



DUALE, OVIA &
ALEX-ADEDIPE

Gas Flaring: Mitigating Environmental Impact to Achieve Commercialisation



Introduction

Within the field of energy innovation, a forward-thinking Nigerian energy firm, **NIGUS International**, has struck a **\$1 billion-dollar energy deal** with **Beijing Zhogmin Xinjunlong New Energy Technology Company Ltd**, a Chinese energy technology firm (the “**Strategic Partnership**”).

The Strategic Partnership is aimed at monetising Nigeria’s commercial-quantity gas which would, otherwise, have been burnt-off into the atmosphere – for context, Nigeria’s gas reserve has a life index of approximately **94 years**. This USD\$1 Billion Strategic Partnership will yield the creative capacity needed to turn gas flaring – a major environmental issue – into a wealth of opportunities via cutting-edge gas processing technology.



Gas Flaring Explained

Gas flaring is a practice that involves burning off associated gas which is produced during the extraction and refining of crude oil. In addition to wasting valuable by-products produced during the extraction of crude oil, this inefficient method releases greenhouse gases ("GHG") into the atmosphere, which results in environmental damage. Converting flared gas into liquefied petroleum and natural gas offers a means to promote environmental sustainability and economic viability.

Double Trouble – Economic Loss and Environmental Degradation

Available data indicate that Nigeria has flared gas worth over \$1 Billion (\approx **780 Billion Naira**) from January 2022 to August 2023 and puts the volume of gas flared in 2022 alone at 224.9 billion standard cubic feet. Other than aggravating climate change, gas flaring also pollutes the air and water – research indicates that public health is directly threatened by the high rates of respiratory illnesses in the neighbourhoods surrounding flaring locations. Furthermore, the negative effects on agriculture and ecosystems are caused by biodiversity loss and soil degradation, which are also part of its environmental impacts. To address this situation, protect human health, and lessen the growing environmental effects of gas flaring in Nigeria, immediate action such as the Strategic Partnership were long overdue.



Regulations to the Rescue

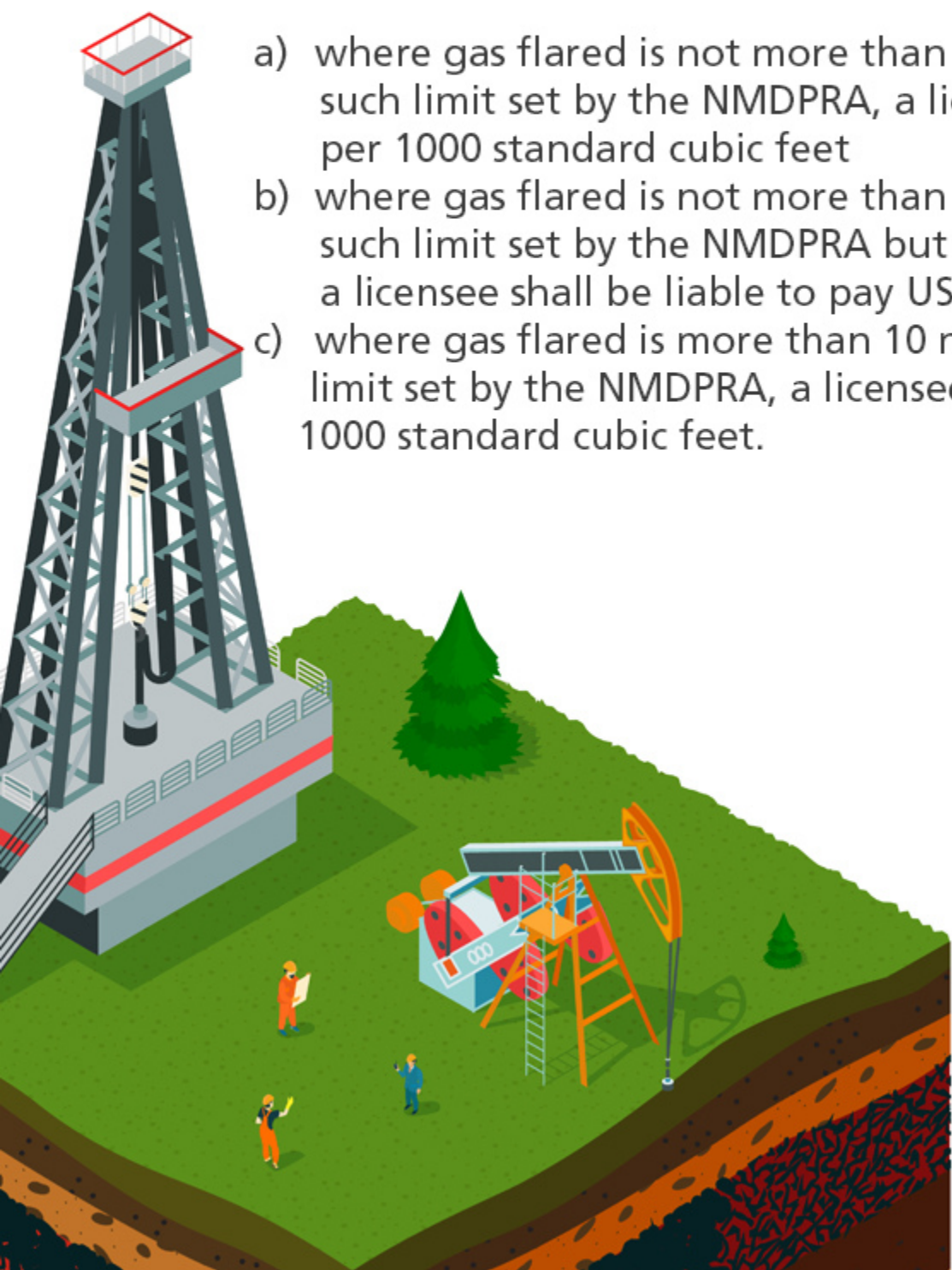
The **Nigerian Upstream Petroleum Regulatory Commission (“NUPRC”)** issued the **Gas Flaring, Venting and Methane Emissions (Prevention of Waste and Pollution) Regulations, 2023** (the “Gas Flaring Regulation”) for the purpose of reducing environmental and social impact of gas flaring, venting of natural gas and fugitive methane emissions into the atmosphere. The Gas Flaring Regulation requires a gas producer or licensee to submit a Flare Elimination and Monetisation Plan (“**FEMP**”) for the NUPRC’s approval. Upon approval of the FEMP, such producer or licensee will enter a “**Milestone Development Agreement**” with the NUPRC for the implementation of the FEMP and the FEMP will also be backed by a milestone bond.

Where a gas producer, licensee or lessee flares gas without the authorisation of the NUPRC or in a manner inconsistent with the Gas Flaring Regulations, such persons commit an offence under the Gas Flaring Regulations and are liable to pay to the NUPRC an administrative fine of **USD\$3.50** for every **1000 standard cubic feet of gas** and where such persons fail to submit gas data or falsify gas data, the fine becomes **USD\$10,000** or the Naira equivalent.



In like manner, the Nigerian Midstream and Downstream Petroleum Regulatory Authority (“**NMDPRA**”) issued the **Midstream Gas Flare Regulations, 2023** (the “**Midstream Gas Flaring Regulation**”) for the purpose of reducing environmental and social impact caused by excessive flaring and venting of flare gas in midstream petroleum operations. By virtue of the Midstream Gas Flaring Regulation, penalties for gas flaring are as follows:

- a) where gas flared is not more than 1 million standard cubic feet beyond such limit set by the NMDPRA, a licensee shall be liable to pay USD\$0.50 per 1000 standard cubic feet
- b) where gas flared is not more than 1 million standard cubic feet beyond such limit set by the NMDPRA but less than 10 million standard cubic feet, a licensee shall be liable to pay USD\$1 per 1000 standard cubic feet; and
- c) where gas flared is more than 10 million standard cubic feet beyond such limit set by the NMDPRA, a licensee shall be liable to pay USD\$1.50 per 1000 standard cubic feet.



All penalties collected by the NMDPRA for gas flared shall be for the account of the Midstream and Downstream Gas Infrastructure Fund and shall be utilised for midstream and downstream gas infrastructure investment in designated host communities.

Prior to now, it is widely believed that flaring gas is a cheaper option in light of the investment required to capture and commercialise gas. It is therefore commendable that regulatory agencies have found a way to make gas flaring expensive through administrative penalties.

An Important Development

Within the dynamic Nigerian energy market, the Strategic Partnership is nothing short of a redemption as it provides a cutting-edge gas-to-liquid technology which will convert associated gas into liquefied petroleum gas, liquefied natural gas and other gas products for commercial use.



Conclusion

The Strategic Partnership is a landmark collaboration which signals that Nigeria has its arms wide open for international cooperation and aims to tackle the perennial economic and environmental problems related to gas flaring. Additionally, it represents a significant turn towards resource and sustainability optimisation in Nigeria's energy market.

