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The problem of gas flaring: a review of current legal and policy efforts in the UK and Nigeria.

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Outline

- Background
- Nigeria's efforts
- UK's efforts
- Methodology and Rational
- Findings & Lessons





Background

- Gas Flaring is a major problem in many oil and gas producing countries (health, safety, environment and economics)
 - Gas Flaring: 2019 - 150 bcm & declined by 5% to 142 bcm in 2020
 - Oil production declined in 2019 by 8% (82mbpd) - to 76mbpd in 2020 - slowed down slightly by Covid
 - Equivalent to total annual gas consumption of Central & South America.
- Nigeria flared around 7.2 bcm making it the largest gas-flaring nation in Africa and 7th largest gas flarer in the world (World Bank 2020)

NIGERIA'S GAS FLARING PROBLEM IN SUMMARY

[GAS FLARING IN NIGERIA - YouTube](#)

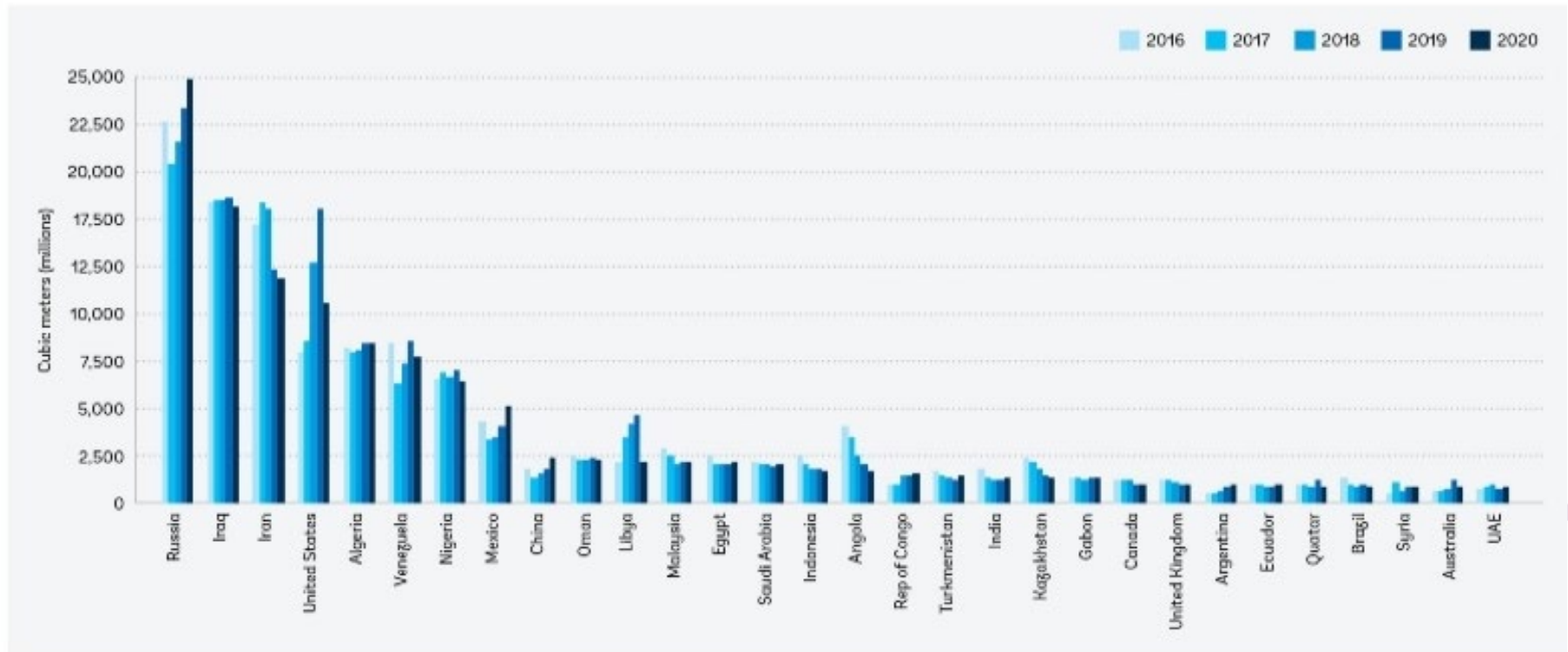
Sources: (Gas Flaring in Nigeria - Budget Nigeria) Uploaded – 11/05/2018

- Q's: Why has it become such a problem? How can it be controlled? Why are the legal and policy efforts in Nigeria ineffective? Can the UK provide some lessons? What is the cost of this monumental wastage?



Gas Flaring Data UK & Nig

Flare Volumes for the top 30 flaring countries from 2016-2020 (Sorted by 2020 flare volume)



Source: NOAA, Payne Institute and Colorado School of Mines, GGFR

Source: NOAA



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Nigeria – Gas Flaring Efforts

Policy Objectives:

Nigeria's 2020 (2030) policy objective and the Flare Gas (Prevention of Waste and Pollution) Regulation, 2018 - *Is this realistic?*

Legal and Regulatory Framework:

Various Acts have been passed setting deadlines for eliminating flaring and providing incentives for associated gas utilisation

- The Petroleum Act, 1969 and the Regulations (Petroleum (D&P) R) 1969 and amended 1998
- Associated Gas Reinjection Act 1979 and accompanying Decree of 1984
- Associated Gas Framework Agreement introduced a package of fiscal incentives for investments to increase gas Utilisation. investments have been made in gas utilisation infrastructure, but seem to be as much about using non-associated gas
- Other Bills under consideration, PIB – *Major gaps?*

Institutional Framework:

- The Department of Petroleum Resources (DPR) is responsible for supervising petroleum industry operations, including gas flaring. DPR is responsible to the Minister for Petroleum Resources. Reg, 2018
- Approval of field development plans, including gas utilisation plans, is undertaken by National Petroleum Investment Management Services, a subsidiary of the Nigerian National Petroleum Corporation (NNPC)

Enforcement: Enforcement has been largely ineffective due to many reasons





UK – Gas Flaring Efforts

Policy Objectives: UK gas flaring policy has to be assessed within its overall policy objectives in regard to:

- Maximizing economic recovery of the U.K.'s oil and gas reserves;
- Climate change, reducing greenhouse gas emissions; energy transition.

Legal and Regulatory Framework:

Primary legislation: Petroleum Act 1998; Section 9 (a), Section 2(1) and Schedule 1 to the Energy Act, 2016 and Section 41 Infrastructure Act 2015

The 1998 Petroleum Act vests all rights in hydrocarbon resources in the Crown, and the Oil and Gas Authority (OGA) is empowered by the Act to grant licences for exploration and production.

Others are: Petroleum (Current Model Clauses) Order 1999; Environmental Legislation applicable to the Onshore Hydrocarbon Industry (England, Scotland, and Wales); The Offshore Petroleum Production and Pipelines (Assessment of Environmental Effects) Regulations 1999

Institutional Framework:

The Energy Act 2016 - OGA consent is required for natural gas to be disposed of by flaring or any other means except where the disposal is at the downstream gas pipelines transportation.

Enforcement:

In 2021, the OGA indicated that their efforts resulted in the reduction of flaring in the UKCS by 22% in one year, and that the results were encouraging, as clear regulatory focus can make a significant impact.





Methodology and Rationale

Methodology:

- Micro-comparative functional Review and Analysis

Rational:

- UKCS as a mature jurisdiction could provide useful lessons to Nigeria

Scope:

- Policy, Legal & Institutional framework:
 - Roles of legislative &/or executive branches, policy objectives & their main drivers, hydrocarbon and environmental provisions and/or other law(s) stating the policy and granting regulatory powers to specific government bodies etc., and also the effectiveness of such regulatory bodies.
- Regulatory regimes - Flaring & venting regulations:
 - Key regulations on flaring and venting and their key elements, Permits and procedures for permit application; fines/taxes, targets or combination, Measurement and reporting requirements; Monitoring of compliance; Enforcement of compliance, TPA and access to flare and vent data, Tax incentives Cost recovery rules for flare reduction investments where PSCs exist; and Regulation on access to transportation & processing infrastructure.



Finding & Lessons

Useful lessons:

The UK provides useful lessons - best practice. Nigeria's efforts to eliminate gas flaring have been handicapped - Lack of clear and precise law and policy direction, low penalties, implementation and enforcement failure, corruption and duplication of responsibility, limited institutional capacity and conflict of interest. Lessons for Nigeria from the UK experience include:

Policy: A need for commitment and transparency in decision making process from policy makers.

Institutional: A need for independent regulatory agency, and more Industry consultation mechanisms

Legal and Regulatory:

- Policy decisions to be reduced into set of transparent and enforceable regulations/ and operational guidelines
- Regulations to differentiate between gas and oil fields
- Revised Regulations to establish the framework for reducing flaring wherever it is economic to do so; and encourage operators to identify opportunities to utilise gas economically

Enforcement:

- Regulator training and skills development necessary
- Accurate measurement and reporting of flared volumes is necessary if enforcement is to be effective
- Scarce resources for enforcement should be allocated in a targeted manner for efficiency
- Penalties may be useful when they lead to flare reduction

Thank you & Questions



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