nigeria', [2011] (8) (4) *Pakistan Journal of Social Sciences*, 187.

growth or per capita affluence (A), and the application of resources depleting¹⁰ and polluting technology (T).

Environmental degradation is also defined as the reduction of the capacity of environmental to meet social and ecological objectives and needs.¹¹ Environmental degradation is occasioned by consistent flow of industrial waste, gas flares, fire disaster, acid rain and so on, which has led to the pollution of farmlands and fish ponds.¹²

Oil and Gas

Oil and gas otherwise called petroleum is a compound mainly composed of hydrocarbon and carbon, and is commonly called a hydrocarbon.¹³ It can exist in gaseous, liquid or solid form. When it is found as a solid, it is coal, shale, tar sand or bitumen. In liquid form, it is referred to as crude oil. Hydrocarbons in gaseous form are known as natural gas. The most commonly known hydrocarbon is crude oil, which is referred to many as petroleum. However, strictly speaking, the term petroleum covers other types of hydrocarbons.¹⁴ Wide variations of crude oil exist, ranging from heavy mixtures that have to be warmed before they can flow, to volatile liquids or gases that condense into liquids at atmospheric pressure (gas flaring).¹⁵

Petroleum means mineral oil (or any related hydrocarbon) or natural gas as it exists in its natural state in strata, and does not include coal or bituminous shales or other stratified deposits from which oil can be extracted by destructive distillation.¹⁶ On the other hand, natural gas means gas obtained from boreholes and wells and consisting primarily of hydrocarbons.¹⁷

¹⁰ Chertow and R Marian, 'The IPAT Equation and its Variants' [2001] (4)(4) *Journal of Industrial Ecology*, 13.

¹¹ ISDR Technology, 'The International Strategy for Disaster Reduction' available at <www.unidr.org> accessed 6 August, 2019.

¹² P P Ugboma, 'Environmental Degradation in oil Producing Areas of Niger Delta Region, Nigeria: The Need For Sustainable Development' [2015] (14)(2) *International Journal of Science and Technology Bahir Dar-Ethiopia*, 75.

¹³ Y Omoregbe, *Oil and Gas Law in Nigeria* (Lagos: Malthouse Press Ltd 2001) 1.

¹⁴ *Ibid.*

¹⁵ *Ibid.*

¹⁶ Petroleum Act, CAP P10 2004, s 15 (1).

¹⁷ *Ibid.*

Gas flaring, which is the burning of natural gas associated with oil and gas production, is one of the most damaging practices in the Nigerian petroleum industry and this has continued to give rise to unimaginable complex consequences in Nigeria, with regard to human health and natural environment.¹⁸ This calls for concern as the gas is not being conserved, re-injected or used in any way but is being wasted thereby impacting negatively on the environment, health and the Nigerian economy as a whole. These impacts are further aggravated because some of the flare stacks are at ground level and point menacingly at the communities belching heat and smoke into the environment.¹⁹

Environment

Generally the term environment is inherently technical in scope and application. This accounts for the difficulties in finding a uniform and generally acceptable definition of the concept. Environment is also defined as the totality of physical, economic, cultural and social circumstances and value of property which also affect the quality of peoples' lives.²⁰ The environment can also be defined environment as all the interesting factor and circumstances that surround, influence and direct the growth and behaviour of individual's beings, group's species and communities.²¹ Also, the environment has been described as a physical matter, that is, the air, the sea, the land, natural resources, flora and fauna and cultural heritage (being items of archaeological, historical, artistic and scientific interest).²²

Environment is also viewed as the totality of the places and surroundings in which we live, work, and interact with other people in our cultural, religious, political and socio-economic activities for self-fulfillment and advancement for our communities, societies or nations.²³ It is within this environment that both natural and man-made things are found. It is not only defined as something out there consisting of lakes, mountains,

¹⁸ A Ajugwo, 'Negative Effects of Gas Flaring: The Nigerian Experience' [2013] (1)(1) *Journal of Environment Pollution and Human Health*, 6.

¹⁹ N Bassey, 'Gas Flaring: Assaulting the Communities, Jeopardising the World', (2008) *Paper Presented at the National Environmental Consultation*, 10-11.

²⁰ B A Graner (ed), *Black's Law Dictionary* (8th edn: West Publishing Co).

²¹ Wilkinson and Wyman, *Environmental Challenge: Learning for Tomorrow's World* (London: Malthouse Press 1986) 87.

²² M Dixon and R M Croquodao, *Cases and Materials on International Law* (2nd edn, London: Blackstone Press Ltd 1995) 521.

²³ A Akinbode, *Introductory Environmental Resource Management* (Ibadan: Daybis Ltd 2002) 1-2.

animals and plants, but it has come to mean everything that surrounds us, that human are integral part of the environment and the interactions within or between and among the living and non-living entities constitute environment.²⁴

Environment has been viewed as a complex relationship existing between the ecosystem and its inhabitants. Scientific explanation contends that environment is the product of a complex ecological system in which human beings and other living and non-living organism co-exist. In this context environment is characterised and classified into two broad categories: physical and cultural. The physical environment is the natural environment, which consists of biosphere, atmosphere, hydrosphere and lithosphere and their inherent resources. The cultural environment generally encompasses the way of life of a set of people in a specific location including human settlements, cultural, historical and religious aspect of human activities.²⁵

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Pollution

Pollution is the act of introducing harmful substances to the environment that results in harming the natural surroundings. Substances that cause pollution are referred to as pollutants. These polluting substances are so diverse and they include chemical products, waste material, light, heat, and noise among others. Due to the diverse nature of pollutants in the world, there are various types of pollution such as water pollution, noise

²⁴ V Home, *Virtual Environment: A Couter Africa Training System* (UNC-Roja: 2000) 11.

²⁵ L Atsegbua, *Environmental Law in Nigeria: Theory and Practice* (Lagos: Ababa Press Ltd 2004) 9.

²⁶ A G Oludayo, *Environmental Law and Practice in Nigeria* (Lagos: University of Lagos Press 2004) 23.

pollution, air pollution, soil contamination, radioactive pollution, and plastic pollution. While some pollution occurs through natural events such as volcanic eruptions and forest fires, most of the pollution in the world is caused by human activities.²⁷ Environmental pollution results in diverse harmful effects on living creatures and the surroundings. Air pollution often leads to health problems in humans such as respiratory diseases, heart diseases, and other ailments. Additionally, polluted air results in acidic rain which is harmful in the soil. Environmental pollution caused by chemicals like lead and mercury mostly lead to developmental problems in children and health complications in adults. On the global scale, pollution often results in an imbalance in the ecosystem and elimination of some endangered species.²⁸

Black Soot

Black Soot is a pseudonym for a type of particle pollution called PM 2.5, an air pollutant comprising a variety of other pollutants like chemical acids, metals and dust particles. The particle has diameters that are 2.5 micrometers or less; due to its tiny size, it can penetrate the lungs and bloodstream easily.²⁹ Black Soot is a byproduct of the incomplete burning of organic (carbon-containing) materials, such as wood, fuel oil, plastics, and household refuse. The fine black or brown powder that makes up soot may contain a number of carcinogens, including arsenic, cadmium, and chromium.³⁰

Acid Rain

Acid rain is a popular term referring to the deposition of a mixture from wet (rain, snow, sleet, fog, cloud-water, and dew) and dry (acidifying particles and gases) acidic components. Distilled water, once carbon dioxide is removed, has a neutral pH of 7. Liquids with a pH less than 7 are acidic, and those with a pH greater than 7 are alkaline. Clean or unpolluted rain has an acidic pH, but usually no lower than 5.7, because

²⁷ B E Sawe, 'What is Pollution' [2018] (17) *World Atlas*, 8.

²⁸ *Ibid.*

²⁹ P Okediya, 'Black Soot: Into the Deadly Air Pollution Plaguing Port Harcourt City' [2021] (4)(12) *Energy Brief Newsletter*, 1.

³⁰ National Cancer Institute, 'Soot' (2019) <<https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/soot>> accessed on 22 April 2022

carbon dioxide and water in the air react together to form carbonic acid.³¹ Acid rain, or acid deposition, is a broad term that includes any form of precipitation with acidic components, such as sulfuric or nitric acid that fall to the ground from the atmosphere in wet or dry forms. This can include rain, snow, fog, hail or even dust that is acidic.³²

National Legal Framework

By and large, the strength of any framework for environmental protection will undoubtedly be enhanced by the fundamental principles used in building its foundation. The article shall first examine the constitutional perspectives³³ to the combating gas flaring and environmental degradation and thereafter examine the legal frameworks for environmental protection and management at the various tiers of Government.

Constitution of the Federal Republic of Nigeria, 1999 (as amended)

The Constitution of the Federal Republic of Nigeria, 1999 (as amended) (CFRN 1999) makes provision for environmental protection by providing that 'the state shall protect and improve the environment and safeguard the water, air and land, forest and wild life of Nigeria.'³⁴ The CFRN 1999 further provided that 'In furtherance of the social order-exploitation of natural resources in any form whatever for reasons other than the good of the community, shall prevented.'³⁵ Again the CFRN 1999 made a categorical pronouncement by enlisting the assistance of its citizen in accomplishing its objective of protecting the environment, when it provided that "it shall be the duty of every citizen to render assistance to the appropriate and lawful agencies in the maintenance of law and order."³⁶ A combined and jurisprudential examination of these provisions clearly creates an obligation on the part of the government of the Federal Republic of Nigeria to protect the environment from noxious acts which includes the flaring of gas, by ensuring that the exploitation of all natural resources especially oil and gas are explored and produced in a safe, healthy and environmentally friendly way.

³¹ United States Environmental Protection Agency, 'What is Acid Rain?' *Newsletter* available at <www.epa.gov>accessed April 30 2022.

³² *Ibid.*

³³ CFRN 1999 CAP C23 LFN, 2004 (as amended)

³⁴ (n 35), s 20.

³⁵ *Ibid.*, s 17 (1)(d).

³⁶ *Ibid.*, s 20 (e).

Stretching it further, it also means that the government is under strict obligations to halt exploitation of oil and gas if such exploitation and production operations are detrimental or hazardous to the lives of Nigerians. To achieve this task, relevant and appropriate regulatory bodies and agencies have been established and the citizens are enjoined to assist them for the effective and efficient discharge of their duties of regulating the Nigerian petroleum industry which is presumed to be governed by public policy.³⁷ It is quite commendable that the Nigerian government, after years of wallowing in environmental unconsciousness, has suddenly woken up to its environmental responsibilities of protecting not just the environment but also its citizens. The extant legal and institutional frameworks gas flaring and environmental degradation in Nigeria all derive their legitimacy from the Constitution. Also the CFRN 1999 provides for the fundamental right to life of every citizen of Nigeria³⁸ which is very sacrosanct to this article because the effects of gas flaring and environmental degradation such black soot and acid rain has the potency of causing the death of a lot of people.³⁹

Petroleum Industry Act 2021 (PIA 2021)

The Petroleum Industry Act 2021 (PIA 2021) was enacted by the federal government of Nigeria to address among other challenges, gas flaring and environmental degradation that arises from the oil and gas exploration and production activities. PIA 2021 introduces the concept of environmental management plan into the oil and gas sector. Oil and gas companies are obligated under the PIA 2021 to present an environmental management plan as a prerequisite for the issuance of an operational licence.⁴⁰ PIA 2021 also provides for financial contribution for remediation of environmental damage in which oil and gas companies are required to contribute funds in advance for the remediation of the environment where gas flaring negatively affects the environment.⁴¹ Also, where an oil and gas company undertakes gas flaring, the PIA 2021 have prescribed for gas flaring fine, as a penalty.⁴² However, the PIA 2021, in a sharp twist make

³⁷ *Station Oil Nigeria Ltd. v Inducon (Nig.) Ltd & Anor* (2021) 7 NWLR (Pt. 1774) 1 SC.

³⁸ (n35) s 33.

³⁹ *Gbemre v. Shell Petroleum Development Company (SPDC) Nig. Ltd.* (Federal High Court, 30January 2013).

⁴⁰ PIA 2021, s 102.

⁴¹ *Ibid*, s 103.

⁴² *Ibid*, s 104.

provision for exemption of some oil and gas companies from the penalties prescribed for gas flaring where the company is a start-up and for strategic operational reasons, including testing.⁴³ The innovations of the PIA 2021 are indeed interesting, what remains is the manifestation of these innovations.

Petroleum Act 1969 (PA 1969)

The Petroleum Act⁴⁴ was enacted in 1969 with the aim of providing a legal framework for the exploration and exploitation of oil and gas resources in Nigeria and all other ancillary matters.⁴⁵ The PA 1969 is the principal law in the Nigeria Petroleum Sector with powers vested in the Minister, to formulate regulations, to prescribe standards and procedures for the purposes of smooth operation of the oil and gas industry in Nigeria.⁴⁶ The PA 1969 is also concise on matters relating to oil and gas pollution, apparently because of the statutory definition of petroleum and powers vested in the minister who is expected to exercise same in prescribing and formulating regulations to ensure compliance with best and current global practice obtainable in the international oil and gas sector. The PA 1969 defined Petroleum as: "...Mineral oil (or any related hydrocarbon) or natural gas as it exists in its natural state in strata, and does not include coal or bituminous shale or other stratified deposits from which oil can be extracted by destructive..."⁴⁷

The mention of natural gas in the above definition of petroleum, indicate that the Act envisages the regulation of gas flaring and its resultant environmental degradation has empowered the minister to make certain regulations in respect thereto. These include regulations providing generally, for matters relating to licenses and leases granted under the Act and operations carried out there under, including the prevention of environmental degradation.⁴⁸

⁴³ (n 42), s 107.

⁴⁴(n18).

⁴⁵*Ibid* Preamble.

⁴⁶*Ibid* s 9.

⁴⁷*Ibid*, s 15 (1).

⁴⁸*Ibid*, s 9(1)(b)(iii).

National Environmental Standards and Regulations Enforcement Agency (Establishment) Act 2007 (NESREA 2007)

The Part II of the National Environmental Standards and Regulations Enforcement Agency (Establishment) Act 2007 contains the functions of the NESREA. The NESREA is authorised to enforce compliance with laws, guidelines, policies and standards of environmental matters. Such standards would include the federal water quality standards and air quality standards. In carrying out its functions, it is to coordinate and liaise with stakeholders within and outside Nigeria on matters of environmental standards, regulations and enforcement. Relevant stakeholders would include the organised private sector, environmental groups at both national and international levels, and other ministries and parastatals.⁴⁹ The NESREA 2007⁵⁰ setting up NESREA empowers it to come up with modalities on ensuring environmental awareness and compliance in Nigeria. This is achieved through effective enforcement mechanism as championed by NESREA and its sister agencies; some of the techniques and mechanism used in ensuring environmental awareness and compliance includes; effective enforcement mechanism, Public Participation in Environmental Protection and Management, Environmental education, cooperation and Partnership with other inter government Agencies, non-Governmental organization and relevant agencies that are directly or indirectly involved in activities related to the protection of the environment in Nigeria and the global community at large. The NESREA 2007 provides for an impressive array of enforcement mechanisms. They include: issuance of permits, licences, certificates for environmental compliance, inspections, searches, seizures, arrests, sealing, notice of violation, notice of revocation of permit, revocation order, recourse to courts for civil penalties for violation, injunctive relief to require compliance, criminal sanctions for violations, citizen's suits to enforce the statutes in the absence of effective government enforcement.⁵¹

⁴⁹ M T Ladan, 'Review of NESREA Act 2007 and Regulations 2009-2011: A New Dawn in Environmental Compliance and Enforcement in Nigeria' [2012](8)(1) *Law, Environment and Development Journal*, 116.

⁵⁰ NESREA Act 2007.

⁵¹ (n 52).

Environmental Guidelines and Standards for the Petroleum Industry in Nigeria 1981 (as revised) (EGASPIN)

The EGASPIN 1981, *inter-alia*, seeks to “establish guidelines and standard for the environmental quality control of the petroleum industry taking into account existing local conditions and planned monitoring programmes.”⁵² Interestingly, part III, paragraph 3.8.8. of EGASPIN reiterates the fact that gas flaring is prohibited in Nigeria. EGASPIN however, goes further to set some conditions should the operator or licensee “be constrained to flare gas”⁵³ in Nigeria.

However, the EGASPIN, just like similar legal frameworks, are not effective in Nigeria, perhaps because of the shortage of capacity or manpower and fund to efficiently enforce the standards of gaseous release, exploration and production as contained therein. For instance, even though the EGASPIN stipulates a maximized sterilized approach distance of two meters’ radius’ which should be maintained from the base of the stack,⁵⁴ most oil exploration and production companies in Nigeria still situate the flare stack right within miles from residential communities and yet the regulatory bodies such as DPR are handicapped in compelling compliance and this is indeed a most unfortunate sorry situation for the Nigerian environment which has been largely degraded.

The EAGSPIN is specially designed to be reviewed periodically. However, the guidelines and provisions have been reviewed just once in 2002, about 11 years after it was enacted in 1998. This review even failed to make any additions to the issue of gas flaring contained in EGASPIN. Even though further amendment is long overdue, it is however, submitted that an effective and efficient enforcement of the current version and guidelines of the EGASPIN can drastically reduce, if not stop the flaring of gas and environmental degradation in Nigeria.

Flare Gas (Prevention of Waste and Pollution) Regulation 2018

The Flare Gas (Prevention of Waste and Pollution) Regulation 2018⁵⁵ introduced a new payment regime for flaring which also appears to have inherited the polluters pay principle like that contained in carbon tax. The

⁵² EGASPIN1981, pt I art 4 (a).

⁵³ *Ibid.* art 3.

⁵⁴ K K Ezeibe, ‘The Legislative and Institutional Framework of Environmental Protection in the Oil and Gas Sector in Nigeria-A Review’ (2015) available at <<http://www.sealripaji.org/pdf.39668>> accessed 30 April 2021.

⁵⁵ Flare Gas (Prevention of Waste and Pollution) Regulation 2018.

Petroleum Act 1969 empowers the Federal Government to take all associated gas flared without any cost and royalty payment.⁵⁶ This same right also extends to all natural gas found during exploration and production existing under a petroleum licenses or lease and requires a license to enter into a separate contract to harness such associated gas recovered during exploration.⁵⁷ A licensee or lessee is only allowed to utilize its associated gas free of charge for personal consumption which is limited to re-injection or sustaining production of crude oil.⁵⁸ Also permit holder or a producer under the producer Approved Flare out Project scheme may be permitted to take flare gas out of a prescribed site subject to the issuance of a permit without obligations to pay royalties to the Federal Government.⁵⁹ A permit holder under the regulation is consequently, banned from engaging gas flaring under this provision.⁶⁰ Finally, it is projected that Nigeria can realize up to USD 3.5 billion worth of investments from interested bidders since the launch of the programme in 2018. As a programme gains momentum, this paper concludes that NGCP has the prospect of ending gas flaming in Nigerian. It is also has the potential to generate revenue for government but the key factor towards solving the power problems remains adequate infrastructure which remains unclear or how this programme intends to solve, although it can generate some fort of security fuel supply.

Nigerian Gas Flare Commercialisation Programme 2016

Under the Nigerian Gas Flare Commercialisation Programme 2016⁶¹ (NGFCP 2016), the Federal Government of Nigeria shall exercise its ownership rights of all gas flared in Nigeria. The Petroleum Act⁶²(PA) provides that the Minister of Petroleum may, in the public interest, impose terms and conditions applying to any natural gas discovered, including the right of the Federal Government of Nigeria (FGN) to take any associated gas that would have been flared either free of cost at the flare or at an agreed cost. To this end, the FGN shall, under the NGFCP 2016, grant licences to third parties (that is, licensees) to access and collect such gas on

⁵⁶*Ibid*, 1st sch art 35 (b)(i).

⁵⁷*Ibid*.

⁵⁸(n 57) reg 3(3).

⁵⁹(n57).

⁶⁰*Ibid*, reg 12(2).

⁶¹ Nigerian Gas Flare Commercialisation Programme 2016.

⁶² (n18) 1stsch para 35(b)(i).

behalf of the FGN from the flare points of oil producing companies. The licensees will then be required to use necessary technology to set up the facilities for the delivery and collection of gas at the flare points. Under the NGFCP 2016, all identified gas flare points are part of the programme and compliance with the programme will be a licence condition for the award and renewal of all Oil Mining Leases and Marginal Fields. The proper implementation of the NGFCP 2016 is a game-changer to the Nigerian economy and can solve Nigerians gas flaming problem provided there is technological progress back with full regulatory support for commercially innovative players in the industry. The program me has the potential to change Nigeria's narrative as a crude oil-based economy to a more balanced gas based industrialized economy there by contributing to adequate security of fuel supply for power generation. However, it remains imperative to consider the need for infrastructural development to facilitate the transit of adequate domestic gas supply to gas fired plants.

National Gas Policy 2017 (NGP 2017)

The National Gas Policy 2017⁶³ was approved by the Nigerian Federal Executive Council to replace the 2008 Nigeria Gas Master plan. Some of the innovations introduced by the NGP 2017 include reforms of governance (legislation and regulation) in the gas sector, enforcement of domestic supply obligations, fiscal provisions, reworking the industry structure with a focus on public-private partnerships, providing incentives and opportunities for investing in natural gas products such as Natural Gas Liquids (NGL) and Liquefied Petroleum Gas (LPG), developing gas infrastructure and building markets, completely prevent gas flaring and limit the reinjection of associated gas in oil projects, separate activities between the government and private sector, pursue a project-based rather than centrally-planned domestic gas development approach, inclusion of a model Gas Development Agreements in Production Sharing Contracts and make a strong maintenance and safety culture a priority, establish strong linkages with electric power, agriculture and the real sectors, provide relevant regulations and a network code and implement and complete necessary infrastructure for gas.⁶⁴

⁶³ National Gas Policy 2017.

⁶⁴Aelex, 'A Quick Overview of the New National Gas Policy' available at <<https://www.aelex.com/a-quick-overview-of-the-new-national-gas-policy/>> accessed on 30 April 2022.

The NGP acknowledges that Nigeria's extant petroleum law, the Petroleum Act of 1969 is designed primarily for crude oil, and does not address gas as a commodity in its own right. This is compounded by the fact that there is no legislation that sufficiently provides for the regulation, production and utilisation of downstream gas. The NGP provides that a new gas legislation will be enacted that will treat gas as a separate commodity and will implement separation of the upstream from the midstream; separation of gas infrastructure ownership and operations from gas marketing; licence different activities in the gas value chain; and provide for appropriate pricing, competition and a fiscal regime. The responsibility for the economic and technical regulation of the gas sector will be vested in a strong independent regulator.

Climate Change Act 2021 (CCA 2021)

The Climate Change Act 2021 (CCA 2021) establishes a National Council on Climate Change that will be a corporate entity, and make policies, regulations, guidelines, institute penalties (including fines).⁶⁵ The Council, which will be chaired by the President, with the Vice President as Vice Chair, will also administer the Climate Change Fund, as well as oversee, working with relevant partners, the implementation of Carbon Emission Trading and a Carbon Tax in Nigeria. Under the CCA 2021, the Federal Ministry of Environment, working with the Federal Ministry of Budget and National Planning, is mandated to set a 'Carbon Budget' for Nigeria, which is basically the allowable/acceptable quantity of greenhouse gases in the country, per time. The CCA 2021 mandates "private entities" that employ 50 or more persons to Create Annual Carbon Emission Reduction Targets that are aligned with the National Climate Change Action Plan, Designate a member of staff as "Climate Change Officer" or "Environmental Sustainability Officer". It will be this person's responsibility to submit annual reports to the Climate Change Council, on the entity's efforts/progress at meeting the targets set in (1) above.

⁶⁵ T Ogunlesi, 'Highlights of Nigeria's New Climate Change Act 2021' available at <<https://www.linkedin.com/pulse/highlights-nigerias-new-climate-change-act-2021-tolu-ogunlesi>> accessed 30 April 2022.

African Charter on Human and People's Rights (Ratification and Enforcement) Act 1983 (ACHPRA 1983)

The African Charter on Human and People's Rights (Ratification and Enforcement) Act 1983 (ACHPRA 1983),⁶⁶ became part of the law of Nigeria pursuant to its adoption and domestication in Nigeria. The Charter contains ample provisions on civil and political rights, economic, social and cultural rights, and right to a general satisfactory environment among others.⁶⁷

Regional Legal Framework

Within the West African Region, through the Economic Community of West African States (ECOWAS), various steps have been taken to enact laws applicable to the member states which would protect the environment within the ECOWAS region from degradation.

Revised Treaty of the Economic Community of West African States (ECOWAS) 1993

The Revised Treaty of the Economic Community of West African States (ECOWAS) 1993 of which Nigeria is a member state makes provision for the establishment of a technical commission for the environment and natural resources.⁶⁸ This commission has the responsibility of providing solutions to matters relating to the environment such as gas flaring in member states. The ECOWAS treaty also makes provision that member states shall make adequate provision for science and technology to address the issue of environmental conservation.⁶⁹

Economic Community of West African States (ECOWAS) Environmental Policy 2008 (ECOWAS EP 2008)

The overall objective of the ECOWAS Environmental Policy 2008 (ECOWAS EP 2008) is to reverse environmental degradation and depletion of natural resources, ameliorate the quality of the living environment, conserve biological diversity, with a view to ensuring a healthy and productive environment; thereby improving the well-being of the ecosystem and the population of the sub region.⁷⁰ The ECOWAS EP 2008

⁶⁶ Cap 10 LFN, 1990.

⁶⁷ *Ibid.* art 4, 16, 24, and 25.

⁶⁸ (n 68) art 21.

⁶⁹ *Ibid.*, art 27.

⁷⁰ ECOWAS EP 2008, 5.3.1.

seeks to employ certain strategies to achieve its objectives such as strengthening of environmental governance (setting up of a sub-regional mechanism) and promotion of capacities to that effect, promotion of sustainable management of the resources for the improvement of the sub-regional economy in an environment-friendly manner; prevention of environmental pollution and nuisance, urban waste and for the control of trans-boundary movements of hazardous waste/products and promotion of information, education, and communication for a healthy environment.⁷¹

International Legal Framework

The reduction of greenhouse gases (referred to as “GHGs”) which are being released into the atmosphere as a result of gas flaring is one of the major problems facing the international community today. Notwithstanding the existence of international treaties aimed at combating the harmful effects of climate change and the effects of gas flaring on the environment, domestic legislation also plays an all-important role in tackling the problem.

Many international agreements and initiatives exist on air quality standards and for prevention and regulation of atmospheric pollution. However, for the purposes of this article, discussion will be limited to the United Nation’s Framework Convention on Climate Change 1997 (Kyoto Protocol), Global Environment Facility 1991 and the Paris Agreement 2016. These instruments are geared towards mitigation of global climate change, regulation of hydrocarbon-related green-house gas (GHG) emissions and international pro-active reduction of gas flaring. The international legal framework/standards are examined below.

United Nation’s Framework Convention on Climate Change 1992 (UNFCCC 1992)

The United Nation’s Framework Convention on Climate Change 1992 (UNFCCC 1992) is the foremost and most significant watershed in the multidimensional effort to tackle climate change.⁷² The UNFCCC is one of the three conventions adopted at the Rio Earth Summit in 1992,⁷³ and its

⁷¹ *Ibid*, 5.3.2.

⁷² F Daniel and P Marjan, *Climate Change Law* (Cheltenham: Edward Elgar Publishing Ltd 2016) 58.

⁷³ Europa, “Environment, Climate Change and Green Economy” [1992] *Public Environment Climate*, 9.

ultimate goal is to stabilize GHG concentrations in the atmosphere at a degree that will inhibit dangerous human interference with the climate system.⁷⁴ The Convention requires that such degree should be attained within a time-frame necessary to permit ecosystems to adapt naturally to climate change, to make sure that food production is not endangered, and to foster sustainable economic development.⁷⁵ The Convention came into force on March 21, 1994, and presently, 197 countries have ratified it.⁷⁶ In furtherance of article 22 of the Convention, the UNFCCC is subject to ratification, adoption, or approval by countries and regional economic integration associations.⁷⁷ It allows countries and regional economic integration associations that have not signed the Convention to agree to it at any time.⁷⁸

Farber and Peeters write that the UNFCCC sets out numerous operating principles that offer conceptual anchorage for the climate regime.⁷⁹ One of such principles is the equity and common but differentiated responsibilities and respective capabilities.⁸⁰ Farber and Peeters assert that the UNFCCC 1992 is the foremost international environmental standard to express the principle of equity and common but differentiated responsibilities and respective capabilities in a workable provision.⁸¹ The principle developed from the understanding of the “common heritage of mankind” and is a demonstration of universal principles of equity in international law.⁸² It acknowledges historical disparities in the contributions of developed and global south countries to global environmental challenges, as well as disparities in their respective economic and technical abilities to address these challenges.⁸³ In line with their common but differentiated responsibilities and respective capacities, as well as social and economic circumstances, parties to the UNFCCC 1992 recognize that the universal nature of climate change demands the

⁷⁴UNFCCC 1992, art 2.

⁷⁵*Ibid.*

⁷⁶*Ibid.*

⁷⁷*Ibid*, art 22.

⁷⁸*Ibid.*

⁷⁹ Daniel and Marjan (n 72).

⁸⁰(n 74), art 3.

⁸¹*Ibid.*

⁸²Center for International Sustainable Development Law, “Law and Governance for the Sustainable Development Goals: Integrating Environment, Human Rights, and Economy through Legal Scholarship and Empowerment” *Newsletter*, 2009, 12.

⁸³*Ibid.*

broadest practicable cooperation by all countries.⁸⁴ This principle has worked as a guiding principle as well as a basis for arguments in the UN climate negotiations. For instance, while global south countries like Nigeria have argued on the basis of this principle for developed countries' leadership and differential treatment for global south countries, developed countries contend that the principle must be understood as a dynamic notion that changes concurrently with changing economic and other circumstances.⁸⁵

Also, in reflecting the principle, the UNFCCC 1992 splits countries into "Annex I" and "non-Annex I" countries, with the former representing developed countries and the latter representing global south countries.⁸⁶ The UNFCCC 1992 stipulates greater mitigation roles for Annex I countries compared to the non-Annex I countries.⁸⁷ Nigeria is not included in the Annex I countries, and this suggests lesser mitigation responsibilities for Nigeria. Despite the incessant gas flaring in Nigeria, one cannot compare the levels of GHGs emitted from all sources in industrialized countries to GHG emissions from Nigeria. However, there is no basis for allowing countries such as Nigeria to enjoy lesser commitments under the UNFCCC 1992 in view of the level of GHG emitted from gas flaring in Nigeria. Conversely, assuming the UNFCCC 1992 created binding obligations on Nigeria, it will only be enforceable after it has been domestically incorporated into a law.⁸⁸

Furthermore, the UNFCCC acknowledges that the absence of complete scientific certainty on issues of climate change ought not to serve as a justification for delaying action.⁸⁹ Specifically, the UNFCCC 1992 provides in article 3(3) as follows:⁹⁰

The Parties should take precautionary measures to anticipate, prevent or minimize the causes of climate change and mitigate its adverse effects. Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing such measures, taking into account that policies and measures to deal with

⁸⁴ Daniel and Marjan (n 72).

⁸⁵(n 74).

⁸⁶Climate Nexus, "Common but Differentiated Responsibilities and Respective Capabilities" *Climate Change News* (2011), 3.

⁸⁷*Ibid.*

⁸⁸(n 35) s 12.

⁸⁹(n 74).

⁹⁰*Ibid* art 3(3).

climate change should be cost-effective so as to ensure global benefits at the lowest possible cost.

Article 3(3) is drafted in a manner that its language is unassertive and weak. Farber and Peeters argue that article 3(3) refers to “precautionary measures”, and neither defines precaution as a “principle” nor an “approach”. They contend that while an “approach” is rather unclear from a legal perspective, a “principle” presupposes legal effects.⁹¹ This article agrees with the writers and argues that the drafters of article 3(3) preferred the phrase “precautionary measures” to “principle” which presupposes a non-obligatory plan or course of action. Relatedly, Article 3(3) also depicts a right to take preventive measures, and not an obligation to take action.⁹² Also, the provision of article 3(3) is permissive in nature in view of the fact that it provides that parties “should” take precautionary measures, rather than “shall” which is much more prescriptive and forceful. As a result, the permissive provision of article 3(3) makes it easier for Nigeria to avoid taking actions aimed at mitigating GHG emissions from gas flaring. Nigeria became a signatory to the UNFCCC on June 13, 1992, and ratified same on August 29, 1994,⁹³ but did not domesticate the UNFCCC which was eventually operationalized by the Kyoto Protocol.

Kyoto Protocol to the United Nation’s Framework Convention on Climate Change 1997

The 1997 Kyoto Protocol to the UNFCCC was adopted in Kyoto, Japan on 11 December 1997 and entered into force on 16 February 2005.⁹⁴It strengthens the commitments of the UNFCCC, particularly those enshrined in Articles 4(2)(a) and (b).⁹⁵ The Protocol covers six greenhouse gases in its Annex B: carbon dioxide(CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF₆).⁹⁶

The Kyoto Protocol builds upon the framework of the UNFCCC. Basically, the Protocol sets out the specific commitments of developed countries in

⁹¹ Daniel and Marjan (n 73).

⁹² *Ibid.*

⁹³ (n 52).

⁹⁴ Kyoto Protocol available at <http://unfccc.int/kyoto_protocol/items/2830.php>accessed 19 May 2021.

⁹⁵ *Ibid.*

⁹⁶ UNFCCC, ‘Text of the Kyoto Protocol to the United Nations Framework Convention on Climate Change’ <<http://unfccc.int/resource/docs/convkp/kpeng.pdf>>accessed 19 May 2021.

its Annex B. These commitments require them, either individually or jointly, to reduce their overall greenhouse emissions by at least 5.2% below 1990 levels over the 2008 to 2012 period.⁹⁷ The Kyoto Protocol recognises that developed countries are principally responsible for the current high levels of GHG emissions in the atmosphere as a result of more than 150 years of industrial activity.⁹⁸ So, developing countries are not subject to these binding emission reduction targets.⁹⁹

The Kyoto Protocol further requires developed countries to:

...strive to implement policies and measures [that is, to combat climate change] ...to minimise adverse effects...of climate change...and social, environmental and economic impacts on the Parties, especially developing country Parties...

Thus, the bulk of the burden to reduce GHG emissions lies on developed countries and they can achieve this through implementation of national measures. However, in order to achieve this, the Protocol provides for three cost-effective mechanisms through which parties can meet their assigned targets, namely the Joint Implementation (JI), Clean Development Mechanism (CDM) and the Emissions Trading (ET).¹⁰⁰ For the purposes of this article, only the CDM is examined below.

Global Gas Flaring Reduction Partnership 2001 (GGFR 2001)

The World Bank in cooperation with the Government of Norway launched a Global Gas Flaring Reduction Initiative (GGFR 2001) at the World Summit on Sustainable Development in August, 2002.¹⁰¹ The GGFR 2001 is a public-private partnership with participation from governments of oil-producing countries, state-owned companies and major international oil companies.¹⁰² The aim of the GGFR 2001 is “to support national governments, development agencies, and the petroleum industry in their

⁹⁷ P W Birnie and A E Boyle, *International Law and the Environment* (2nd edn, OUP Publications 2002) 526.

⁹⁸ (n52).

⁹⁹ Louise du Toit ‘Promoting Clean Development Mechanism Implementation in South Africa: Law and Policy’

<http://search.sabinet.co.za/WebZ/Authorize?sessionid=0&bad=ejour/ejour_badsearch.html&portal=ejournal&next=images/ejour/sapr/sapr_v24_n1_a2.pdf>accessed 20 May 2021.

¹⁰⁰ (n52).

¹⁰¹ ‘A Twelve Year Record of National and Global Gas Flaring Volumes Estimated using Satellite Data: Final Report to the World Bank.’ May 30, 2007.

¹⁰² *Ibid.*

efforts to reduce the environmentally damaging flaring and the petroleum industry in their efforts to reduce the environmentally damaging flaring and venting of gas associated with the extraction of crude oil.”¹⁰³ Thus, it facilitates and supports national efforts to use currently flared gas by promoting effective regulatory frameworks and tackling the constraints on gas utilization, such as insufficient infrastructure and poor access to local and international energy markets, particularly in developing countries.¹⁰⁴ In addition, the GGFR 2001 seeks to reduce poverty by developing concepts for how local communities close to the flaring sites can use natural gas and liquefied petroleum gas (LPG) that may otherwise be flared and wasted.¹⁰⁵ The Programme has already evaluated opportunities for small-scale gas utilisation in several countries, including Nigeria.¹⁰⁶ The GGFR 2001 is led by the World Bank Group in collaboration with the Government of Norway. The idea for this Initiative was put forward during a June 2001 Oslo seminar hosted by Anne Kristin Sydney, who was then the Norwegian Minister for International Development. Subsequently, the Initiative was launched during the Conference of the Parties (COP-7) under the United Nations Framework Convention on Climate Change (UNFCCC) in Marrakech. Nigeria and Canada are both members of the Partnership. The GGFR 2001’s action plan to reduce gas flaring and venting focuses on four key areas¹⁰⁷ namely: a) commercialization of associated gas; b) regulations for associated gas; c) implementation of a voluntary standard for associated gas flaring and venting reduction; and d) capacity building to obtain carbon credits for flaring and venting reduction projects.¹⁰⁸

Paris Agreement 2015

At the 2015 United Nations Climate Change Conference, Paris, also known as COP 21, parties to the UNFCCC reached a landmark agreement to eliminate climate change and intensify the actions needed for a sustainable

¹⁰³Global Gas Flaring Reduction Initiative Launched as Public-Private Partnership’ World Bank Press Release, Johannesburg, August 30, 2002.

¹⁰⁴Global Gas Flaring Reduction Partnership: Towards a World Free of Flares’ (2009) Flaring Reduction Forum.

¹⁰⁵*ibid.*

¹⁰⁶*ibid.*

¹⁰⁷(n103).

¹⁰⁸World Bank: Over 150 Billion Cubic Meters of Gas Flared Annually’, available at <http://www.flaringreductionforum.org/downloads/GGFR_brochure.pdf>accessed 30 May 2021.

low carbon future by signing a legally binding agreement on the climate.¹⁰⁹ The Agreement rests on the UNFCCC, and for the first time, carries all countries into a universal cause to pursue determined efforts to address climate change and adapt to its impacts, with heightened support to aid global south countries to do so.¹¹⁰ The key objective of the Agreement is to bolster the global reaction to the danger posed by climate change by maintaining a “global temperature increase this century far beneath 2 degrees Centigrade beyond pre-industrial levels and to push towards efforts to restrict the temperature rise even further to 1.5 degrees Centigrade”.¹¹¹ The Paris Agreement is focused on bolstering the capacity of countries to address the effects of climate change.¹¹² The Agreement was opened for signature on April 22, 2015 and as at September 2018, 180 parties have ratified it.¹¹³ It entered into force on November 4, 2016, and charts a new course in the global climate effort.¹¹⁴ Although Nigeria has signed and ratified the Paris Agreement,¹¹⁵ the Agreement is yet to be domestically incorporated into a law as required by the Nigerian Constitution.

As with the preceding instruments, the Paris Agreement also recognizes the principle of equity and common but differentiated responsibilities and respective capabilities.¹¹⁶ For this reason, scholars such as Pardy state that the Agreement and its preceding Convention are all about “wealth distribution, social justice and development”.¹¹⁷ He writes that rather than requiring mitigation of GHG emissions and energy use, the Paris

¹⁰⁹European Commission, “Paris Agreement” available at <https://ec.europa.eu/clima/policies/international/negotiations/paris_en>accessed 30 May 2021.

¹¹⁰United Nations Climate Change, “The Paris Agreement” available at <<https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>>accessed 30 May 2021.

¹¹¹*ibid.*

¹¹²*ibid.*

¹¹³United Nations Framework Convention on Climate Change, “Paris Agreement-Status of Ratifications” available at <https://unfccc.int/paris_agreement/items/9444.php>accessed 30 May 2021.

¹¹⁴(n111).

¹¹⁵Climate Analytics, “Paris Agreement Ratification Tracker” online: Available at <<https://climateanalytics.org/briefings/ratification-tracker.html>> Accessed on 30 May 2021.

¹¹⁶United Nations Framework Convention on Climate Change, “The Paris Agreement” art (2) (2) available at <https://unfccc.int/paris_agreement/items/9485.php>accessed 30 May 2021.

¹¹⁷B Pardy, “Paris is a Progressive Fairy Tale: In Praise of American Withdrawal” [2018](32)*Forthcoming Journal of Environmental Law and Practice*, at 6.

Agreement envisions the transfer of resources from developed countries to global south countries as well as a rise in energy consumption in the global south.¹¹⁸ In the same vein, the United States Government also claims that the Agreement imposes largely discriminatory environmental standards on US corporations and workers.¹¹⁹ Consequently, the US has given notice of its intention to the United Nations to leave the Paris Agreement by 2020, in line with article 28 of the Agreement which allows state parties to withdraw from the Paris Agreement at any time after three years from the date on which the Paris Agreement comes into force.¹²⁰

In the build-up to the Paris Conference, parties were required to submit Intended Nationally Determined Contributions (INDCs) which showed each country's agenda for tackling climate change, mitigating GHG emissions, and how the countries intend to meet those objectives.¹²¹ The Paris Agreement now recognizes these INDCs as Nationally Determined Contributions (NDC) and mandates parties to carry on and communicate determined efforts through their NDCs to respond to the challenges posed by climate change.¹²² Parties are also mandated to report on a frequent basis on emissions and progress towards their NDCs under a transparency framework created in article 13 of the Agreement. In line with the requirement of the Agreement, Nigeria has submitted its NDC which reports that emissions in Nigeria are anticipated to rise to around 900 million tonnes per year by 2030, which means about 3.4 tonnes per individual.¹²³ A critical look at Nigeria's NDC reveals that it acknowledges the impact of GHG emissions from gas flaring on climate change.¹²⁴ It provides that one of its key aspects is to work towards ending gas flaring

¹¹⁸ *ibid.*

¹¹⁹ New York Times, "Trump Will Withdraw U.S. From Paris Climate Agreement" available at <<https://nytimes.com/2017/06/01/climate/trump-paris-climate-agreement.html>>accessed 31 May 2021.

¹²⁰ V Volcovici, "U.S. Submits Formal Notice of Withdrawal From Paris Climate Pact" *Reuters* (New York, August 4, 2017) 10.

¹²¹ Parliament of Australia, "Paris Climate Agreement: A Quick Guide" available at <https://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/pubs/rp/rp1718/Quick_Guides/ParisAgreement>accessed 31 May 2021.

¹²² (n74) art 3 and 4(2).

¹²³ United Nations Climate Change, "Nigeria's Intended Nationally Determined Contribution" available at <www4.unfccc.int/submissions/INDC/Published%20Documents/Nigeria/1/Approved%20Nigeria's%20INDC_27115.pdf>accessed on 31 May 2021.

¹²⁴ *ibid.*

by 2030.¹²⁵ In order to achieve this, the NDC proposes several mitigation measures which include reducing the potential GHG emissions from gas flaring by 64 million tonnes per year, from 2030.¹²⁶ A practical means of achieving Nigeria's gas flaring reduction target under its NDC, is to enact comprehensive legislation in this regard.

A synthesis report released by the UNFCCC on the cumulative impact of the NDCs submitted by state parties reveals that NDCs are anticipated to bring about substantial emissions reductions and reduce GHG emissions progression in the coming years, but would be insufficient to counter the rising trend of global GHG emissions by 2025 and 2030.¹²⁷ A more recent synthesis report of the UNFCCC has now concluded that greater GHG emissions mitigation efforts than those related to the NDCs will be needed in the period after 2025 and 2030 in order to maintain the temperature increase below 2 degrees Centigrade beyond preindustrial levels.¹²⁸ Considering the amount of GHGs emitted by gas flaring, this calls for a lasting legal solution to the intractable problem of gas flaring in Nigeria.

The commitments under the Paris Agreement require governments to be more prescriptive about mitigating GHG emissions from gas flaring.¹²⁹ The Paris Agreement makes some binding provisions on Nigeria, but in the absence of domestication, these provisions will not be enforceable in Nigeria. Some of these provisions include the obligation to undertake domestic mitigation measures with the aim of achieving its NDCs,¹³⁰ preparation and communication of strategies for low GHG emissions development reflecting its peculiar circumstance,¹³¹ communication of its NDCs every five years,¹³² formulation and communication of long term low GHG emissions development plans,¹³³ and provision of national

¹²⁵(n 74).

¹²⁶*ibid.*

¹²⁷United Nations Climate Change, "Synthesis Report on the Aggregate Effect of the Intended Nationally Determined Contributions" available at <<https://unfccc.int/resource/docs/2015/cop21/eng/07.pdf>>accessed 31 May 2021.

¹²⁸United Nations Climate Change, "Aggregate Effect of the Intended Nationally Determined Contributions: An Update" available at <<https://unfccc.int/resource/docs/2016/cop22/eng/02.pdf>>accessed 31 May 2021.

¹²⁹Fluenta, "Flaring Regulations Series: European Union" available at <www.fluenta.com/news/flaring-regulations-series-european-union>accessed 31 May 2021.

¹³⁰(n76) art 4 (2).

¹³¹*ibid*, art 4 (6).

¹³²*ibid*, art 4 (9).

¹³³*ibid*, art 4(19).

inventory report of anthropogenic emissions as well as information required in assessing progress made in enforcing and achieving its NDC.¹³⁴

Given that gas flaring reduction is an important aspect of Nigeria's NDC, it will be imperative for Nigeria to show that it is carrying out domestic mitigation measures aimed at reducing gas flaring. It is also mandatory for Nigeria to prepare and communicate its strategies such as legislative reforms aimed at achieving low GHG emissions including emissions from gas flaring as required under the Paris Agreement. Also, the national inventory report of anthropogenic emissions required to be submitted could assist in monitoring progress made towards implementing and achieving Nigeria's NDC as it relates to gas flaring reduction.

In order for these provisions to be enforceable in Nigeria, they must be incorporated into domestic laws. Accordingly, this article contends that one of the solutions to the gas flaring challenge lies in enacting new legislation and domesticating the provisions of international environmental standards on GHG emissions such as the Paris Agreement.

Conclusion

This research work has succinctly discussed in four main chapters. Chapter one basically dealt with introduction while chapter two dealt basically with the review of various literatures that would come in aid in the course of the research. Chapter three delved into the heart of the matter thereby dissecting various laws and institutional bodies set up for the purpose of tackling the challenges of gas flaring and environmental degradation in Nigeria while Chapter four dealt with an in-depth analysis of the structure put in place to curb gas flaring and environmental degradation as well as the reason for the failure to eradicating gas flaring and environmental degradation and a comparative analysis of Nigeria with Canada and Norway in arriving at a realistic approach to end gas flaring and environmental degradation in Nigeria.

Based on the fore going, the paper makes the recommendations contained hereunder.

¹³⁴*ibid*, art 13(7).

Recommendations

Based on the findings and Conclusion of the research as indicated above, the paper makes the following recommendations:

- I. The Constitution of the Federal Republic of Nigeria 1999 (As amended) has made provision for the right to life and gas flaring by oil and gas companies results in black soot which causes the death of many Nigerians. In view of this, the dissertation recommends that the judiciary should be more proactive in dealing with cases arising from the enforcement of the fundamental right to life against oil and gas companies that engage in gas flaring. The judiciary should give such cases accelerated hearing considering the fact that life is involved and that the companies be made to pay heavily in compensation to the applicants.
- II. In view of the inadequacy and ineffectiveness of the extant legal mechanisms for combating gas flaring and environmental degradation, it is recommended that the federal government employ stiffer sanctions and penalties against gas flaring with no exceptions in order to show zero tolerance for gas flaring and environmental degradation in Nigeria.
- III. It is also recommended that the Federal government should revisit the issue of exemption from gas flaring penalties for some class of oil and gas companies as provided for in the Petroleum Industry Act 2021. Such exemptions would only further impair the utilization of the legal mechanisms for combating gas flaring and environmental degradation in Nigeria.
- IV. It is also recommended that the Federal government consider keenly the current trends and best global practice that can be learnt from other jurisdictions for combating gas flaring and environmental degradation in Nigeria. The oil producing province of Alberta in Canada and Norway are clearly ahead of Nigeria in terms of application of global best practices for combating gas flaring and environmental degradation in their jurisdictions and this paper has examined those best practices which Nigeria can learn in her quest to successfully combat gas flaring and environmental degradation.