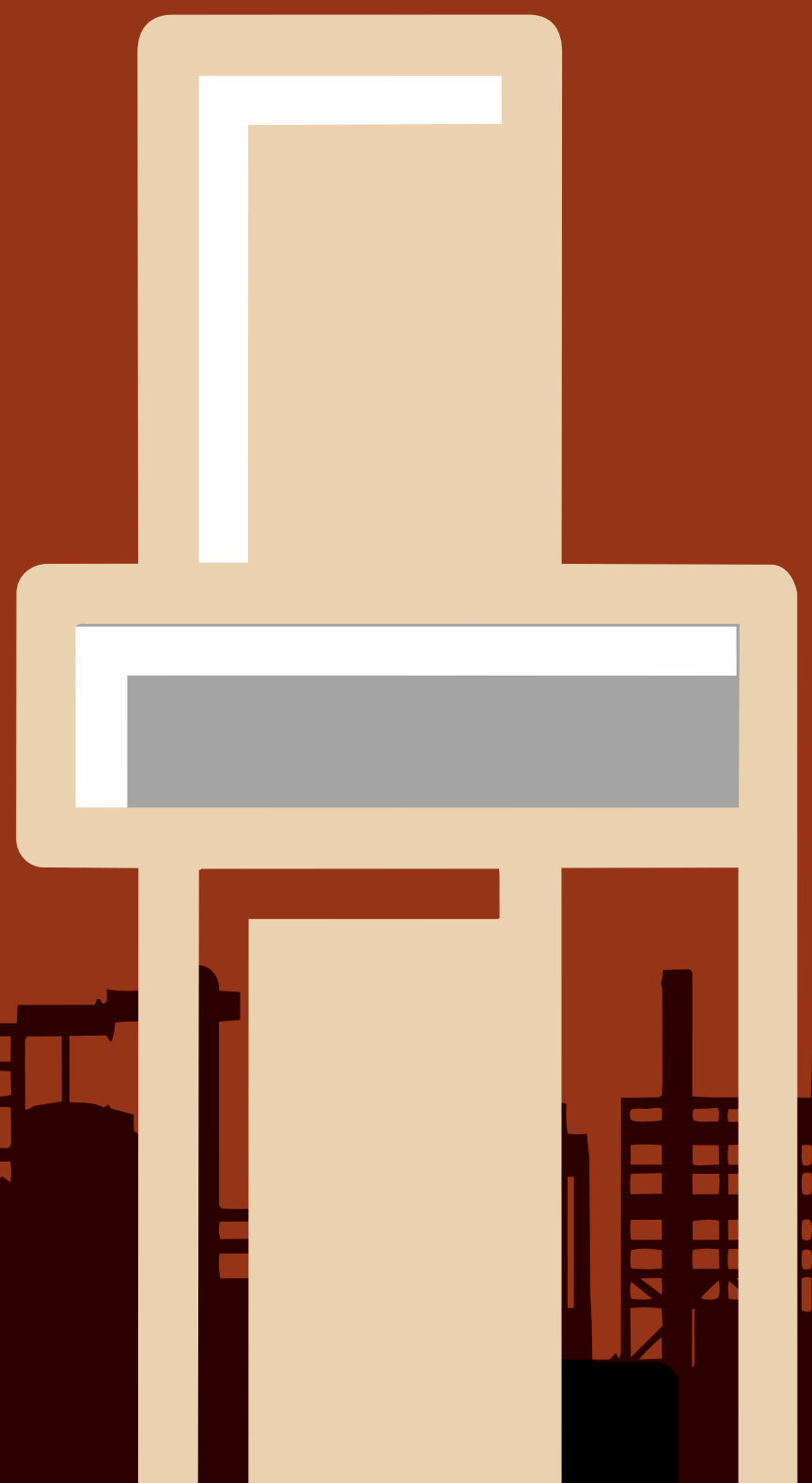


Nigeria's Gas Flaring Crisis in Numbers.

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Introduced by the World Bank, the Zero Routine Flaring by 2030 initiative unites governments, oil companies, and development institutions committed to ending routine gas flaring because it is environmentally and economically unsustainable.

Nigeria is among the 27 governments that have endorsed the initiative, committing to create the legal, regulatory, investment, and infrastructure conditions needed for gas utilisation. Participating oil companies also agree to develop new oil fields without routine gas flaring by adopting sustainable gas conservation or utilisation plans.

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Nigeria's gas flaring Legislative and Regulatory framework



Various constitutional measures to curb gas flaring in Nigeria have been in place since 1969. Since 1984, it has been illegal to flare gas in Nigeria without the written permission of the minister of petroleum resources. Successive laws, including the Petroleum Industry Act (2021) and the 2023 Gas Flaring Regulations, have further strengthened penalties and prohibited routine flaring.

Specifically:

1969

Petroleum Drilling and Production Regulations:

Required oil companies to take precautions to prevent environmental pollution and regulate oil-well operations.

Associated Gas Re-injection Act:

Required oil and gas companies to submit plans for gas re-injection and regulated gas flaring.

1979

1984

Associated Gas Re-injection (Continued Flaring of Gas) Regulations:

Provided conditions under which gas flaring could continue in Nigeria.

Environmental Impact Assessment (EIA) Act:

Required environmental impact assessments before the approval of certain public and private projects.

1992

2021

The Petroleum Industry Act (PIA) prohibits routine flaring, strengthens penalties and promotes gas utilisation and commercialisation.

Guidelines for management of fugitive methane and greenhouse gases emissions in the upstream oil and gas operations in Nigeria (2022)

2022

2023

Gas flaring, venting and methane emissions (prevention of waste and pollution) regulations 2023

Nigeria Gas Flare Commercialisation Program (NGFCP) Expected to advance gas-processing /commercial projects to monetise associated gas and reduce gas flaring.

2016 – Till Date

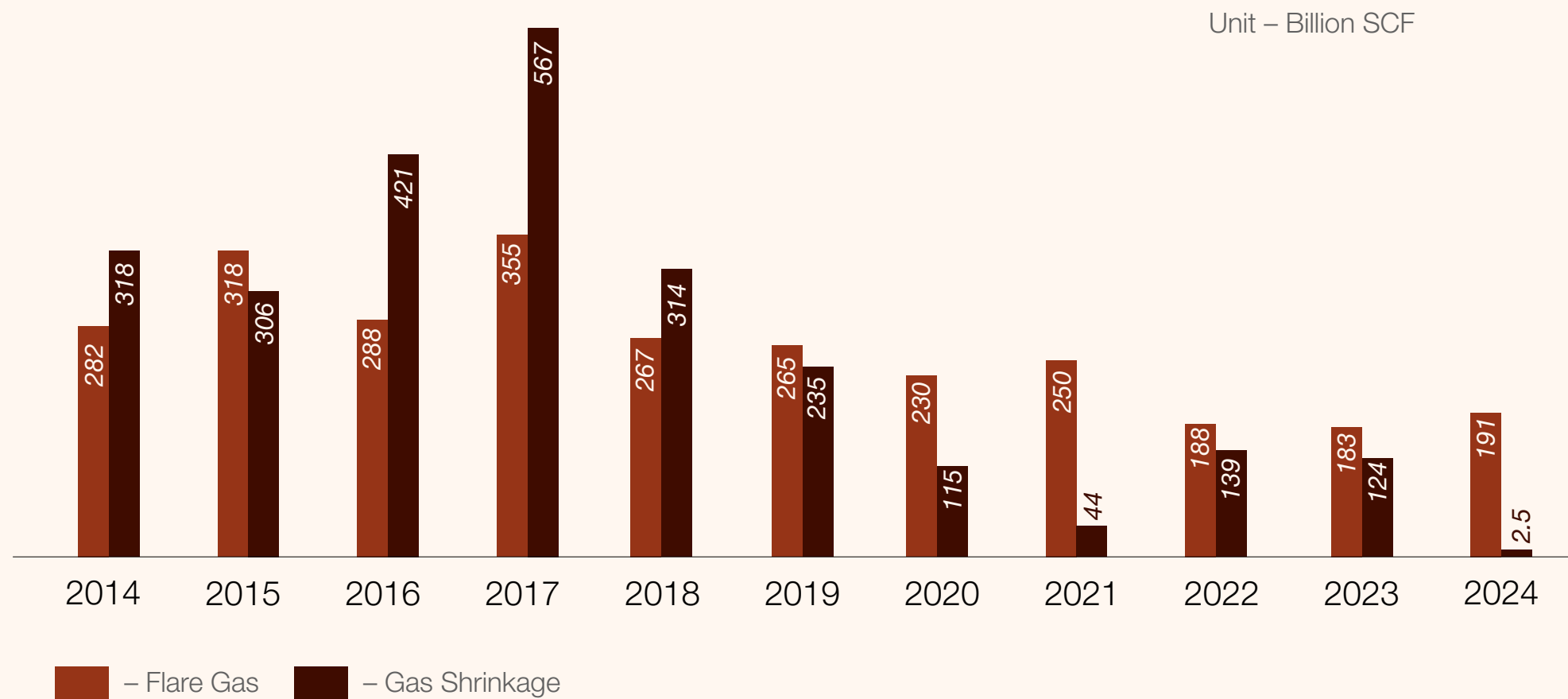
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Ten-Year Trend of Gas Flaring in Nigeria



In Nigeria, gas flaring continues to waste valuable energy and revenue. From 2021 to 2024, over 817 billion cubic feet of gas were flared, worth about ~~N~~\$1.19 trillion and enough to generate more than 110,000 GWh of electricity. This highlights the importance of gas utilisation initiatives like the Nigerian Gas Flare Commercialisation Programme.



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Distribution of Gas Production



2022 Total gas production

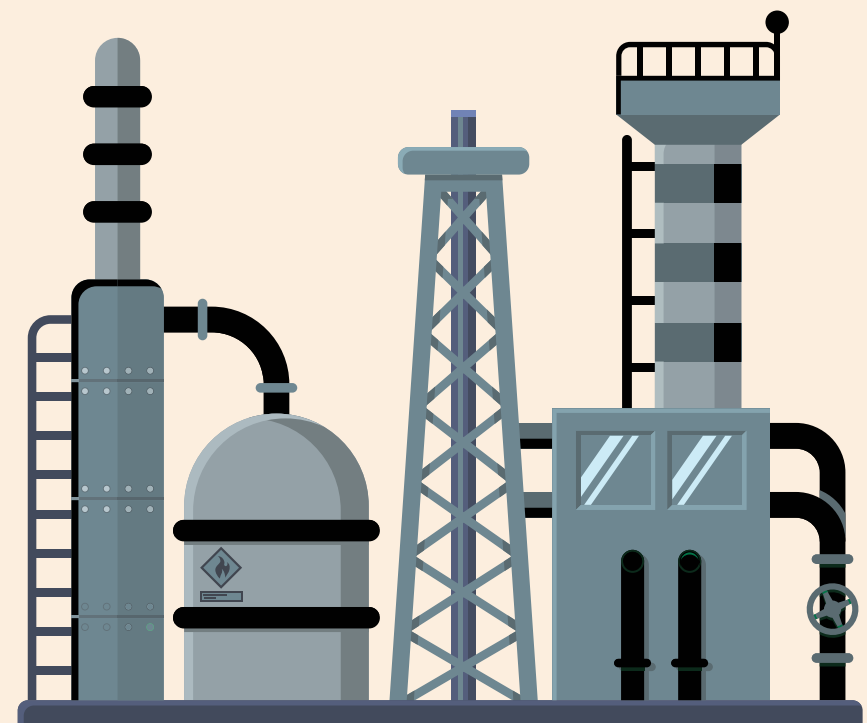
2.511 million SCF

🔥 Total gas produced in 2024 was 2,511,345.02 million SCF.

🔥 Associated gas accounted for 52.2% of total gas production.

🔥 Non-associated gas accounted for 42.8% of total gas production.

A large share of Nigeria's gas production is still incidental to oil production, indicating persistent challenges with transforming gas resources to productive uses.



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Gas Flaring by Terrain



Most of the gas flared in Nigeria occurs within proximity of living populations (onshore and shallow offshore fields), posing risks to several communities and economic activities. One-third of the gas flared (offshore and deep offshore) poses significant threats to aquatic habitats and marine life, endangering fish species, coral reefs, and oceanic oxygen.

Type of Terrain	Number of Companies	Gas flared (Million SCF)	Share of Gas produced	Share of Gas flared %	Share of Gas Produced %
Onshore	28	34,074.61	336,893.11	17.76	13.41%
Onshore/Offshore	6	109,242.13	1,412,797.97	56.95	56.26%
Deep Offshore	7	25,500.02	533,023.43	13.29	21.22%
Offshore	7	23,017.78	228,630.51	12.00	9.10%
Total	48	191,834.54	2,511,345.02	100.00	100.00%

Source: BudgIT Analysis

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Ten-Year Trend of Gas Flaring in Nigeria



Gas flare data was analysed to assess the performance and track record of companies operating in Nigeria's oil and gas sector. In all, 48 companies were analysed in 2023 and 2024.

Of these:

25 

companies recorded a decrease in the volume of gas flared.

1 

company recorded no change (it flared no gas in either year).

20 

companies recorded an increase in the volume of gas flared.

2 

companies had no data for 2023 (one of them flared zero gas in 2024).



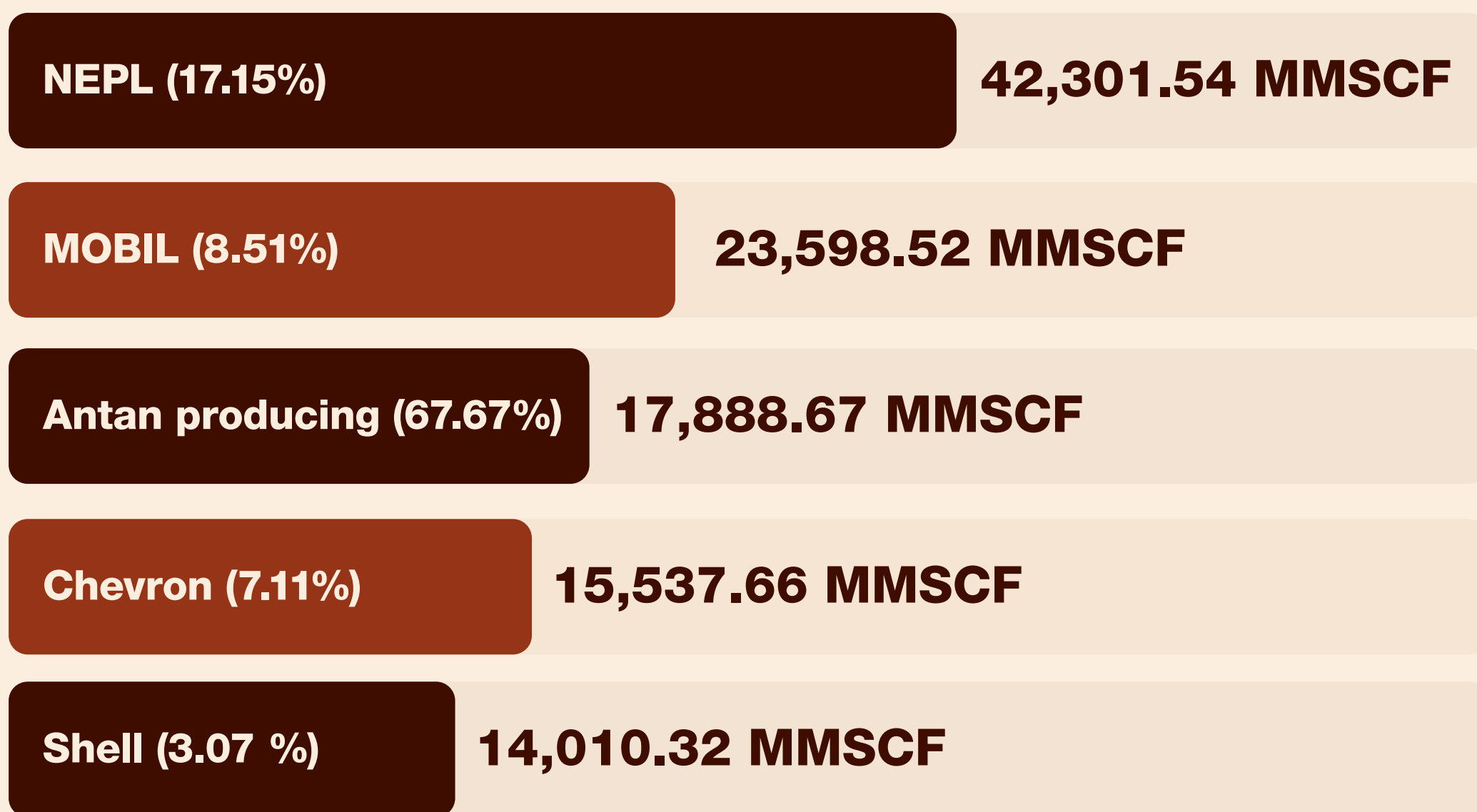
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The top five companies that flare the most amount of gas.



The top five companies that flared the largest volume of gas in 2024 are



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Companies that flared the least amount of gas



The companies that flared the smallest volumes of gas in 2024.

MILLENIUM (100.00%)	4.76 MMSCF
SGORL (1.17%)	4.32 MMSCF
Amalgamated Oil & Gas (0.05%)	1.06 MMSCF
Newcross Petroleum (0.00%)	0.00 MMSCF
Sterling Global EXPL (0.00%)	0.00 MMSCF

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Analysis by Volume



20% of the companies (the top 10) were responsible for nearly 80% of the total gas flared in the country.



NEPL (NNPC Exploration and Production Limited) flared the highest volume: 42,301.54 million scf, which is 22% (one-fifth) of all gas flared nationally.



However, NEPL had a utilisation rate of 83%.



NEWCROSS Petroleum and STERLING Global didn't flare any gas in 2024, according to the data from NUPRC.

NEPL flared the highest volume:

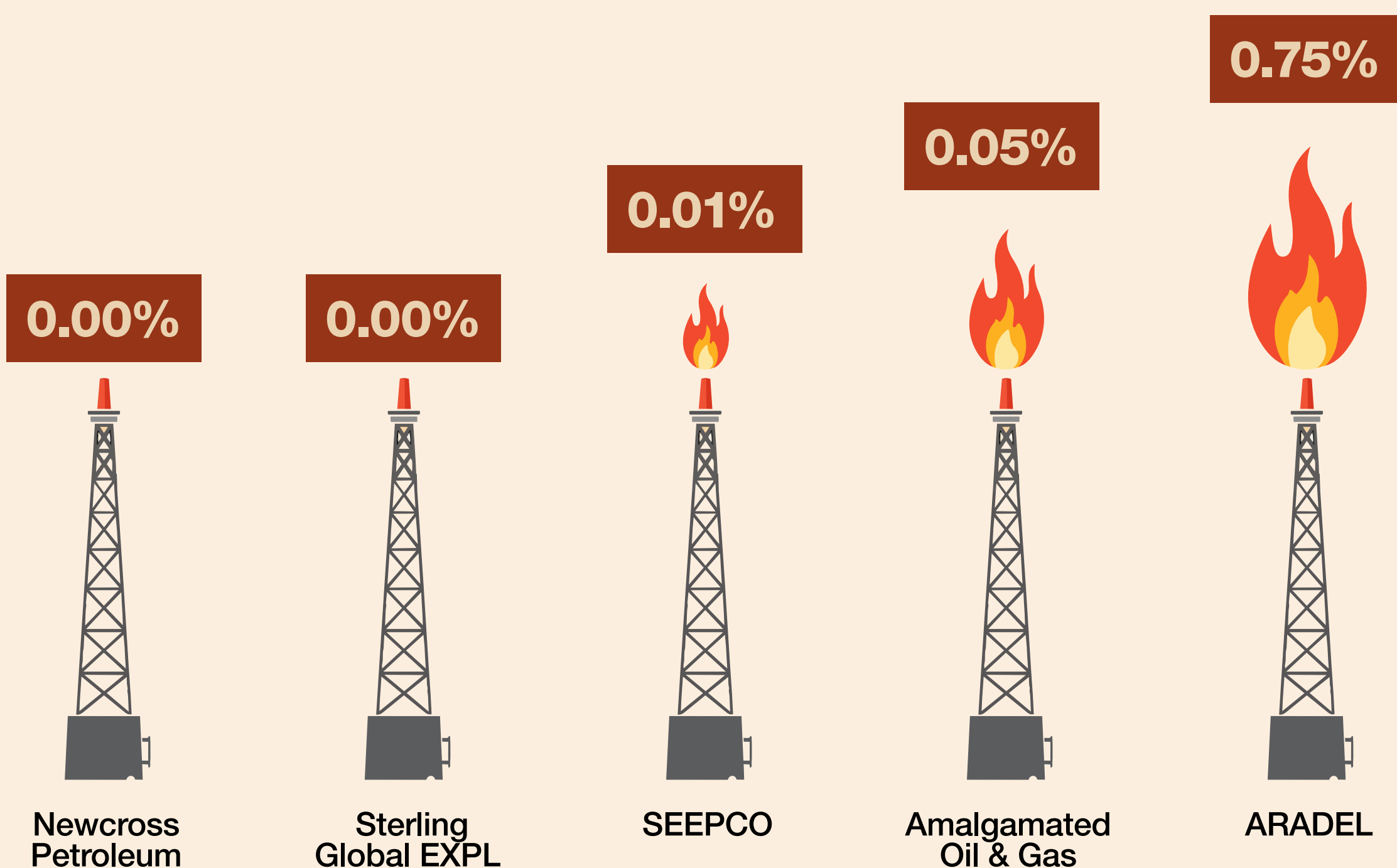
42,301.54 million scf



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Most efficient companies (lowest flare percentage)



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Analysis of Utilisation



20 out of 46 companies had a utilisation rate above 90%. Together they accounted for **85% of the total gas produced.**



29 companies had a utilisation rate of more than 70%. Together, they accounted for 96% of the total gas produced.



Companies that ranked high in utilisation rate were also responsible for the largest quantity of gas flared because the same companies produce the bulk of total gas.



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Economic implications of gas flaring



Gas flaring causes big economic losses. Nigeria collects penalties for gas flaring; nevertheless, a Analysis indicates that commercialising the gas would attract more revenue and benefits compared to collecting penalties.

🔥 Total gas flared 2021-2024: 817,434 mmscf

🔥 This is equal to 23 trillion litres

🔥 Nigeria has collected ₦700.78 billion.

🔥 Penalty collection improved significantly, especially in the last two years (doubled between 2022 and 2023, and almost tripled between 2023 and 2024).

🔥 If the gas had been commercialised, revenue would have been ₦2.73 trillion

🔥 In 2024 alone, ₦1.19 trillion was lost to gas flaring, more than the 2025 state budgets of all oil-producing states except Lagos.

🔥 Electricity that could have been generated: 110,166.32 GWh

🔥 Number of homes that could have been powered per year: between 2,400 and 3,176 (without interruption).



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Economic and Environmental advantages of ending gas flaring



Category	Gas Flaring (Waste)	Gas Utilisation (Value)
Primary Definition	Combustion of excess natural gas at the wellhead or processing facility.	Capturing and processing natural gas for productive use instead of burning it
Energy Recovery	0% recovered	High recovery (electricity, heat, industrial feedstock)
Output	Heat, light, CO ₂ , methane emissions	Power (MWh), Heat (GJ), LNG, Feedstock
Economic Value	Lost Revenue – Gas is burned, not sold or used	Value Created – Revenue from power sales, feedstock, or reduced fuel costs
Operational Impact	Simple to implement; handles excess gas safely	Requires infrastructure (pipelines, processing, turbines) but improves efficiency
Environmental Impact	High greenhouse gas emissions and wasted resources	Lower emissions per unit of energy reduce waste
Key Benefit	Safety (prevents gas accumulation)	Energy security, revenue generation, ESG compliance
Key Drawback	Waste of a valuable resource; negative environmental impact	In the long term, higher upfront capital costs require significant infrastructure investment.

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Energy Losses



Year	Total Gas Flared (MMSCF)	Quantity of Electricity that could have been Generated (GWh)	Number of Homes that could have been Powered Per Year
2021	252,579	34,040.30	3,176.88
2022	188,442	25,396.50	2,370.18
2023	183,526	24,733.96	2,308.35
2024	192,887	25,995.56	2,426.09
Total	817,434	110,166.32	10,281.50

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Advantages of Reducing Gas Flaring



🔥 Revenue stream for economic development and diversification – Improvement in environmental health.

🔥 Flared gas is an energy source that can be harnessed for power and industrial applications.

🔥 Less flaring means fewer harmful emissions, reduced respiratory diseases, and improved overall well-being, consequently resulting in healthier and more productive communities.

🔥 Stopping gas flaring takes us closer to achieving national climate commitments. Reducing gas flaring also translates to cuts in methane emissions in the oil and gas sector, one of the largest contributors to methane emissions in Nigeria. This takes Nigeria closer to meeting methane emission reduction targets and also contributes to global methane abatement targets

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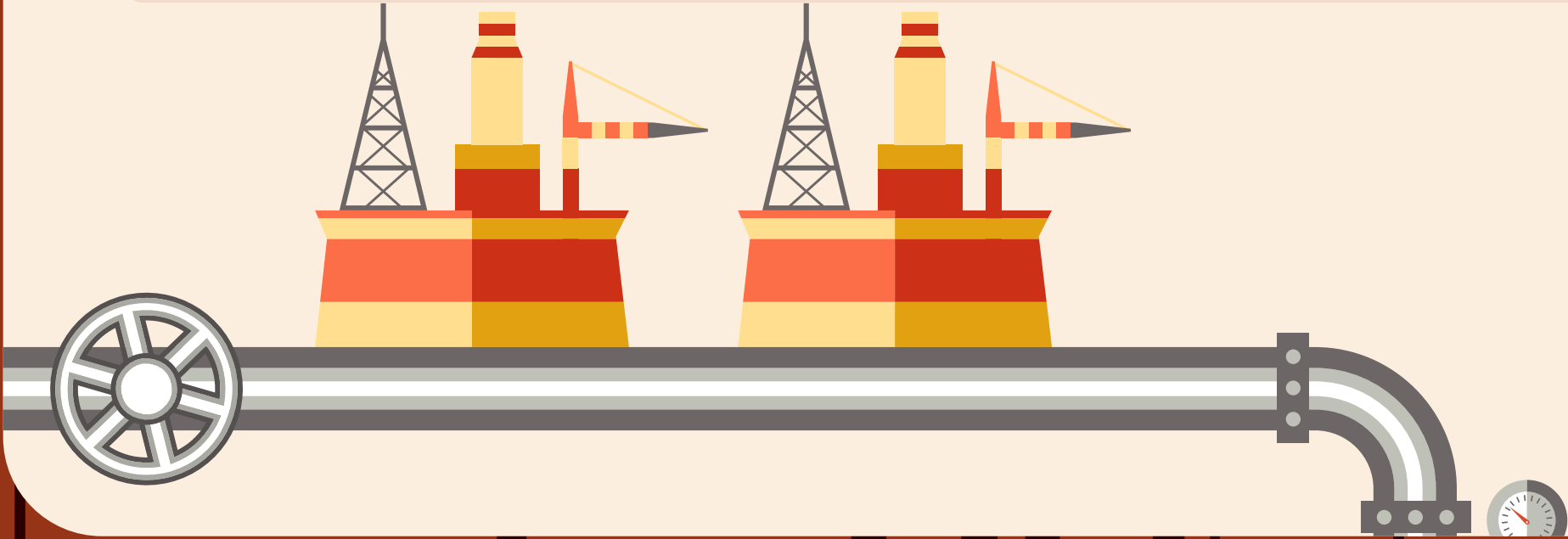
Table 1: National targets for methane reduction in Nigeria's oil and gas sector



Nigeria's methane reduction targets focus on reducing emissions from the oil and gas sector through gas flaring elimination and methane leak control. The 2018 SLCP Action Plan initially targeted complete gas flaring elimination by 2020 and a 50% reduction in fugitive methane emissions by 2030. In the 2021 NDC update, the gas flaring deadline was extended to 2030, while the fugitive emissions reduction target was increased to 60% by 2031.

As the deadline for Nigeria's commitments draws closer, it is increasingly imperative that decisive action be taken now to ensure that deadlines are met and the 2030 flare-out date is not shifted again.

	Nigeria's 2018 SLCP Action Plan	2021 update to Nigeria's first NDC report
Elimination of gas flaring	100% eliminated by 2020	100% eliminated by 2030
Fugitive methane emissions/leakage control	50% reduction by 2030	60% reduction in fugitive emissions by 2031



Nigeria's Gas Flaring Crisis in Numbers.

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Global Methane Standards: EU Benchmark, Nigeria's Position, and Trade Risks



EU Benchmark?

The EU Methane Regulation (adopted in 2024).

The EU is setting a methane-intensity standard for fossil fuels traded into its market (from 2030), alongside strict MRV (monitoring, reporting, verification) and leak-control requirements. Exporters are expected to meet “low methane leakage” performance levels aligned with best international practice (OGMP 2.0 standards).

It requires:

- 🔥 Strict methane measurement, reporting, and verification (MRV)
- 🔥 Leak detection and repair (LDAR) in oil and gas systems
- 🔥 Ban on routine venting and flaring
- 🔥 From about 2030, imported fossil fuels must meet methane-intensity standards (low methane emissions per unit of gas/oil produced)
- 🔥 Alignment with best international performance standards (OGMP 2.0)

Nigeria's current situation: Nigeria has relatively high methane emissions in the oil and gas sector, mainly due to gas flaring and fugitive leaks, although improvements are ongoing.

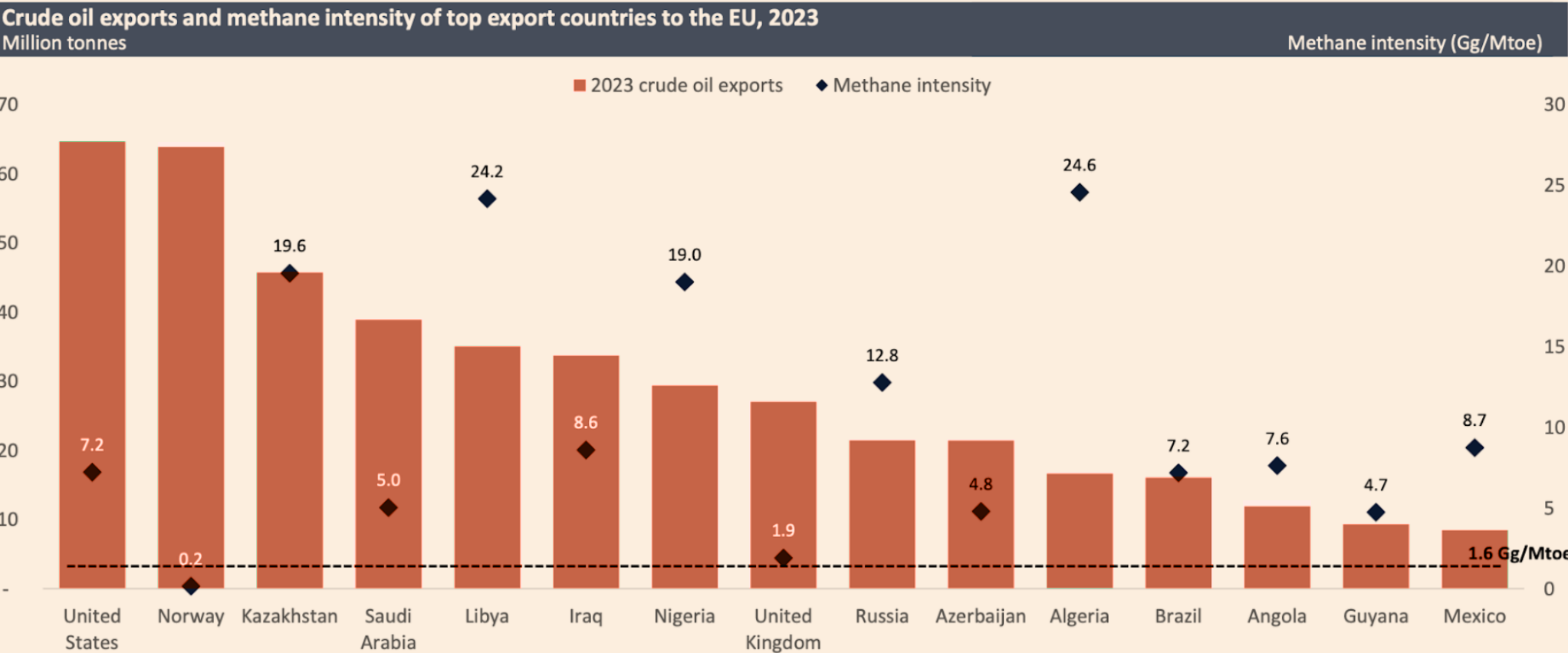
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Global Methane Standards: EU Benchmark, Nigeria's Position, and Trade Risks



Norway is the only crude supplier that has an emission intensity below the threshold



Note: Defined as upstream methane intensity. See Methodology for more details on system boundaries.
Source: Rystad Energy research and analysis; Eurostat; IEA (see slide 63)

 **Challenge:** Non-compliant oil and gas may struggle to access the EU markets.

 **Opportunity:** Producers that reduce emissions can secure long-term contracts and stronger competitiveness in a tightening market.

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Impending Implications of failing to meet required emission standards



Various constitutional measures to curb gas flaring in Nigeria have been in place since 1969. Since 1984, it has been illegal to flare gas in Nigeria without the written permission of the minister of petroleum resources. Successive laws, including the Petroleum Industry Act (2021) and the 2023 Gas Flaring Regulations, have further strengthened penalties and prohibited routine flaring.



Reduced export competitiveness: Buyers are shifting toward low-carbon supply chains.

Nigerian goods produced with high emissions (including gas flaring-linked production) may be rejected or discounted in international markets.



Loss of investment and contracts: Global companies increasingly require suppliers to meet ESG and emissions standards. Non-compliance could push contracts toward lower-emission countries.



Limited access to climate finance and trade incentives: Countries that meet emissions targets often gain access to green trade programs, concessional loans, and carbon credit markets. Missing targets reduces these opportunities.



Stricter certification requirements: Exported goods require carbon reporting and verification. Nigerian producers without compliance systems may struggle to meet documentation standards.



Reputation risk in global markets: Persistent high emissions can affect Nigeria's image as a trade partner, influencing long-term buyer confidence.

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When does the benchmark end?



🔥 The EU methane rules are not temporary

🔥 2027–2030 (phased implementation)

🔥 Key enforcement starts around:

🔥 From 2030 onward, methane-intensity standards for imports become fully operational

EU Benchmark (Trade Requirement)

EU Benchmark (Trade Requirement) Methane intensity standard for oil and gas imports (from 2030), strict MRV (monitoring, reporting, verification), leak detection and repair (LDAR), and limits on flaring/venting based on best global performance (OGMP 2.0).

Nigeria's Current Emissions Level

Relatively high methane emissions in the oil and gas sector, mainly due to gas flaring and fugitive leaks, though reduction efforts are ongoing.

Implication for Nigeria

Current emission levels are not fully aligned with the EU benchmark. A significant investment in infrastructure, gas capture, and monitoring is needed to comply and access the EU market.

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Primary Methane Emission Sources



Nigeria's methane emissions are primarily driven by a few key sources:



Gas flaring: This process of burning off natural gas during oil extraction is the largest source of methane in the region. Although gas flaring is intended to reduce methane, inefficient combustion allows substantial amounts to escape into the atmosphere.



Fugitive emissions: Methane leaks from oil pipelines, storage tanks, and other ageing infrastructure due to poor maintenance. These leaks are often underreported because advanced monitoring technologies required for detection are not widely available.



Abandoned oil wells: Improperly sealed or maintained wells leak methane, a frequent issue in the Niger Delta's numerous inactive oil fields. This source of methane can continue unchecked for years if not addressed.



Incomplete combustion: During flaring, incomplete combustion of methane can occur, especially in older or poorly maintained equipment, leading to higher emissions.

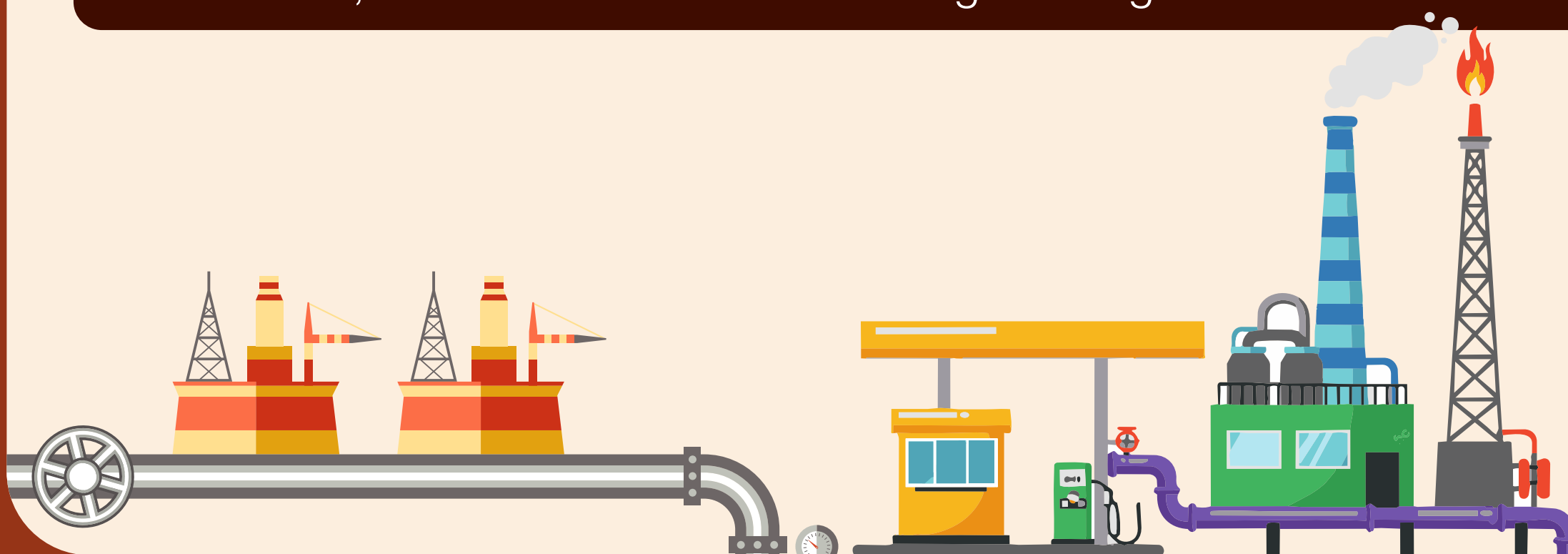
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Health Impacts Of Methane Hydrocarbon Exposure



-  **Respiratory Illness:** Persistent exposure causes coughing, asthma, chronic bronchitis and other breathing problems.
-  **Cancer:** Hydrocarbons from gas flaring are linked to various cancers, including lung cancer.
-  **Skin Irritation:** People suffer from rashes, itching, sores and other skin conditions.
-  **Blindness:** Methane exposure can damage the eyes and may lead to partial or total blindness.
-  **Birth defects:** Up to 80% of deformed fetuses are linked to hydrocarbon exposure during pregnancy. Our people seek medical solutions, but the real solution is to end gas flaring.



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Environmental Impacts



-  **Acid Rain:** Gas flaring contributes to acid rain, which destroys vegetation, corrodes buildings and pollutes water sources.
-  **Soil Contamination:** Toxic hydrocarbons degrade soil quality and reduce its fertility.
-  **Impacts on Crops:** Yam, cocoa, cassava and other root crops absorb toxins, reducing yield and damaging livelihoods.
-  **Water Pollution:** Rivers and streams are contaminated, affecting drinking water, aquatic life and local economies.



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The Double Cost: Resources Lost and Health Compromised



Why is this missed?

- 🔥 Impacts are underestimated and underreported.
- 🔥 Communities are excluded from decisions.
- 🔥 Corporate profits are prioritised over people and the planet.
- 🔥 Lack of accountability and weak enforcement.

Community-Led Advocacy: The Way Forward

Communities must be at the front line to end gas flaring

- 🔥 **Raise Awareness:** Share our stories and demand visibility.
- 🔥 **Demand Accountability:** Hold governments and companies responsible.
- 🔥 **Influence Policy:** Push for strong laws and effective enforcement.
- 🔥 **Build Alliances:** Work with local, national and global partners.

PROTECT OUR FUTURE. Ensure a healthy environment for future generations.

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Stakeholder collaboration and potential hurdles



Methane mitigation faces complex challenges, but they can be overcome through collaboration – combining technology, global partnerships, and shared action. Governments, industry, NGOs, and the public must all play a role to pool resources and ensure mitigation efforts are holistic and effective.

NGOs and grassroots movements: While top-down approaches are vital, bottom-up movements led by NGOs and community groups can address localised issues effectively. They can also play a pivotal role in awareness campaigns, ensuring that the public remains informed and involved.

International collaborations: Methane mitigation is a global challenge. Collaborations, in the form of shared research, technology transfer, and policy harmonisation, can accelerate efforts. International agreements, like the Paris Agreement, also offer a framework for nations to collectively address the challenge.

Potential hurdles: Collaborative efforts, while essential, are not without challenges.

- Differing priorities: Industries might prioritise profitability over environmental considerations, leading to potential conflicts with regulatory bodies.
- Regulatory gaps: Inconsistencies in regulations, especially across nations, can hinder effective mitigation.
- Economic constraints: Methane mitigation, in the short term, can be capital-intensive, potentially dissuading industries from adopting necessary measures.
- Public perception: Misinformation or a lack of awareness can hinder public support for necessary initiatives.