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# **Methane regulation in Africa**

Shaping equitable trade and climate transitions in a global context

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# Executive Summary

Methane has emerged as a critical focus in global climate governance, marking a new chapter in efforts to meet the Paris Agreement's objectives. While carbon dioxide remains the dominant greenhouse gas in climate discourse, methane's potency, trapping 80 times more heat than carbon dioxide over a 20-year period, makes it a priority for immediate climate action.

Its relatively short atmospheric lifespan of about 12 years means that reducing methane emissions can deliver rapid cooling benefits, positioning methane abatement as one of the fastest ways to slow global warming.

Globally, methane accounts for roughly 30% of warming since pre-industrial times, with fossil fuels, agriculture, and waste responsible for over 90% of anthropogenic emissions. The energy sector alone contributes about 40% of these emissions, with oil and gas operations representing the largest share. Africa's role in this equation is significant - the continent accounts for nearly 13% of global methane emissions, with oil and gas responsible for half of the emissions outside livestock. This is particularly concerning given Africa's growing energy ambitions and its reliance on fossil fuel exports for economic stability.

Recent global developments underscore methane's rising importance. The Global Methane Pledge, launched at COP26, commits signatories to reduce methane emissions by 30% from 2020 levels by 2030. Building on this momentum, the European Union Methane Regulation, adopted in 2024, represents a landmark shift. It is the first regulation to extend methane accountability beyond EU borders, requiring importers of oil, gas, and coal to comply with stringent monitoring, reporting, and verification standards by 2027 and meet methane intensity thresholds by 2030. This extraterritorial approach effectively links climate objectives to trade policy, reshaping market access for global suppliers.

For Africa, the implications are significant. The EU is a major destination for African oil and gas exports, accounting for 36% of crude oil and 64% of natural gas exports between 2015 and 2024. Failure to comply with EU methane standards could threaten billions in export revenue and erode

competitiveness. However, compliance is not straightforward. African exporters face very different starting points. For instance, Nigeria has upstream methane guidelines, while Ghana, Senegal and Mozambique are still developing theirs. In addition, African producers face structural barriers, including limited financing, inadequate infrastructure, and weak regulatory frameworks. The continent receives only 3% of global climate finance, and methane-specific funding remains negligible. Technical challenges such as harmonising MRV standards, ensuring independent verification, and addressing data gaps compound the problem.

Despite these hurdles, methane abatement offers Africa a strategic opportunity. Proven technologies can cut oil and gas methane emissions by up to 75% at relatively low cost, and captured methane can be monetised to counterbalance investments. Aligning with global standards could secure Africa's position in future energy markets while advancing climate goals. However, this requires coordinated action: mobilising innovative financing instruments, strengthening institutional capacity, and fostering partnerships between governments, industry, and development actors.

While African countries must turn regulatory pressure into a catalyst for investment and reform, the EU Methane regulation has significant economic implications for energy-exporting African countries. While reducing methane emissions remains essential for global climate action, the implementation of these regulations must be sequenced in a manner that does not compromise exporting countries' economies to ensure a just and equitable transition. This will require close cooperation between the EU, African exporters and the private sector to ensure that the required measures (including CAPEX investments) are supported.



## Policy Recommendations

- **Mobilise innovative financing mechanisms**  
Develop methane-specific financing tools such as sustainability-linked bonds and transition bonds, supported by public and philanthropic actors, to de-risk investments.
- **Strengthen economic incentives for low-Methane fossil fuels**  
Encourage market access and premium pricing for fuels with verified low methane emissions to stimulate investment in abatement technologies.
- **Provide technical and institutional support**  
Build capacity for methane regulation, MRV systems, and enforcement through partnerships with the EU and international organisations.
- **Promote harmonised MRV standards**  
Align measurement, monitoring, reporting, and verification frameworks to reduce compliance burdens and enhance transparency.
- **Establish independent verification capacity**  
Establishing accredited African institutions for methane data verification would reduce costs, build local expertise and improve trust in the MRV ecosystem, while strengthening long-term regulatory independence.
- **Engage the financial sector**  
Integrate methane metrics into investment decisions and create financial products that reward verified reductions.
- **Hold fossil fuel producers accountable**  
Require clear methane reduction targets, transparent reporting, and link performance to executive compensation.
- **Foster multi-stakeholder collaboration**  
Establish partnerships among governments, industry, civil society, and development partners to scale up methane mitigation efforts.





# List of Acronyms

A CEP	Africa Centre for Energy Policy	LDAR	Leak, Detection and Repair
AfDB	African Development Bank	LNG	Liquefied Natural Gas
CCAC	Climate and Clean Air Coalition	MIPS	Methane Import Performance Standards
CAPEX	Capital Expenditure	MRV	Monitoring, Reporting and Verifying
CATF	Clean Air Task Force	NDCs	Nationally Determined Contributions
CoMAT	Country Methane Abatement Tool	NOCs	National Oil Companies
COP	Conference of the Parties	OGMP	Oil Gas and Methane Partnership
CO <sub>2</sub>	Carbon Dioxide	UNEP	United Nations Environment Programme
EU	European Union	UNFCCC	United Nations Framework Convention on Climate Change
GHG	Greenhouse Gas		
GMI	Global Methane Initiative		
GMP	Global Methane Pledge		
IEA	International Energy Agency		
IPCC	Intergovernmental Panel on Climate Change		



# 1 Introduction

The [United Nations Framework Convention on Climate Change \(UNFCCC\)](#) is often heralded as the principal treaty that established a global response to climate change. The Convention's goal is to achieve stabilisation of greenhouse gas concentration in the atmosphere to a level that does not interfere with the climate system.<sup>1</sup> Since 1992, when the Convention was adopted, the Conference of the Parties (COP) meets periodically to negotiate global climate response, as outlined in Article 7 of the Convention.

Building on the UNFCCC, the [Paris Agreement](#) was adopted at COP21 in 2015 as a response to the threat of climate change by aiming to limit the increase in the global average temperature to below 2 °C, ideally to 1.5 °C above pre-industrial levels.<sup>2</sup> Since COP21, there has been a renewed drive to tackle greenhouse gas emissions through ambitious Nationally Determined Contributions (NDCs), which are voluntary climate pledges made by the parties to the UNFCCC and Paris Agreement.

Although carbon dioxide (CO<sub>2</sub>) continues to be the primary focus of global greenhouse gas (GHG) discussions due to its significant contribution to emissions, methane has recently gained prominence as a critical climate issue because of its potent warming effect and shorter atmospheric lifespan. Methane has been in the spotlight because it is a powerful GHG which traps 80 times more heat than carbon dioxide, over a 20-year period after it is released into the atmosphere. Methane is the second<sup>3</sup> most significant greenhouse gas after carbon dioxide, mainly emitted from<sup>4</sup> fossil fuels, agriculture and waste. At the same time, methane presents a strategic opportunity as it stays in the atmosphere for about 12 years, compared to centuries for CO<sub>2</sub>. This means that cutting methane emissions leads to faster cooling effects, making it ideal for near-term climate targets.

The global energy transition is driven by the urgent need to mitigate climate change impacts. This transition involves moving away from fossil fuel dependency toward cleaner, more sustainable sources of energy. The imperative to reduce GHG emissions, notably carbon dioxide and methane, is

a key element of this shift. Methane's high warming potential necessitates immediate action to reduce emissions from high-emitting industries such as the fossil fuel sector, which is responsible for over 75% of global GHG emissions.

The energy sector is responsible for about 40% of anthropogenic methane emissions. Emissions have steadily increased over the past decade, and projections suggest a potential rise of 3% to 17% between 2020 and 2030 if robust reduction measures are not implemented. The oil and gas sector constitutes about 62% of the methane emissions within the energy sector, primarily through venting, incomplete combustion of flared gas, and equipment and pipeline leaks. Given this substantial contribution, the sector is crucial in shaping methane emissions reduction efforts.

Africa's share of global methane emissions was estimated at [12.9%](#) in 2024. According to the [African Development Bank \(AfDB\)](#), annual methane emissions for the four primary emitting sectors, excluding livestock, totalled 4.7 million tonnes. Furthermore, only five countries are responsible for 73% of methane emissions (excluding livestock), with the oil and gas sector responsible for 50% of emissions and coal mining for 15%.

In addition to global initiatives such as the Global Methane Pledge (GMP), some jurisdictions have also deployed regulatory measures to meet their targets. Such measures, as is the case of the European Union's (EU) [Methane Regulation](#), have an extraterritorial dimension due to their application to international trade, thus impacting third-party countries' trade with the EU. The EU's Regulation on



the reduction of methane emissions in the energy sector (Methane Regulation), which was adopted in June 2024 and entered into force (initial phase) on 4 August 2024, is one such example.

The Regulation's primary focus is to reduce methane emissions in (i) oil and fossil gas upstream exploration and production, (ii) inactive wells, temporarily plugged wells and permanently plugged and abandoned wells, (iii) fossil gas gathering and processing, (iv) gas transmission, distribution and underground storage, (v) liquefied natural gas (LNG) facilities and also to (vi) active underground coal mines and surface coal mines and closed or abandoned underground coal mines. Through standards setting, the Regulation is clear on its objective, being the "wider uptake of methane emission mitigation solutions across the globe".

As methane regulation becomes more stringent in the global north, regulating methane emissions will position African countries strategically for export markets in the EU and the global north. Methane abatement has been flagged in several African countries' NDCs, and many of the targets are seemingly aligned with the sequencing articulated

in the EU Methane Regulation. However, this will require close cooperation between the EU, African exporters and the private sector to ensure that the required measures, including capital expenditure (CAPEX) investments, are supported. In this respect, the initial response of gas-exporting African countries to the Methane Regulation has emphasised the need to turn it into an opportunity that supports mitigation while maintaining economic benefits for countries. Despite technologies being available for methane regulation, access to such technologies and financing are challenges that many African countries face.

This paper, therefore, analyses the EU Methane Regulation by tracking its evolution and potential impact on African countries while proposing key actions that are required for an equitable pathway for methane abatement. The recommendations will outline possible responses that enable African countries to take climate action in a mutually beneficial manner. While the EU Methane Regulation extends to coal imports, this paper focuses on oil and gas, as these sectors have been the primary focus of voluntary and regulatory initiatives to date.





## 2 Evolution of Methane Regulation

Approximately 60% of total global methane emissions come from anthropogenic sources—emissions originating from human activities.<sup>5</sup> Fossil fuels, agriculture and waste account for more than 90% of all anthropogenic methane emissions.

Between the adoption of the UNFCCC in 1992 and the Paris Agreement in 2015, few global efforts have specifically targeted reducing or regulating methane emissions. This was despite the growing body of knowledge on the effects of methane on the ozone layer and its role in global warming.<sup>6,7,8</sup> In 2021, at COP26 in Glasgow, the GMP was launched by the United States and the EU to catalyse climate action towards the reduction of methane emissions.<sup>9</sup> Many countries have since joined the GMP, which currently has 159 participating countries, in addition to the EU.<sup>10</sup> One of the key pillars of the GMP is the commitment to collectively reduce anthropogenic methane emissions from all sectors by at least 30% below 2020 levels by 2030 and to take the necessary domestic actions to reach this target.<sup>11</sup> As part of the GMP, countries also committed to using the highest tier Intergovernmental Panel on Climate Change (IPCC) good practice inventory methodologies to quantify methane emissions and to publish this information transparently.<sup>12</sup>

The EU has taken further steps towards its methane emission targets through the EU Methane Regulation.<sup>13</sup> The EU is one of the largest importers of oil and gas, and estimates that an import standard on methane emissions could reduce up to a third of global oil and gas emissions. The EU Methane Regulation focuses on upstream exploration and production of oil and fossil gas and extends further to both underground and surface coal mining. The policy further develops rules for accurate measurement, monitoring, reporting and verification of methane emissions in the three targeted sectors, whilst restricting venting and flaring.

The EU Methane Regulation is distinctive because it has rules that enhance transparency with fossil energy imports into the EU, implying that the policy not only applies to methane emissions from oil, gas

and coal within the EU but also applies to imports of oil, gas and coal into the EU. Apart from the EU Methane Regulation, most efforts to regulate methane have been focused on the three sectors with the largest anthropogenic emissions.

Starting in 2024, the regulation requires importers to provide data on imports to a public transparency database. This includes information on production locations and transit routes before reaching the EU market. They will also need to state whether the producer or the exporter is undertaking source and site-level measurement and quantification, and whether it is subject to independent verification. Other information required is whether the producer or exporter applies regulatory or voluntary measures to control methane emissions. The extent of Leak, Detection and Repair (LDAR) programmes and measures to reduce venting and flaring, along with relevant reports from LDAR surveys and venting/flaring events from the past year, will also be required. After 18 months, the European Commission will establish a Transparency Database.

From 2027, all oil, gas and coal imports must meet the EU's rules for monitoring, reporting and verifying (MRV) emissions. Importers must demonstrate that all imported oil, gas, and coal are produced in compliance with the EU's MRV rules. This can be demonstrated through two methods (Article 27a). Under the first approach, imports are produced in countries that have set MRV frameworks equivalent to the EU's MRV rules. Equivalency criteria will be determined by the European Commission, and countries that meet equivalence will be routinely reevaluated. Under the second approach, producers meet the Oil Gas and Methane Partnership (OMGP) Level 5 reporting with third-party verification. MRV will be determined for specific cargo. The criteria



for third-party verification have not been set yet. This could be introduced in the EU's technical standards for measurement and quantification. From 2030, all imports must be below a maximum methane intensity threshold for all contracts concluded after 2024.

Additionally, it is worth noting that MRV mechanisms are important as they enhance transparency through accurate measurement, up-to-date documentation and procedures to verify the data. In 2006, the IPCC developed guidelines for good practice methodologies to quantify national greenhouse gas emissions from anthropogenic sources,<sup>14</sup> which formed the foundation for measuring methane emissions. The guidelines offer a general guide to reporting and cover four sectors: energy; industrial processes and product use; agriculture, forestry and other land use; and waste. The guidelines provide advice on estimation methods in three tiers, with the first tier containing simple default methods, the second tier comprising country-specific data with some default methodologies and the third tier featuring country-specific models with more complex methods.<sup>15</sup> The 2019 refinement of the IPCC good practice methodologies expanded the subsectors under the existing 2006 sectors to cover a broader range of emissions sources and updated some methodologies under the tiers.<sup>16</sup> The IPCC guidelines for monitoring, reporting and verification are relevant today and have been relied on for initiatives such as the GMP.

Other attempts to develop an MRV mechanism were undertaken by the Global Methane Initiative (GMI) and the United Nations Economic Commission for Europe (UNECE), which developed national-level monitoring, reporting, verification and mitigation guidelines for methane emissions from the oil and gas sector,<sup>17</sup> and from coal mining.<sup>18</sup> In 2014, the Climate and Clean Air Coalition (CCAC) launched the OGMP Framework, which was implemented by the United Nations Environment Programme (UNEP) as a flagship reporting and mitigation programme. The OGMP was later enhanced to improve the accuracy and transparency of methane emissions reporting in 2020 as OGMP 2.0.<sup>19</sup> Since the OGMP 2.0 was regarded as the only comprehensive, measurement-based reporting framework for the oil and gas industry, producers are required to use OGMP 2.0 Level 5 to satisfy the EU Methane Regulation's MRV mechanism.<sup>20</sup>

The EU's methane regulation, therefore, presents the first-ever effort by any jurisdiction to regulate methane emissions outside its borders – creating incentives to develop domestic methane regulations. The EU import standard aims to solve the central challenge in methane emissions abatement – the lack of quality, credible data. However, it has implications on market access for third parties regarding technical requirements for monitoring, measuring and reporting emissions. The following sections take a deep dive into the current emissions scale for African countries and the challenges presented by the EU methane regulation.



Photo by: [Anne Nygård](#) on [Unsplash](#)



# 3

# Africa's path to compliance and competitiveness in the wake of methane regulations

## 3.1. Methane Emissions in Africa

The [Global Methane Initiative \(GMI\)](#) indicates that methane emissions in Africa come from various sources. Africa's total methane emissions in 2024 were 12.8% of total global emissions, with 5-6 countries responsible for roughly three-quarters of that total. The primary source of emissions on the continent is livestock. Emissions from oil and gas (the focus of this paper) are quite significant, accounting for about 14.28% of total methane emissions. Other notable sectors that contribute to methane emissions are combustion and municipal solid waste, representing 13.61% and 11.79% respectively.

At a global level, the energy sector accounts for about 40% of methane emissions. The fossil fuel sector likely offers the greatest potential for rapid and low-cost reductions in methane emissions, hence the call for concerted efforts to support methane abatement in the sector. The International Energy Agency (IEA) estimates that around 70% of methane emissions from this sector could be reduced with existing technology at low cost. Oil and gas methane emissions can be reduced by around 75% through proven mitigation measures such as LDAR programmes, upgrading leaky and high-emitting equipment, or plugging leaky wells.

The [IEA Global Methane Tracker](#) highlights that in 2024, fossil fuel operations in Africa emitted about 6 million metric tons of methane; of this, around 70% came from oil and gas operations. Notably, Africa's oil and gas sector accounts for about 10.7% of global emissions, with Nigeria and Algeria recorded as the largest emitters of methane from gas and oil, respectively. The oil and gas sector accounts for about **68%** of methane emissions on the continent from the energy sector, with a potential increase in emissions considering the anticipated growth in oil and gas activities. It is worth noting that there are

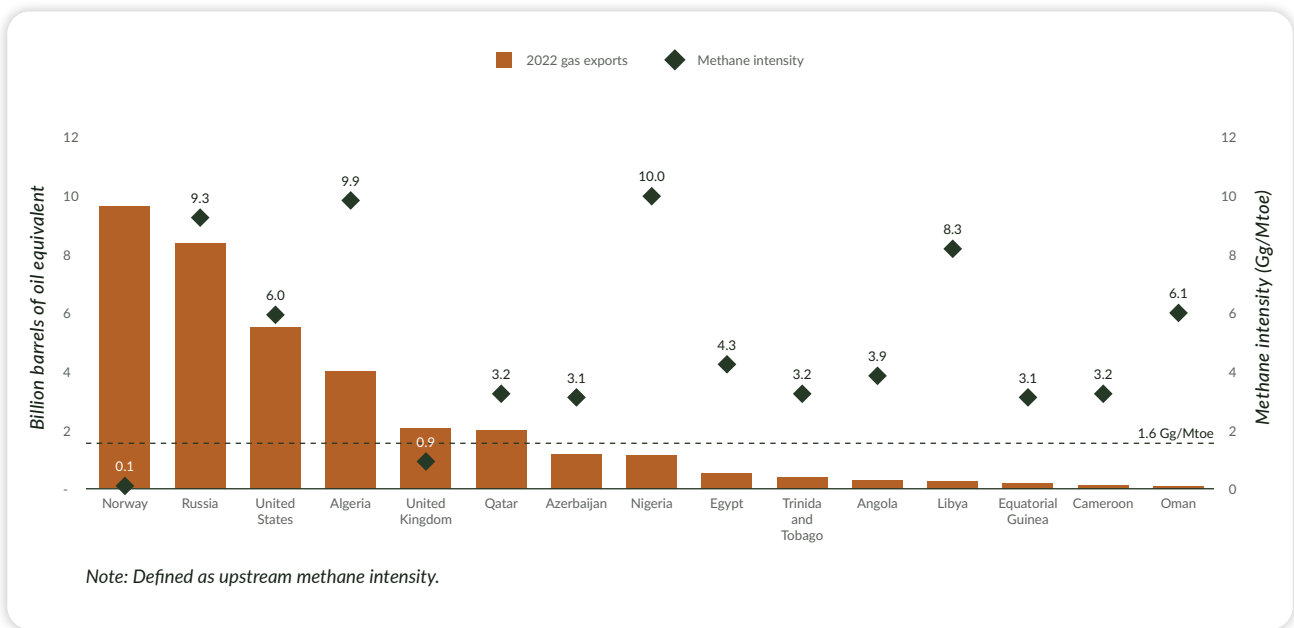
existing reliability challenges with African emissions inventories. Many national inventories still depend on Tier 1 default emission factors due to limited measurement-based data. The absence of site-level measurements and the lack of independent verification capability increase the scale of uncertainty in reported emissions across Africa.

As highlighted, in addition to some of the ongoing pledges aimed at reducing methane emissions, the EU has recently introduced methane regulations. The EU's import standard is critical because it aims to regulate methane emissions beyond its borders. It is also concerning because currently, Norway and the UK are the only EU gas suppliers with intensities below 0.2% equivalent threshold, as shown in Figure 1. The Methane Regulation, therefore, has a direct impact on Africa's trade with the EU in the oil and gas sectors, which are both covered by the regulation.





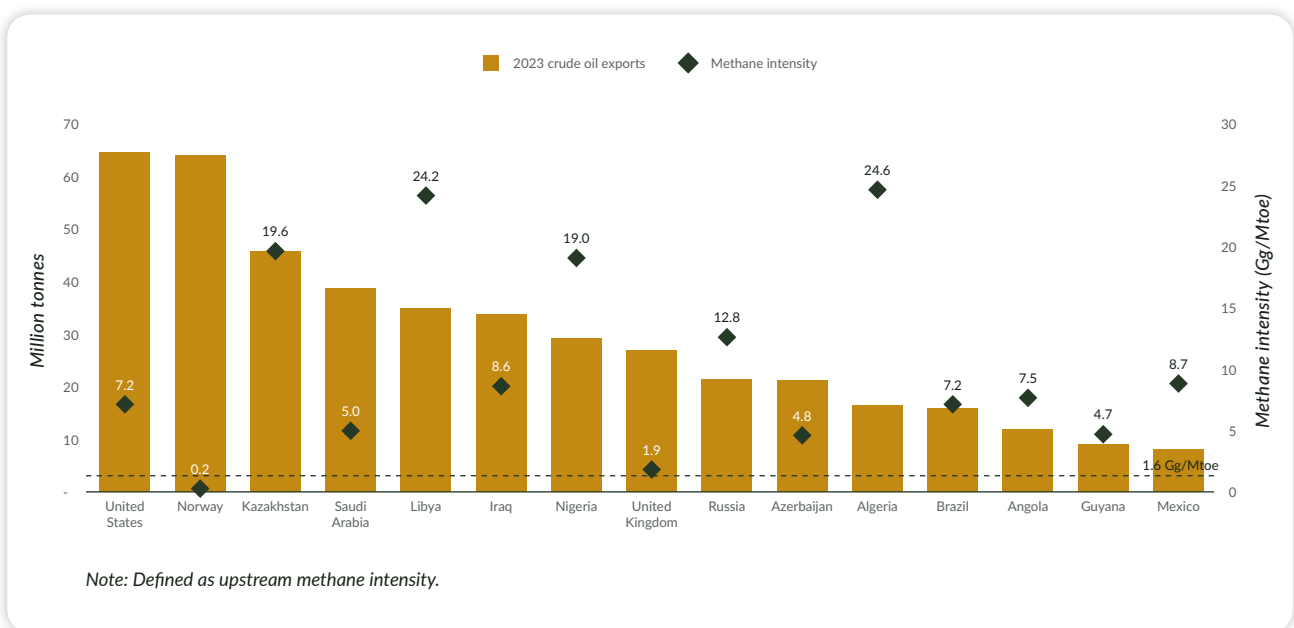
**Figure 1: Gas exports and methane intensity of top export countries to the EU, 2022**



Source: Rystad Energy research and analysis; Rystad Energy GasMarketCube; IEA (see slide 63)

Including oil is just as critical as gas because many of the EU's source markets for oil have high methane intensities. Norway is the only crude supplier that has an emission intensity below the equivalent 0.2% threshold, as shown in Figure 2.

**Figure 2: Crude oil exports and methane intensity of top export countries to the EU, 2023**



Source: Rystad Energy research and analysis; Eurostat; IEA (see slide 63)



## 3.2. Africa's oil and gas trade

Crude oil exports account for about 60% of Africa's total energy exports, while natural gas accounts for 18% of Africa's total energy exports. Figure 3 shows Africa's exports of crude oil and natural gas<sup>21</sup> to the EU and the corresponding share of these exports in the continent's total

exports between 2015 and 2024. Crude oil exports to the EU accounted for an average of 36% of Africa's total crude oil exports, whereas natural gas exports to the EU accounted for a staggering average of about 64% of Africa's total natural gas exports.

**Figure 3: Africa's crude oil and gas exports to the world and EU** Source: Authors' illustration using ITC trade map data



Source: Authors' illustration using ITC trade map data

Exporting oil, gas and coal is a significant source of earnings for several countries. In the first half of 2022, oil revenue constituted 29% of total government revenues. In the same year, Algeria's earnings from oil and gas exports were estimated at \$27.4 billion, while Angola's crude oil exports were valued at \$39.4 billion.

Africa has about 15 oil producers and ten gas producers, and this means that the two sectors play a key role in methane emissions. Upstream oil and gas emissions are relatively high in the region, with some countries such as Nigeria, Congo and Gabon

recording intensities nearly twice the global industry average. Recent oil and gas discoveries in countries like Senegal, Cote d'Ivoire, Tanzania, Uganda, Kenya and Mozambique will only increase methane emissions in the medium to long term.

The EU regulation will eventually affect countries and entities that supply fossil fuels to the EU. To guarantee continued access to the EU market and avoid penalties, fossil fuel producers are expected to monitor, report and verify upstream methane emissions at a level equivalent to that of EU operators by 2027. Additionally, contracts concluded



or renewed post August 5, 2025, must comply with the methane intensity standard by 2030.

While there are no detailed studies examining the detailed impact of regulations on African countries, the Clean Air Task Force (CATF) assessed the potential trade, price, and emissions impact of a cross border Methane Import Performance Standard (“MIPS”) if adopted by the EU. The study provides some insights into the impact of the measure on African countries. It predicted that the US, Qatar and various African countries are expected to deliver increasing gas imports to the EU this decade and maintain the levels up to 2030. The study showed that the costs for exporters imposed by this policy would average EUR 0.07/million British thermal unit (MMBtu) for gas and EUR 1.33/barrel for oil. Many of these costs would be in the form of abatement activities, with the remainder being fees paid under the policy for emitting above the 1.6 gigagrams per million tonnes of oil equivalent (Gg/

Mtoe) threshold. Methane fees represent the fees paid on remaining, unabated methane emissions above the policy threshold. Abatement costs represent operators’ expenditures to abate methane to avoid MIPS fees. Libya and Kazakhstan face the highest cost impact of major EU crude suppliers, while Algeria will be the greatest cost effect among key gas exporters to the EU.

The report also forecasts that most exporting countries to the EU will have relatively higher emission intensities, with higher relative emissions from Africa and US imports (3.6 Gg Mtoe from 2027 – 2031). Like gas, most crude exporting countries besides Norway and the UK have relatively high emission intensities. The upstream methane intensity of EU crude imports is estimated to be 8.5 Gg/Mtoe on average from 2027 to 2031, with the highest relative imports from Kazakhstan, Libya, Algeria and Venezuela.

### 3.3. Finance and capacity constraints

While tackling methane emissions from fossil fuel operations represents one of the fastest and low-cost opportunities to reduce greenhouse gas emissions globally, several factors explain why emission reduction measures will remain a challenge for Africa. Securing capital for required upfront investments can be difficult on the continent. Africa not only receives a small fraction (3%) of global climate finance flows, but the continent faces a climate investment deficit of 77%; only 23% of needs are currently being met. The African continent has also received limited funding for methane reduction, even though it is one of the largest emitters of methane. The sub-Saharan African region received only around 6% of total methane financing, while the Middle East and North Africa region received 12% over the 2021/2022 period.

Global credit rating agencies continue to play a significant role in shaping Africa’s negative risk perception, which in turn hinders investment, but also increases the cost of capital. This risk premium persists despite Africa recording the lowest default rate for infrastructure finance projects globally—just 5.5%. This reality may, in part, be constraining the flow of investments needed for methane abatement

across the continent. In addition, investment barriers in this sector are fuelled by information gaps about methane sources, emissions levels and impacts. This is exacerbated by inadequate infrastructure to bring captured gas to the consumer for productive use. There is also a limited understanding of the cost-effectiveness of abatement and the absence of a regulatory framework.

Companies struggle to muster sufficient capacity or secure the necessary services to tackle abatement and gas capture. They may also not have identified an effective pathway or business case for bringing captured gas to productive use. Actors often lack the resources and technical expertise to implement reduction strategies. This includes governments that want to refine regulations targeting methane emissions and strengthen implementation, but do not yet have the capacity to do so. Similarly, companies may lack the technical expertise to develop viable emission-reduction projects or the necessary technology.

In Africa, National Oil Companies (NOCs) are often constrained by contending priorities for domestic spending. They need and lack dedicated funding



for projects with high upfront costs and those with high operational costs. In addition, there are limited incentives for National Oil Companies to prioritise methane abatement. Many NOCs allocate capital to revenue-generating projects rather than fugitive emissions reductions, even when abatement delivers long-term value. Without direct regulatory pressure, internal carbon pricing or mandates, the willingness of NOCs to invest remains low, which poses a major hurdle for compliance with EU standards.

### 3.4. Technical and regulatory requirements

Aside from financial challenges, the technical requirements of the EU measures will remain a problem for African countries. One of the pillars of the EU methane regulations is the imposition of MRV rules on importers from 2027. The EU will have to assess whether other countries' MRV regulations are equivalent to or stronger than its own. This is a critical issue that could influence market competitiveness – or eventually even market access for gas suppliers. This will be particularly challenging for African countries given the variations in regulatory regimes. For example, can Nigeria demonstrate that its upstream regulations are as strong as those in the EU? Article 29a of the regulations notes that the EU may request organisations to develop harmonised standards. However, uncertainty remains. African countries could face challenges regarding technical guidance for monitoring, measurement and reporting of emissions.

Another critical issue is data verification. The legislation notes the importance of independent, accredited verification of data to satisfy MRV. However, the technical sophistication required to analyse and interpret methane emissions data suggests a limited pool of qualified potential verifiers, especially in Africa. Data quality, consistency and accessibility are major challenges

The [IEA](#) estimates the financing gap for fossil fuel methane abatement in low- and middle-income countries to be around USD 60 billion (roughly USD 40 billion for active operations and USD 20 billion for abandoned facilities). Worryingly, to date, external financing aimed at reducing methane in the fossil fuel industry totals less than USD 1 billion. Because of this financing gap, regulators and NOCs cannot adopt an equivalent approach to methane MRV and invest in emissions reduction interventions.

in Africa. While multiple tools are being developed, they lack alignment and harmonisation. There is a lack of clarity on the alignment of independent verification protocols. There are practical challenges that African regulators face in demonstrating MRV equivalence to the EU. Even with strong regulations, implementation capacity is often weak due to limited staffing, insufficient inspection resources and the absence of certified national verifiers. This creates a gap between regulation on paper and regulation in practice, which may affect whether African producers can satisfy EU MRV equivalence assessments by 2027.

An important goal of the legislation is to measure the methane intensity of imported fossil fuels. However, the methodology for calculating intensity is yet to be determined. Delays in publishing a methodology could cause regulatory uncertainty, given the complexity of methane emissions monitoring, quantification, reporting and verification. In addition, it is challenging for producers to track environmental attributes across supply chains.

In Africa, political economy factors are decisive. While some countries have methane regulations on paper, there is weakness in enforcement, capacity and institutional coordination. This is exacerbated by conflicts between government agencies and a lack of independent oversight among the regulators.



# 4

## Responses by African countries

According to the [IEA 2025 Methane Tracker](#), except for South Africa, most emitters in Africa participate in the GMP, a voluntary initiative launched at COP26 by the US and EU to collectively reduce global methane emissions by at least 30% from 2020 levels by 2030. Many countries also take part in the Zero Routine Flaring by 2030 Initiative, including Angola, Nigeria and Gabon, and some countries have developed action plans to tackle methane emissions, including Côte d'Ivoire, Ghana, Nigeria and Togo. Several African countries have included methane regulations in their NDCs. Côte d'Ivoire, Ghana and Nigeria have also established targets for methane emissions reduction.

However, most African countries lack methane-specific regulations, especially in the oil and gas sectors where emissions are highest. Methane is often addressed indirectly through broader climate or energy policies. Despite the opportunity and need for action, specific methane regulations remain absent in most African countries. For instance, in North Africa, none of the leading oil and gas producers (Algeria, Libya and Tunisia) have developed dedicated methane regulations as of 2024. According to [CATE](#), only Egypt is currently developing a policy, but its implementation remains incomplete. Algeria is one of Africa's largest oil and gas producers with substantial exports to Europe. Algeria has one of the highest methane intensities on the continent. Libya has vast oil reserves and remains a major producer. Tunisia's production is smaller but still commercially significant.

It is worth noting that even where national strategies exist, methane reduction efforts in many African countries remain donor-driven rather than domestically financed. This reliance on external funding affects sustainability, political ownership and long-term enforcement. Without domestic budgetary commitment, many of the early MRV and methane management pilots may not scale nationwide.

The picture is slightly different in sub-Saharan Africa. The energy sector significantly contributes to methane emissions in Nigeria and Angola; it is comparatively less significant in Ghana, Mozambique and Senegal. However, it still warrants attention, as oil and gas activities are likely to increase in these countries. According to the [IEA](#), Nigeria has

developed a set of methane regulations specifically for oil and gas. These include emissions and equipment standards, LDAR requirements, a tax on flaring and measurement and reporting obligations.

A review by the Africa Centre for Energy Policy ([ACEP](#)) shows that Nigeria has also established specific MRV frameworks for methane abatement using the Country Methane Abatement Tool (CoMAT). Additionally, the Nigeria Gas Flare Tracker uses satellite imagery to track gas flares on its offshore and onshore sites. Despite strong regulations, Nigeria still faces enforcement, financing, coordination and data usage challenges. The Global Methane Hub highlights the potential for Nigeria to serve as a continental model if challenges are overcome.

Ghana has also established an MRV system. However, MRV frameworks in methane management heavily rely on voluntary disclosures, which raise questions about the accuracy of reported emissions data. Further, the absence of a clear consensus on who bears responsibility for emission reduction investments hinders resource allocation for effective methane management. Its current NDC commits to reducing fugitive methane emissions from oil and gas operations by 60% by 2031. Several other countries in the region also limit flaring, including Gabon and Equatorial Guinea. Many NOCs participate in the OGDC, including NNPC (Nigeria), Sonangol (Angola), NILEPET (South Sudan) and NAMCOR (Namibia).

Nigeria and Ghana have explicitly incorporated methane emission targets in specific national



policies. Methane abatement efforts in Angola, Mozambique and Senegal are displayed in their overall strategies on GHG emissions reduction. Overall, African countries exhibit varying levels of commitment towards methane management, even though this has not outrightly resulted in methane reductions. To reduce Africa's methane emissions by 30% by the end of this decade, two sectors stand

out the most when it comes to cost-effectiveness. In particular, the potential for methane emissions reduction is the most significant for the oil and gas sector. Although only 17 countries in Africa are significant oil and gas producers, 50% of methane emissions originate from the sector, from which more than half can be mitigated at a negative or low abatement cost.





# Policy Recommendations

Reducing methane emissions in the oil and gas sectors is the most promising for swift action. Therefore, the EU methane regulation needs to be translated into an opportunity to support mitigation while maintaining economic benefits to countries. While African countries must turn regulatory pressure into a catalyst for investment and reform, the EU Methane regulation has significant economic implications for energy-exporting African countries.

While reducing methane emissions remains essential for global climate action, the implementation of these regulations must be sequenced in a manner that does not compromise exporting countries' economies to ensure a just and equitable transition.

This will require close cooperation between the EU, African exporters and the private sector to ensure that the required measures (including CAPEX) are supported. Some specific policy actions are necessary to ensure that the envisioned support comes to fruition.

- **Mobilise innovative financing mechanisms**  
Methane abatement requires upfront capital investment. However, it is widely agreed that mobilising methane financing in Africa will require a new approach beyond the slow processes of global finance. Governments, development banks, and private financiers should deploy innovative financing approaches such as KPI sustainability-linked bonds. There is scope for Africa to innovate with the development of transition bonds, although explicit methane abatement bonds are not yet common. These bonds can be developed as a collaboration between pan-African financial institutions, global philanthropies and leading global asset management and investment firms. The bonds can be designed to mobilise financing for firms to pay for investments that will reduce their environmental impact and/or reduce methane emissions. Because risk management is critical, public and philanthropic actors can help de-risk projects and unlock private capital, while fossil fuel companies should adopt internal methane pricing to guide investment decisions.

African countries, with support from partners such as the African Development Bank, the European Investment Bank and the International Finance Corporation (IFC) should develop green taxonomies to finance investments that abate methane emissions. Political buy-in is essential to drive methane abatement financing.

- **Strengthen economic incentives for low-methane fossil fuels**  
Importing countries can boost demand for cleaner fossil fuels by buying gas that would otherwise be flared or released into the atmosphere. The captured methane can then be sold to recover some of the investment costs. Offering better market access or higher prices for fuels with verified low methane emissions would encourage producers to invest in methane-reduction technologies. These incentives should be tied to proven, measurable emission cuts.
- **Provide technical and institutional support to exporting countries**  
Capacity building is essential for effective methane mitigation. The EU should support exporting African countries in developing methane policies, regulations and technologies. This support should enable African countries to prepare action plans which include regulations to reduce oil and gas methane emissions, national planning and policies, sector-specific and country-specific mitigation needs, and national capacity building and institutional strengthening for methane abatement. African countries can also be supported to draw on international best practices to implement regulatory measures that serve as incentives for companies to reduce their emissions.



- **Promote harmonised MMRV standards**

Establishing common standards for measurement, monitoring, reporting, and verification (MMRV) of methane emissions is critical to ensuring transparency and comparability across jurisdictions. For African countries, harmonised frameworks can reduce regulatory burdens and prevent loopholes. Initiatives like UNEP's OGMP 2.0 and the CLEAN coalition offer models for international alignment. It is important for Africa that sequencing is considered. Companies and governments should start with what is feasible and build toward measurement-based reporting and methane intensity targets.

- **Establish independent verification capacity**

There is a need to build an African-based independent verification capacity. The EU requirement for independent verification creates a risk that African countries will rely on expensive external verifiers. Establishing accredited African institutions for methane data verification would reduce costs, build local expertise and improve trust in the MRV ecosystem, while strengthening long-term regulatory independence.

- **Engage the financial sector to drive methane abatement**

Investors and insurers have a key role in promoting methane mitigation. They

should integrate methane-related metrics into investment decisions, encourage strict performance standards and support transparent disclosures. Financial products that reward verified reductions and penalise non-compliance can help align capital flows with climate objectives.

- **Hold fossil fuel producers primarily accountable**

Given the relatively low cost of methane abatement compared to industry profits, fossil fuel companies must take the lead in reducing emissions. They should set clear targets, report progress regularly and link executive and employee compensation to methane reduction outcomes. Governments should embed methane performance into regulatory and operational frameworks.

- **Foster multi-stakeholder collaboration**

Effective methane abatement requires coordinated action among governments, industry, civil society and international organisations. Public-private partnerships can facilitate project development and capacity building, while philanthropic capital can help bridge financing gaps. Collaboration is essential to overcome systemic barriers and scale up mitigation efforts.



## 6 Conclusion

Methane regulation is a new and crucial frontier in global climate governance, with far-reaching implications for trade, energy policy and sustainable development. The EU's Methane Regulation represents a landmark shift in climate diplomacy, extending environmental accountability beyond domestic borders and into international supply chains.

For African countries, this presents both a challenge. The continent faces significant hurdles in terms of financing, technical capacity and regulatory readiness; it also holds substantial potential for methane abatement – particularly in the oil and gas sector. By aligning with global standards and building on voluntary initiatives like the Global Methane Pledge, African exporters can strengthen their position in future energy markets.

To realise this potential, a coordinated and inclusive approach is essential. African governments, the

EU and development partners must work together to mobilise innovative financing, harmonise measurement and reporting standards and build institutional capacity. Fossil fuel producers must take primary responsibility for emissions reduction, supported by targeted incentives and transparent accountability mechanisms. The way forward is to turn regulatory pressure into strategic investment and policy reform, ensuring that methane abatement contributes not only to climate goals but also to equitable economic development across the continent.



Photo by: Richard Hurd



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