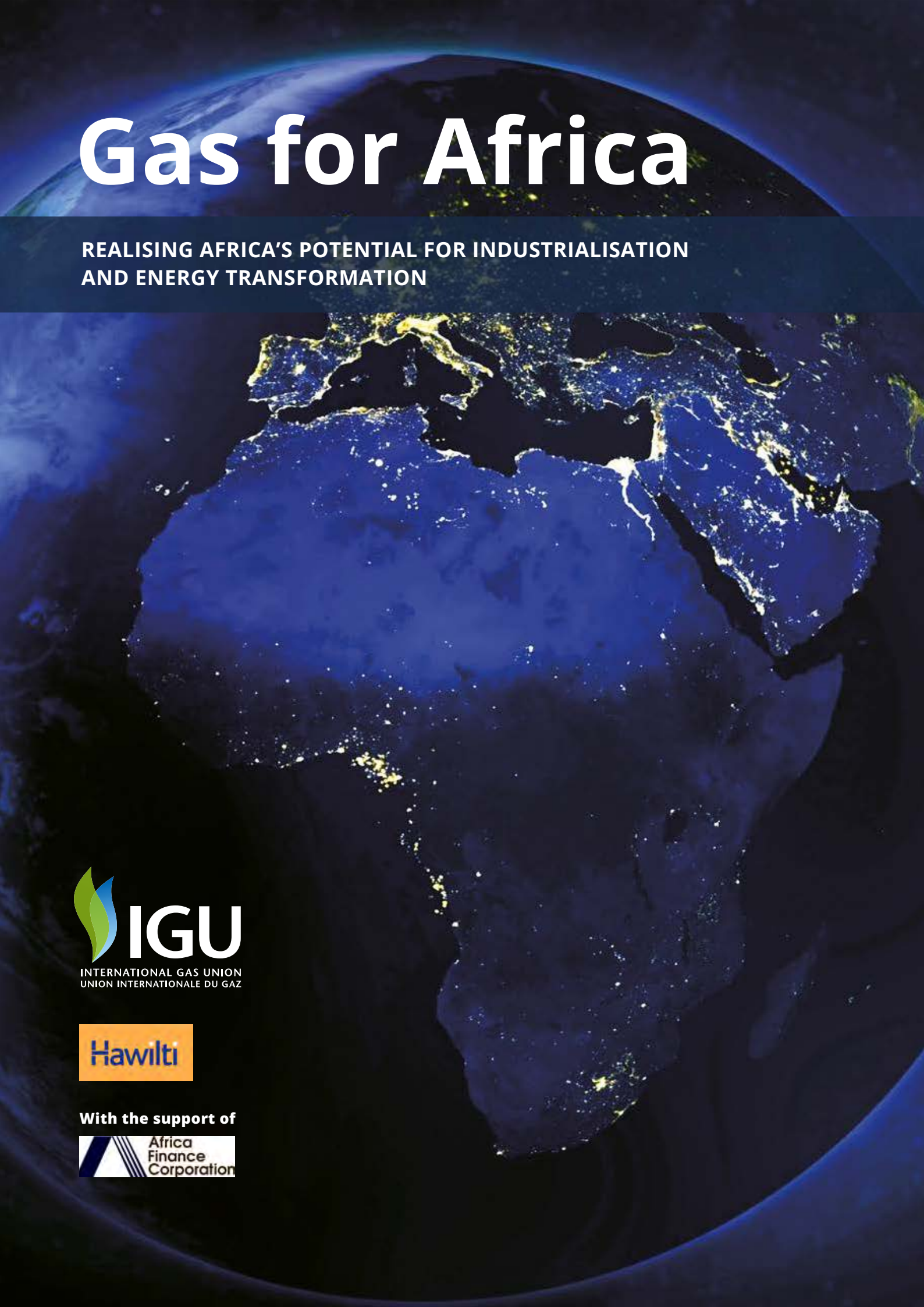
Gas for Africa

REALISING AFRICA'S POTENTIAL FOR INDUSTRIALISATION AND ENERGY TRANSFORMATION



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Hawilti

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Front Cover Picture: Shutterstock

Acknowledgements

The Gas for Africa report was prepared by Hawilti Ltd in partnership with the International Gas Union (IGU) and with the support of the Africa Finance Corporation (AFC).

The report is based on market research, publicly available data, and research interviews conducted by Hawilti Ltd. with various public and private-sector industry executives across Africa. It engaged the African Petroleum Producers Organization (APPO) and the AFC, which have provided critical insights and supported the report's key findings and conclusions. It is supplemented by several case studies available in the Appendix.

We received valuable inputs from numerous Gas and energy experts whose contributions and reviews helped to develop and shape this report, including:

- Dr Omar Farouk Ibrahim, Secretary General, Africa Petroleum Producers' Organization (APPO)
- Mario Bello, Head of Sub Saharan Africa Region, Eni
- Bayo Bashir Ojulari, Group Chief Excecutive, NNPC Ltd
- Armel Simondin, CEO, Perenco
- Roger Brown, CEO, Seplat Energy
- Judith Adjobah Blay, CEO, Ghana National Gas Company
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- Paul Eardley-Taylor, Gas Sector Lead, Standard Bank
- Akachukwu A. Nwokedi, General Counsel and Company Secretary, Nigeria LNG Ltd
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- Mlandzeni Boyce, CEO, Republic of Mozambique Pipeline Investments Company (ROMPCO)
- David Ige, CEO, GasInvest Ltd
- Abiodun Bodurin, Managing Director, West African Gas Pipeline Company Ltd (WAPCo)
- Nagendra Verma, Managing Director, NIPCO Gas Ltd
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- Barnabas Olise, Managing Director, Cakasa (Nig) Company Ltd
- Abiodun Oshodi, Managing Director, ILF Consulting Engineers
- Edward Tawfik, Managing Director, Morpol Engineering Services

Picture: NNPC Ltd

Welcome

We are delighted to welcome you to the second edition (2025) of the Gas for Africa Report, produced jointly by Hawilti and the IGU.

Africa holds vast proven natural gas reserves, yet it accounts for only 6% of global production. This imbalance between resource wealth and utilisation underscores a central challenge: the continent has yet to fully harness Gas as a strategic engine for accessing the energy that will drive economic growth and human development in a continent whose population is predicted to grow by almost 1 billion people to 2050.

Building on the International Gas Union's 2023 *Gas for Africa* Report, this publication reviews progress and captures a pivotal moment in Africa's Gas journey. While there are encouraging signs, including new infrastructure build-out, policy reforms and emerging regional connections, overall natural gas demand has remained largely stagnant for the past four decades. This means that Africa's vast Gas potential is not yet being fully leveraged into widespread energy access, industrial growth and economic resilience.

The opportunity for Gas in Africa remains immense. Natural gas can play a transformative role in achieving domestic energy security, reducing dependence on imported fuels, and fostering economic stability through industrialisation and regional integration. Gas can deliver greater prosperity and equity for fast-growing populations by enabling cleaner power generation, industrial development, modern cooking solutions, lower-emission transport, and a more resilient energy future for Africa.

The eight strategic principles outlined in this report provide a clear roadmap for action. They reflect the deeply interconnected nature of Gas development, from futureproof infrastructure and financial innovation to electricity market reform and regional cooperation. Together, they offer a unified strategy to unlock Africa's natural gas potential in ways that are sustainable, scalable, and equitable.

ANDREA STEGHER
President
International Gas Union

Picture: WAGPO

Foreword

It gives me great pleasure to introduce the 2025 edition of the Gas for Africa Report, a timely contribution to one of the continent's most urgent and complex challenges — turning energy potential into real, inclusive development outcomes.

Africa holds over 8% of the world's proven natural gas reserves yet produces and consumes a disproportionately small share. This underutilisation persists even as Gas offers a competitive energy resource to support industrialisation, and as hundreds of millions live without access to clean cooking fuels. What this report makes clear is that the case for natural gas is not merely about export revenues or energy supply — it is about building the foundation for industrialisation, job creation, energy security, and climate resilience.

One of the most encouraging trends emerging from this year's report is the growing role of African capital, African banks, and African developers in leading the Gas agenda. From the expansion of gas-to-power capacity in Senegal to the development of urea production in Nigeria and Ethiopia, local actors are stepping forward — not just as participants, but as financiers, project sponsors, and solution drivers. This signals an important shift in ownership: Africa is beginning to take the lead in shaping, financing, and delivering the infrastructure it needs to meet its development goals.

At Africa Finance Corporation (AFC), we continue to view natural gas as a strategic enabler of Africa's development. It offers a unique pathway to address multiple needs at once: cleaner electricity, modern cooking, industrial growth, and regional trade integration. The world's energy systems are evolving fast — and this creates both urgency and opportunity for Africa. The continent must act decisively to attract capital, build future-ready infrastructure, and deliver projects that unlock the full value of its resources.

This report outlines how we can achieve this — through pragmatic financing, flexible infrastructure, and clear, commercially viable policy frameworks. Importantly, it demonstrates how Africa's Gas story must now move from potential to performance, by focusing on industrialisation and regionalisation.

As ever, AFC stands ready to partner with public and private stakeholders to finance and deliver critical Gas infrastructure — not just for energy access, but for structural transformation. Let us get to work.

Samaila Zubairu
President & CEO
Africa Finance Corporation

Acronyms

AAGP	African-Atlantic Gas Pipeline
AFC	Africa Finance Corporation
APPO	African Petroleum Producers' Organization
ASB	Annual Statistical Bulletin
AUM	assets under management
bbl	barrel
Bcm	billion cubic metres
Bscf/d	billion (standard) cubic feet per day
Btu	British thermal units
CCGT	combined-cycle gas turbine
CO2	carbon dioxide
CNG	compressed natural gas
CCUS	carbon capture, utilisation and storage
DFI	development finance institution
EPRA	Energy and Petroleum Regulator Authority
FID	final investment decision
FPSO	Floating Production and Storage Offloading unit
FY	fiscal year
GDP	gross domestic product
GMP	Gas Masterplan
GW	gigawatt
HFO	heavy fuel oil
IEA	International Energy Agency
IGU	International Gas Union
ILX	Infrastructure Led Exploration
km	kilometre
kWh	kilowatt hour
LDAR	leak detection and repair
LNG	liquified natural gas
LPG	liquefied petroleum gas
MEM	modern energy minimum
MMbtu	million British thermal units
MMscf/d	million (standard) cubic feet per day
MMscm	million (standard) cubic metres
MOU	Memorandum of Understanding
MRU	mechanical refrigeration units
MSP	Mozambique-Secunda Pipeline
mtpa	million metric tonnes per annum
MW	megawatt
NAG	non-associated gas
OPEC	Organization of Petroleum Producing Countries
PAYG	pay-as-you-go
PJ	petajoule
PoA	programme of activities
PPA	Power Purchase Agreement
PSA	Production Sharing Agreement
PV	photovoltaic
ROMPCO	Republic of Mozambique Pipeline Company
SADC	South African Development Community
scf	standard cubic foot
scm	standard cubic metre
SMEs	small and medium enterprises
Tcm	trillion cubic metres
Tcf	trillion cubic feet
tpa	tonne per annum
TransMed	Trans Mediterranean Pipeline
VAT	value added tax
VRU	vapour recovery units
WAGA	West Africa Gas Pipeline

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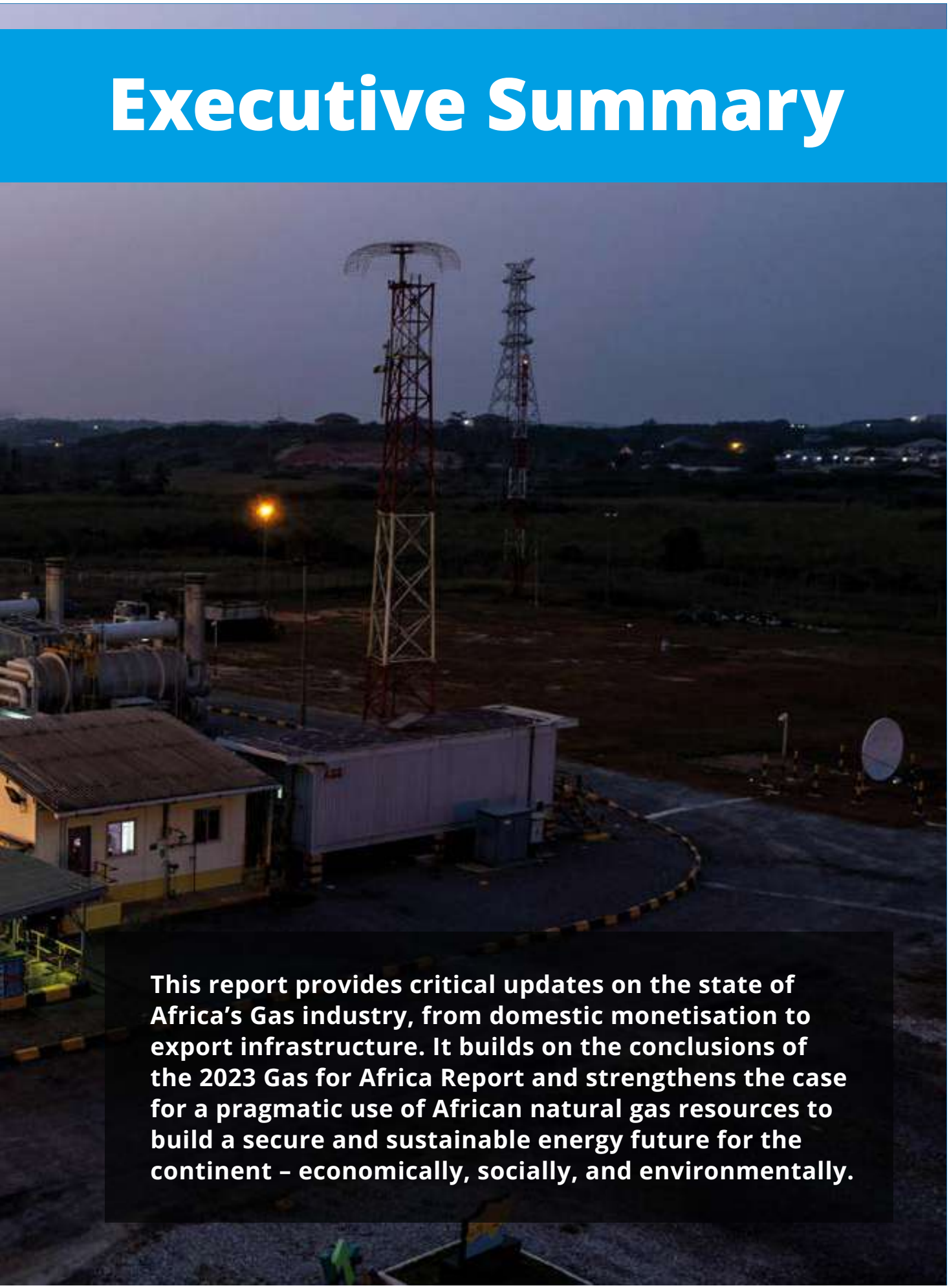
Picture: Seplat Energy

Picture: West African Gas Pipeline Company

Executive Summary



This report provides critical updates on the state of Africa's Gas industry, from domestic monetisation to export infrastructure. It builds on the conclusions of the 2023 Gas for Africa Report and strengthens the case for a pragmatic use of African natural gas resources to build a secure and sustainable energy future for the continent – economically, socially, and environmentally.

Executive Summary

Global primary energy demand is on the rise, spurred by the rapid growth of energy-intensive technologies like artificial intelligence and data centres, alongside climate-driven needs for heating and cooling[1]. In this evolving landscape, Africa emerges as a critical zone for future energy demand growth. The continent combines the lowest per capita energy consumption globally with some of the fastest rates of demographic expansion, urbanisation, and industrialisation.

This latent demand is beginning to materialise. Earlier in 2025, Egypt deployed four Floating Storage and Regasification Units (FSRUs) to import natural gas and meet surging electricity needs during peak summer heat — a stark illustration of the pressures African countries face in securing reliable, dispatchable energy.

Yet despite clear demand potential — and widespread recognition that natural gas is a strategic resource for Africa's structural economic transformation — a significant share of the continent's natural gas remains stranded and undeveloped. Importantly, gas-to-power accounts for a disproportionately large share of natural gas use in Africa, reflecting a missed opportunity to harness natural gas more broadly across the economy — particularly in industry, manufacturing, mining, transport, and households, where it could drive productivity, reduce import dependence, promote cleaner cooking practices and support inclusive growth.

The recommendations of this report are a call-to-action: unless the continent accelerates technological innovation and puts in place clear, stable, and investable regulatory and pricing frameworks, much of the continent's natural gas resource will remain a missed opportunity — economically, socially, and environmentally. If left unaddressed, Africa risks falling behind in an increasingly competitive global natural gas market.

Picture: WAGPO

[1] *Global Energy Review 2025, International Energy Agency.*

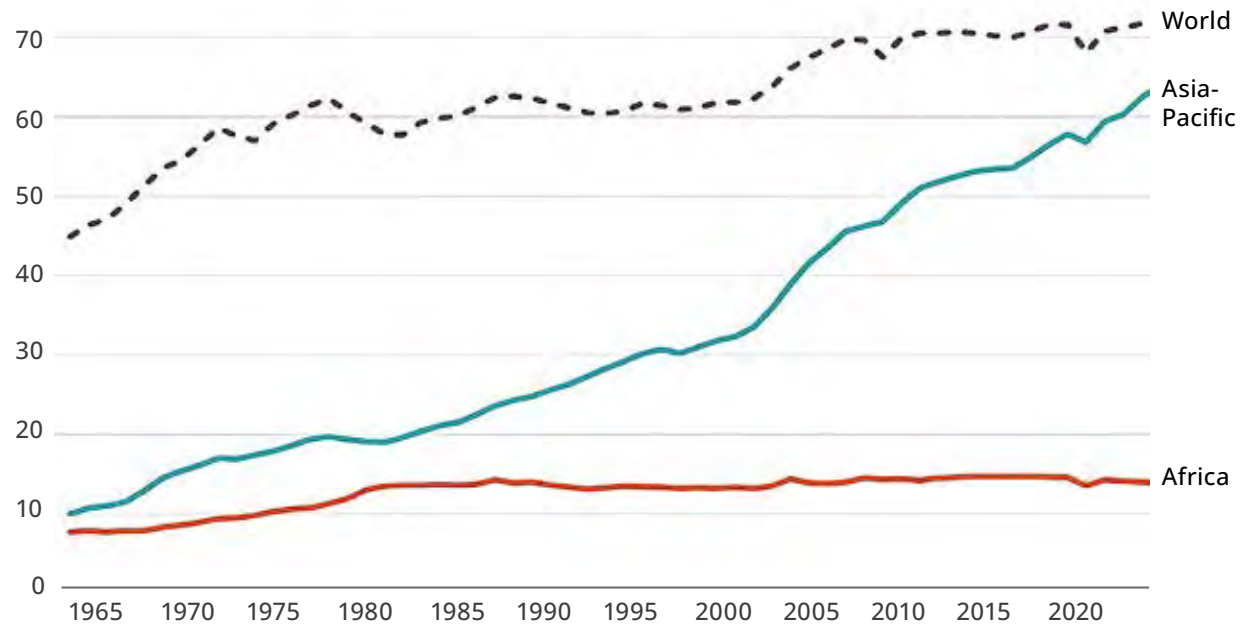
Picture: NNPC Ltd

Understanding African energy realities and priorities

This report addresses Africa's wider energy deficit, far beyond the lack of household electricity or clean cooking access. While these remain urgent needs, they represent only part of a much broader systemic shortfall. Industries, minerals processing, transport systems, and increasingly digital infrastructure also suffer from underpowered and unreliable energy systems. This structural weakness is clearly reflected in the continent's energy metrics: overall energy supply per capita has stagnated for several decades (see Figure 1), while per capita electricity consumption has declined in Africa over the past twenty years[2] — a stark indicator of stagnation in productive energy use.

Figure 1: Africa's per capita energy supply has stagnated for the past 40 years

Total energy supply, in gigajoule per capita



Source: Energy Institute, World Bank

[2] *State of Africa's Infrastructure Report 2025, Africa Finance Corporation.*

To address this deficit, Africa must adopt a comprehensive approach to energy planning that prioritises not just access, but also the productive use of energy to fuel economic growth, job creation, and industrial transformation. This means going beyond household electrification to build energy systems that can power factories, supply chains, transport fleets, and digital economies.

Natural gas offers a pragmatic and scalable source of energy to meet this broader set of needs — from grid stability and dispatchable power to industrial heat and process fuel. Yet, despite having vast proven natural gas reserves, Africa remains a modest producer and an even smaller consumer of natural gas compared to other global regions. This disconnect underscores a missed opportunity.

African natural gas, if better mobilised and integrated, could serve as a key enabler of structural economic transformation, supporting not only energy security, but also long-term industrial development.

Picture: NNPC Ltd

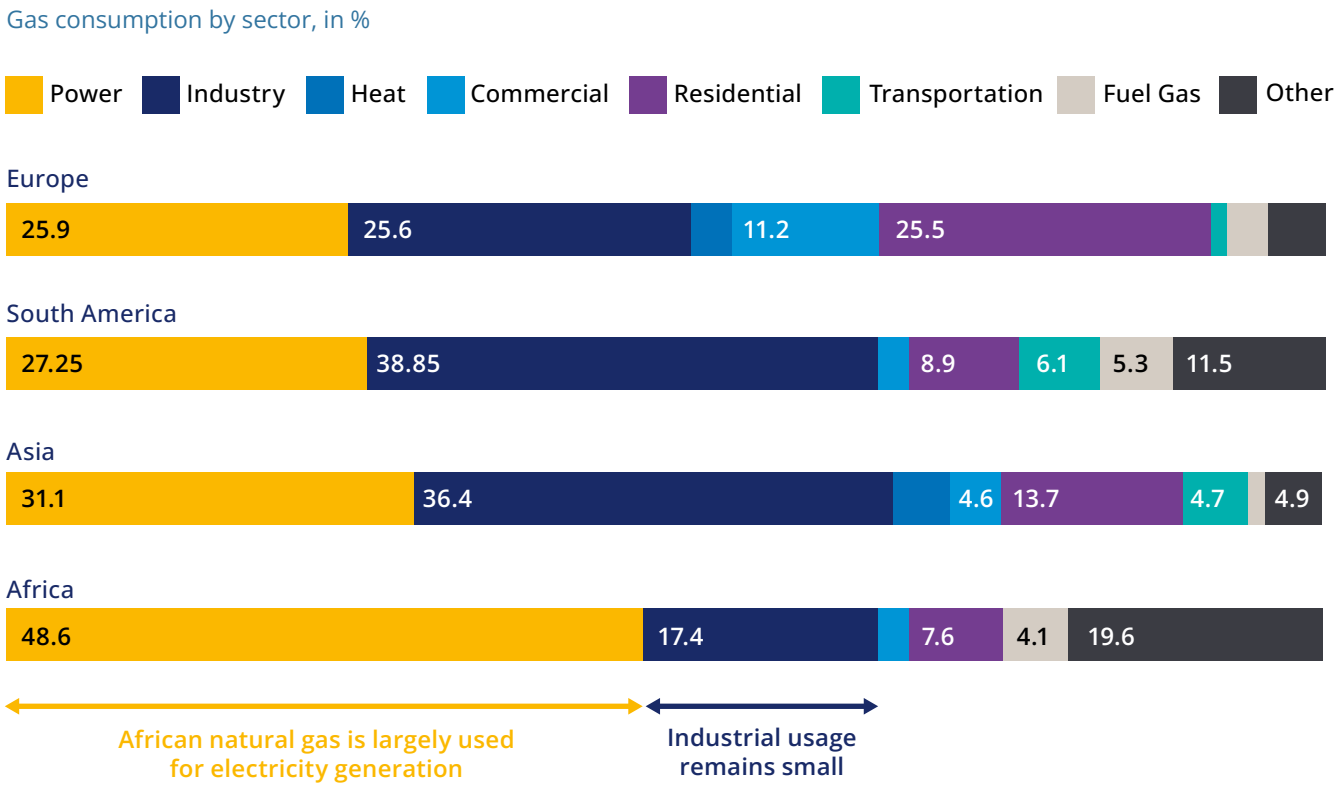
The need to diversify natural gas utilisation across Africa

To realise the full value of natural gas, Africa must promote a more diversified approach to its use, extending beyond its current concentration in electricity generation. While natural gas is well positioned to address urgent energy access challenges — particularly in power and clean cooking — its broader potential as an enabler of industrial development and economic resilience remains underutilised.

Unlike in other global regions, natural gas demand in Africa is heavily skewed toward the power sector (see Figure 2), which often faces financial and operational constraints. Expanding natural gas use across industry, transport, and commercial sectors like mining would not only unlock greater economic value but also improve the bankability and viability of natural gas infrastructure projects by spreading demand and reducing overreliance on illiquid power markets.

Some countries are already demonstrating what this could look like. Egypt, Algeria, and Nigeria have built successful natural gas-based industries in fertilisers, petrochemicals, cement and steel, offering practical models for other markets to adapt and scale. Tapping into similar opportunities in countries like Angola, Senegal or the Republic of Congo will depend on targeted investment in midstream and downstream infrastructure, along with coordinated policy action that integrates natural gas into national industrial strategies.

Figure 2: The African exception: natural gas in Africa is excessively used for electricity generation instead of a broader utilisation across the economy



Source: Global Gas Report 2024, IGU

Africa's natural gas infrastructure is expanding, albeit too slowly

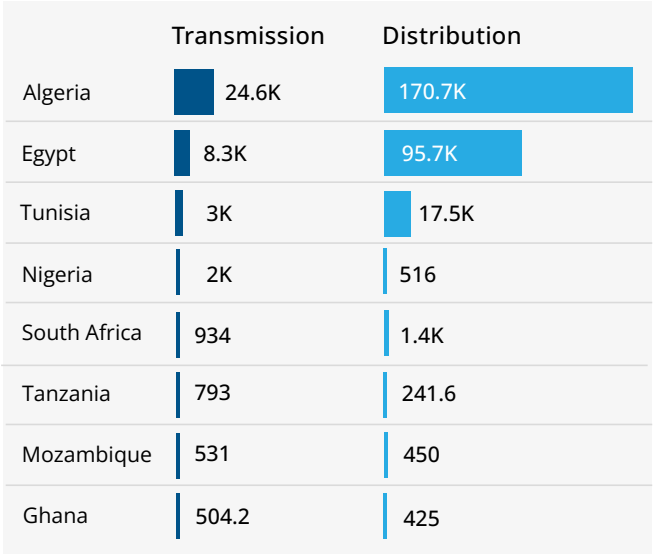
Since the 2023 Gas for Africa Report, the most notable progress in Africa's natural gas infrastructure has come from export-oriented projects. New liquefaction capacity has come online in Mozambique[3], Congo[4] and the Senegal–Mauritania Basin[5], reshaping the continent's role in global natural gas supply. These developments mark an important step forward in positioning Africa as a competitive LNG exporter. However, setbacks in established exporters like Nigeria and Egypt — due to feed gas constraints and rising domestic demand — illustrate the delicate balance between export ambitions and local energy needs.

In parallel, there is growing interest in domestic natural gas infrastructure, particularly in pipeline development, to expand access to industrial, power, and residential users. Yet, despite this appetite, many projects remain slow to materialise, largely held back by financing or regulatory hurdles. Key infrastructure projects are now under construction in Senegal, Ghana, Nigeria and South Africa, and their successful commissioning will be critical to demonstrate the viability of the region's natural gas infrastructure ambitions and attract further private sector investment across the value chain.

Looking ahead, regional integration will be critical to unlock the full potential of Africa's natural gas sector. Cross-border pipelines

Figure 3: African natural gas infrastructure is largely concentrated in North Africa

Natural as pipeline networks in selected African countries, in kilometres



Source: Hawilti Research

Picture: Seplat Energy

[3] https://www.eni.com/en-IT/actions/global-activities/mozambique/coral-south.html

[4] https://www.eni.com/en-IT/media/press-release/2023/12/eni-started-gas-introduction-tango-flng-congo.html

[5] https://www.bp.com/en/global/corporate/news-and-insights/press-releases/bp-flows-first-gas-at-greater-tortue-ahmeyim-lng-project.html

and infrastructure — building on successful models like the Republic of Mozambique Pipeline Investment Company (ROMPCO) — can create synergies of scale, strengthen energy security, and make smaller discoveries commercially viable.

Without deliberate efforts to accelerate domestic and regional infrastructure, Africa risks missing the opportunity to leverage its natural gas endowments for broad-based domestic and regional development.

African natural gas in a lower-emissions global economy

Africa is the lowest-emitting continent globally, yet it faces some of the most severe climate risks[6]. In this context, natural gas offers a pragmatic pathway to reduce emissions while supporting development goals and climate-resilience. Its role as a transition fuel is particularly relevant for Africa's energy systems, which remain heavily reliant on coal, diesel, and biomass. In that regard, natural gas supports Africa's climate objectives in several ways:

- It helps displace coal and oil in power generation, with meaningful progress already underway in South Africa, Senegal, and Morocco[7].
- It enables the integration of intermittent renewables, balancing wind and solar, by providing resilient baseload supply, while also mitigating hydropower variability in drought-prone regions — thereby strengthening grid reliability.
- In the transport and maritime sectors, natural gas provides a cost-effective alternative to imported fuels, helping governments reduce fuel subsidy burdens while lowering emissions from urban fleets and logistics. When strategically positioned along major shipping routes, LNG bunkering facilities can also help supply lower carbon fuel to ships and help decarbonise global trade.
- It lays the groundwork for a lower-emissions energy future, offering backbone infrastructure that is compatible with biogas, biomethane, hydrogen, and other emerging low-carbon fuels.
- It supports a cleaner and healthier cooking transition through the use of liquefied petroleum gas (LPG) which reduces reliance on wood and charcoal. This shift helps combat deforestation and promotes public health[8].

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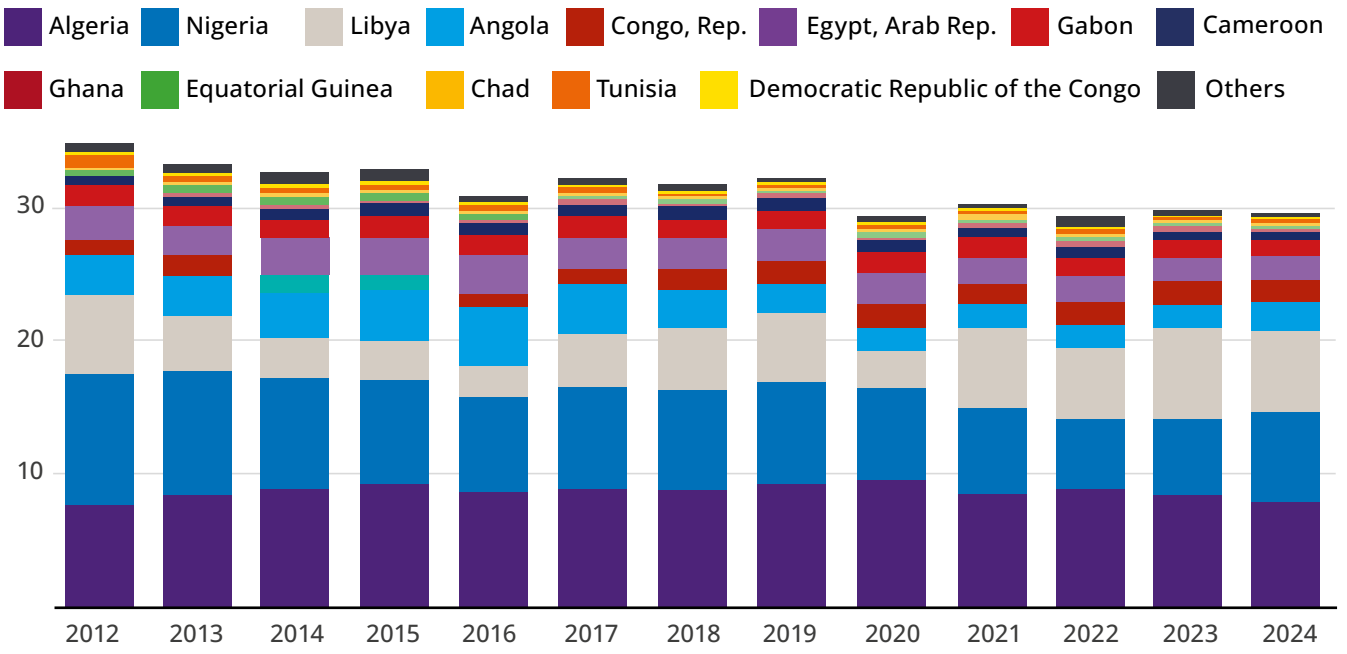
[6] *See for instance United Nations Fact Sheet on Climate Change - https://unfccc.int/files/press/backgrounders/application/pdf/factsheet_africa.pdf*

[7] *Globally, switching to natural gas — such as in the Middle East's power sector or the record sales of natural gas-powered trucks in China in 2024 — reinforces natural gas' role in emissions reduction. See for instance United Nations Fact Sheet on Climate Change - https://unfccc.int/files/press/backgrounders/application/pdf/factsheet_africa.pdf*

[8] *The lack of clean cooking access is linked to the loss of 1.3 million hectares of forest annually across Africa, while household air pollution is responsible for an estimated 815,000 premature deaths each year on the continent. See https://www.iea.org/reports/universal-access-to-clean-cooking-in-africa/executive-summary*

Figure 4: With the exception of Angola, most African oil & gas producers have seen flaring volumes broadly unchanged over the past decade

Gas flaring, in billion cubic metres (Bcm)



Source: World Bank

Picture: iStock

However, to play its full decarbonisation role, natural gas must be produced more sustainably. According to the World Bank's 2025 Global Gas Flaring Tracker[9], global flaring rose to its highest level since 2007, undermining progress on energy security, energy access, and emissions reduction goals. Africa remains one of the largest contributors to global flaring (see Figure 4), with persistently high emissions intensities in several oil and natural gas-producing markets.

This not only represents a significant climate challenge, but also a missed opportunity to recover and utilise valuable energy resources. Tackling flaring and methane emissions is among the most immediate and cost-effective ways to decarbonise Africa's oil and gas sector, while freeing up natural gas that can displace higher-emitting fuels in power, cooking and industries.

[9] https://www.worldbank.org/en/programs/gasflaringreduction/publication/2025-global-gas-flaring-tracker-report

This report calls for sustained action to eliminate routine flaring and reduce methane leaks, particularly in the continent's largest producing countries. These efforts are critical to ensure African natural gas remains globally competitive, climate-aligned, and capable of delivering on its development potential.

These trends underscore the growing importance of natural gas in Africa's economic agenda — but also highlight the complexities of scaling its adoption in markets that remain fragmented, under-capitalised, and institutionally constrained.

Natural gas can serve as a cornerstone of Africa's energy future, its structural transformation and lower-carbon transition. But unlocking its full potential will require deliberate, coordinated action across three critical fronts:

1.

FINANCIAL INNOVATION

Including tailored investment instruments, stronger public-private partnerships, and mechanisms to mobilise domestic capital from pension funds, sovereign wealth funds, and local financial markets.

2.

INFRASTRUCTURE EXPANSION

With a shift from a sole focus on large-scale export projects to include small- and mid-scale systems that serve local industry, urban centres, clean cooking markets, and enable regional energy trade.

3.

POLICY REFORM & INSTITUTIONAL COORDINATION

Through clearer regulatory frameworks, flexible pricing structures, modernised natural gas planning, and better alignment between energy, industrial, and climate objectives.

If these conditions are met, Africa's natural gas sector can deliver far more than molecules and electrons. It can power factories, mines, transport, digital infrastructure, and inclusive economic growth, while supporting a just and sustainable energy transition, on African terms.

1 / Africa's Energy Context

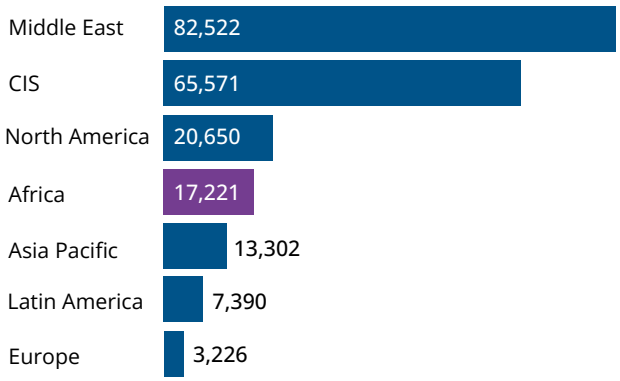
Africa holds vast proven reserves of natural gas, yet it accounts for just 6% of global production (see Figure 5). This stark imbalance between resource wealth and resource utilisation underscores the continent's ongoing underleveraging of natural gas as a strategic economic and development asset.

Despite its potential to bridge electricity access gaps, expand clean cooking solutions, and drive industrial growth, natural gas remains marginal in Africa's energy mix — a missed opportunity with far-reaching implications.

Picture: Eni

Figure 5: Africa has some of the highest proven reserves of natural gas in the world...

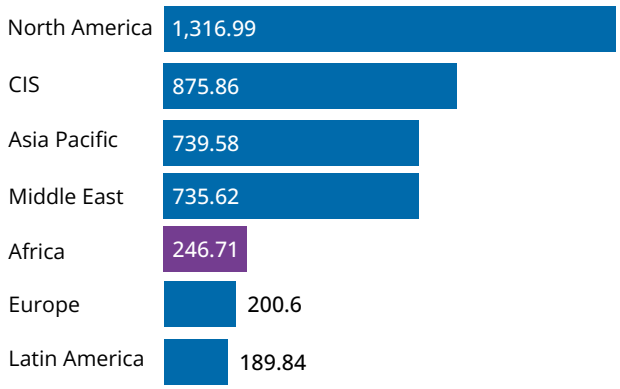
Proven natural gas reserves, in Bcm (2024)



Source: OPEC Annual Statistical Bulletin (ASB)

... yet monetises only a fraction of it...

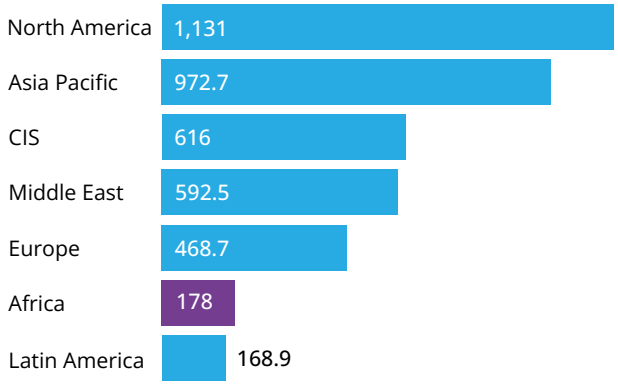
Marketed natural gas production, in Bcm (2024)



Source: OPEC Annual Statistical Bulletin (ASB)

... and its economies are yet to benefit from gas utilisation

Natural gas consumption, in Bcm (2024)



Source: Statistical Review of World Energy, Energy Institute

Beyond Households Electrification: Understanding Africa's Energy Needs

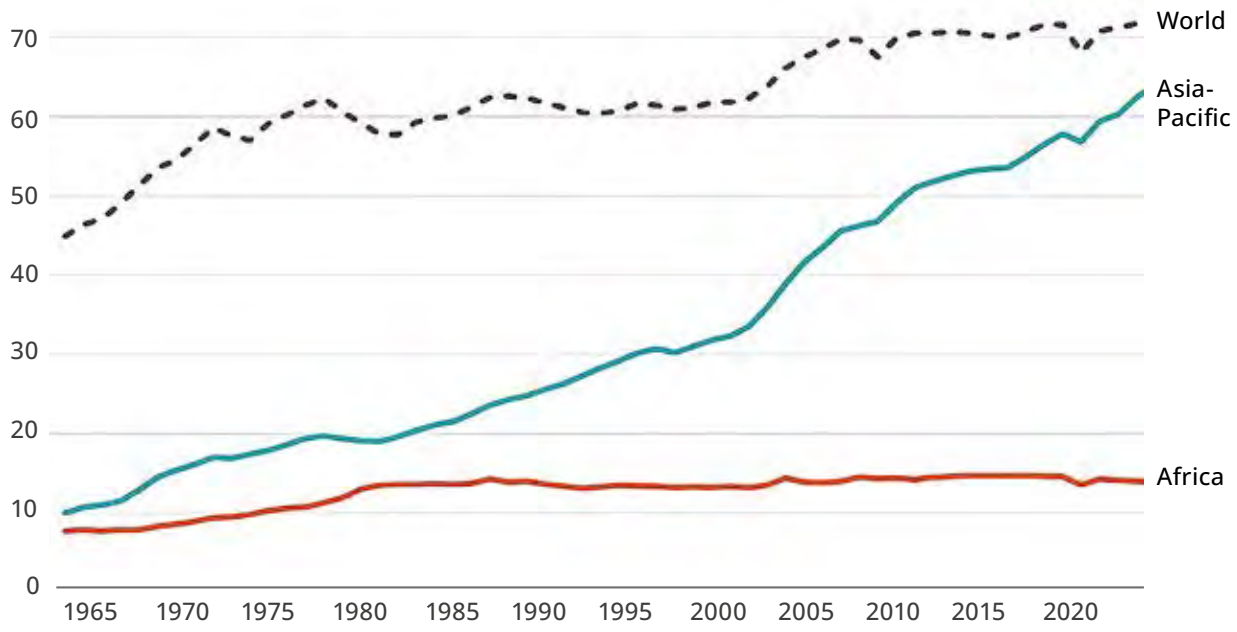
Africa remains the least energised continent in the world, with per capita energy supply stagnant for the past four decades.

While global energy availability has grown significantly, Africa's growth in absolute terms has been largely offset by rapid population expansion, limited infrastructure investment, and persistent structural and financial barriers. As a result, the average African today has access to about the same amount of energy that they did in the 1980s — a reality that underpins many of the continent's social and economic challenges. By contrast, energy supply in Asia — once on par with Africa in the 1960s — has increased sixfold over the past decades, powering the region's structural economic transformation (see Figure 6).

Picture: Ghana Gas

Figure 6: Africa's energy supply has stagnated for the past 40 years

Total energy supply, in gigajoule per capita



Source: Hawilti calculations based on Statistical Review of World Energy, Energy Institute; World Bank population data

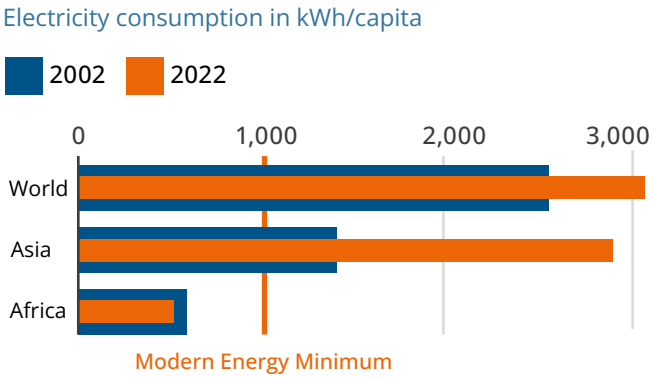
Perhaps more striking is the trend in electricity consumption, which has declined over the past 25 years at continent level, on a per capita basis (see Figure 7). Despite progress in electrification rates on paper, this decline indicates that fewer electrons are available per person, pointing to a deeper issue: access is not the same as availability or reliability. In many countries, grid connections are nominal, with frequent outages, low voltage, and rationing — undermining the productive use of electricity in homes, businesses, and essential economic services.

This context calls for a fundamental rethinking of the scale of Africa's energy needs.

Policymakers and investors must move beyond headline electrification statistics and begin to assess the quality, reliability, and quantity of energy available to industries and citizens.

A more appropriate benchmark is the Modern Energy Minimum of 1,000 kWh per capita per year, which represents the threshold needed to power not only basic household needs, but also the electricity needed to power a modern economy. The metric assumes a minimum of 250 kWh of consumption at home, but more important 750 kWh across economic activities (industry, commerce, transportation, agriculture etc)[10].

Figure 7: Africa consumes less electricity today than it did 25 years ago



Source: UNSTATS

Most African countries remain well below this threshold, with a few exceptions in North and Southern Africa (see Figure 8).

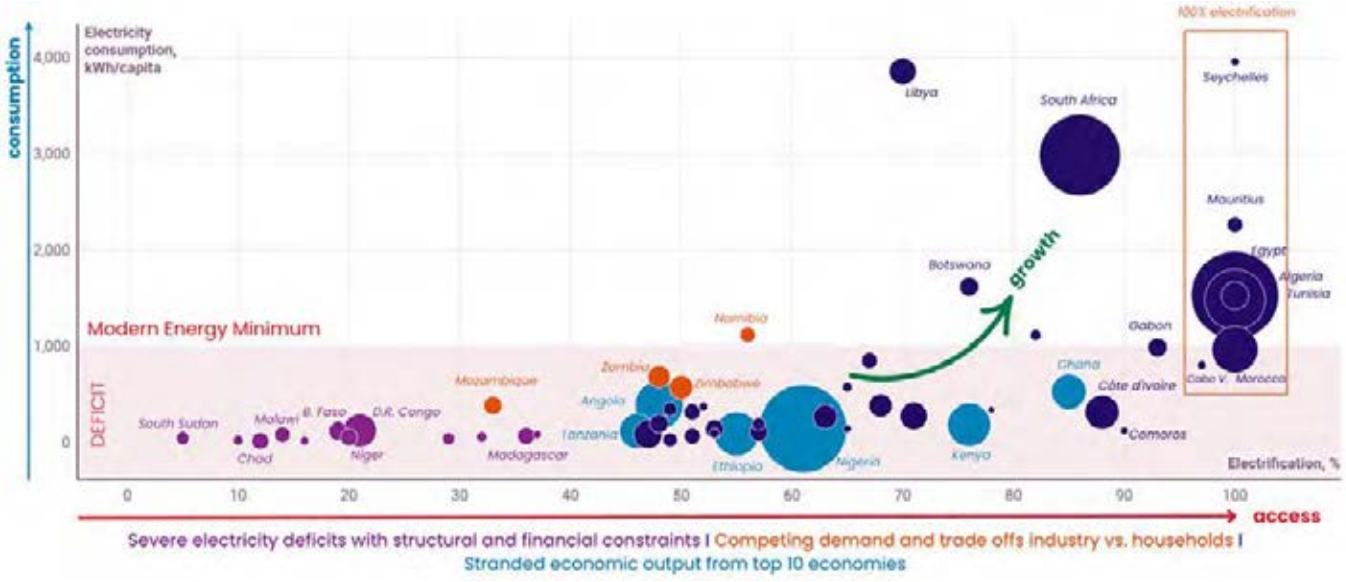
Only by adopting this broader lens can we begin to measure the scale of Africa's energy needs and assess the value that natural gas resources can play in meeting them. As part of a resilient and diversified energy mix, natural gas offers a flexible, dispatchable, and scalable energy source that is well-suited to meet both electricity access goals and broader energy needs — from powering industrial clusters and commercial centres to supporting clean cooking and transport.

Acknowledging and addressing the depth of the continent's energy shortfall is the first step toward understanding the pragmatic and strategic role natural gas must play in Africa's energy future.

[10] *For more details on the Modern Energy Minimum (MEM), see Energy for Growth Hub - https://modernenergyminimum.org/. Importantly, several African countries adopted the Kigali Communiqué in 2022, acknowledging the MEM as a more ambitious and realistic metric for the continent.*

Figure 8: No one-size-fits-all: by going beyond household's electrification, we can start to understand the diversity of Africa's electricity challenges and opportunities

Households' electrification (2023) vs. electricity consumption (2022) across Africa. Countries represented according to the size of their GDP.



Source: AFC staff calculations based on UNStats consumption data; Energy Progress Report electrification data, and IMF GDP data

Picture: Seplat Energy

New Discoveries Have Expanded African Natural Gas Frontiers

Against a persisting energy deficit, Africa's natural gas reserves have continued to grow steadily over the past two decades.

To date, natural gas has been discovered in 24 countries, with Zimbabwe becoming the most recent addition, confirming the continent's strategic role in the global natural gas landscape.

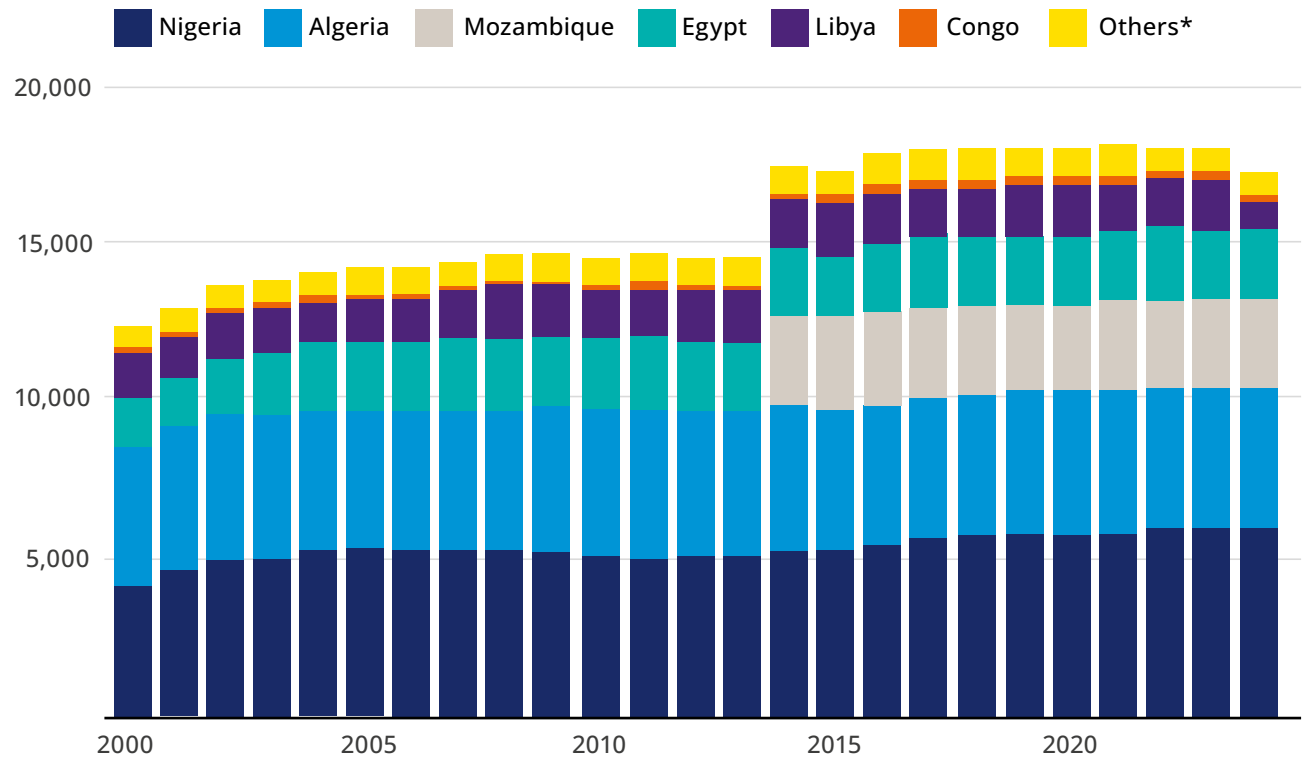
From established hubs in North and West Africa to newer basins in the south and east, Africa's natural gas geography is broadening — a reflection of renewed exploration activity and rising interest in the continent's untapped hydrocarbon potential.

Currently, Africa has some 15-17 trillion cubic metres (Tcm) of proven natural gas reserves (see Figure 9), accounting for over 8% of the world's total. While large natural gas discoveries have traditionally been made in Nigeria, Algeria and Egypt for decades, natural gas exploration took a new turn over 2010-2020 with world-class discoveries made offshore Senegal-Mauritania, Tanzania and Mozambique.

Since 2020, more recent discoveries across Angola, Namibia or Côte d'Ivoire are shifting

Figure 9: Africa holds over 8% of the world's proven natural gas reserves

Proven natural gas reserves in Africa, in Bcm



* Cameroon, Angola, Equatorial Guinea, Gabon, Senegal, Mauritania, Tanzania, Namibia, Ghana, Côte d'Ivoire

Source: Organization of the Petroleum Exporting Countries (OPEC) Annual Statistical Bulletin (ASB)

the centre of gravity of African natural gas once again. Entirely new natural gas provinces are also emerging, such as Namibia's Orange Basin[11] and Zimbabwe's Cabora Bassa[12], where early drilling success is opening fresh frontiers for upstream development of both associated and non-associated natural gas.

These developments present a unique opportunity to enable domestic energy transformation, support regional energy security and potentially expand export capacity. Yet much of Africa's natural gas potential is still underreported in official reserve figures, due in large part to project delays, regulatory uncertainty, and the absence of final investment decisions.

Several of the continent's largest natural gas finds still lack approved or bankable field development plans, despite their enormous resource size.

These undeveloped discoveries are spread across the continent, including Yakaar-Teranga in Senegal (25 Trillion cubic feet - Tcf), Orca and BirAllah in Mauritania (50 Tcf), Tanzania LNG (36 Tcf), and multiple offshore blocks in Mozambique and South Africa. In East and Southern Africa alone, discoveries totalling well over 150 Tcf remain to be developed.

Meanwhile, older but commercially viable fields such as Fortuna in Equatorial Guinea, Calub and Hilala in Ethiopia, and Kudu in

Picture: Perenco

[11] https://www.rhinorsc.com/volans-1x-gas-condensate-discovery-rhino/

[12] https://api.investi.com.au/api/announcements/ivz/899c26b5-738.pdf

Namibia are finally being revived after years of inactivity.

While this is an encouraging sign of renewed momentum, the fact that these relatively de-risked discoveries have taken decades to reach even preliminary development stages speaks to deeper structural delays. Unlocking the full value of Africa's stranded natural gas resources will require pragmatic route-to-market solutions — supported by technology — whether through Gas by pipe, Gas by wire, or Gas by truck. These approaches can accelerate monetisation timelines, reduce dependency on large anchor projects, and bring Gas closer to end users across power, industry, and transport.

Long lead times, policy uncertainty, and unresolved commercial frameworks continue to erode the competitiveness of African natural gas projects in a global market where agility and speed to market are increasingly critical[13].

In contrast, infrastructure-led exploration (ILX) is starting to unlock smaller, more commercially agile discoveries. This is particularly the case in Egypt (bp, ExxonMobil, Eni), Nigeria (First E&P, TotalEnergies), Algeria (Sonatrach) and Angola (Azule Energy), where new natural gas finds are being made in proximity to existing production systems and monetisation infrastructure. These "fast-track" discoveries are more likely to attract near-term investment and move swiftly toward development — especially when aligned with growing domestic demand or LNG backfilling opportunities.

Taken together, these trends suggest that Africa's natural gas story is still unfolding — and that its resource base is far deeper than the current reserve figures suggest. The challenge now is less about geology and more about regulatory certainty, project bankability, and infrastructure readiness. With the right enabling environment, these discoveries could underpin the next wave of energy access, industrialisation, and regional integration across the continent.

Picture: Azule Energy

In August 2022, Azule Energy reached Final Investment Decision (FID) on Angola's first non-associated natural gas development, and is currently developing the Quiluma and Maboqueiro natural gas fields offshore Angola to supply feedstock to the Angola LNG export terminal.

[13] *Gas for Africa Report 2023, International Gas Union.*

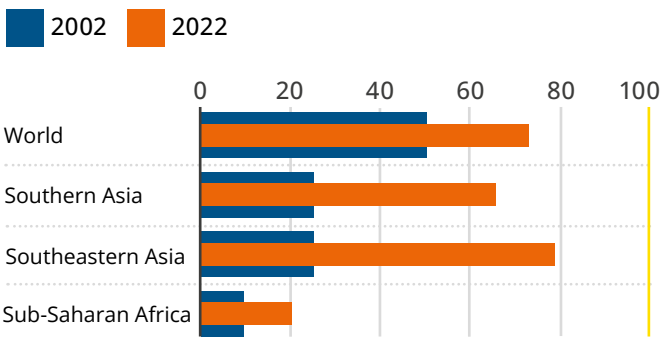
Despite Growing Proven Reserves, Natural Gas Penetration Remains Minimal

Africa's growing natural gas reserves contrast sharply with persistently low levels of domestic utilisation, particularly in sectors central to inclusive development.

Nowhere is this more urgent than in the clean cooking sector. Clean cooking access in Africa currently stands at about 20% (see Figure 10), leaving over 900 million Africans to rely on polluting fuels like wood, charcoal, and kerosene for basic cooking needs. This reliance contributes to 815,000 premature deaths annually[14] from household air pollution and leads to the loss of more than 1.3 million hectares of forest each year[15], undermining public health and environmental resilience.

Along with improved cookstoves, Liquefied Petroleum Gas (LPG) offers a practical and scalable solution to this crisis — particularly in urban and peri-urban areas where distribution is more viable. LPG is clean-burning, energy-dense and portable, and will remain a central pillar of Africa's clean cooking transition through to, at least, 2040, under the International Energy Agency (IEA)'s[16] latest projections.

Figure 10: Clean cooking access rates remain minimal in sub-Saharan Africa



Source: The Energy Progress Report

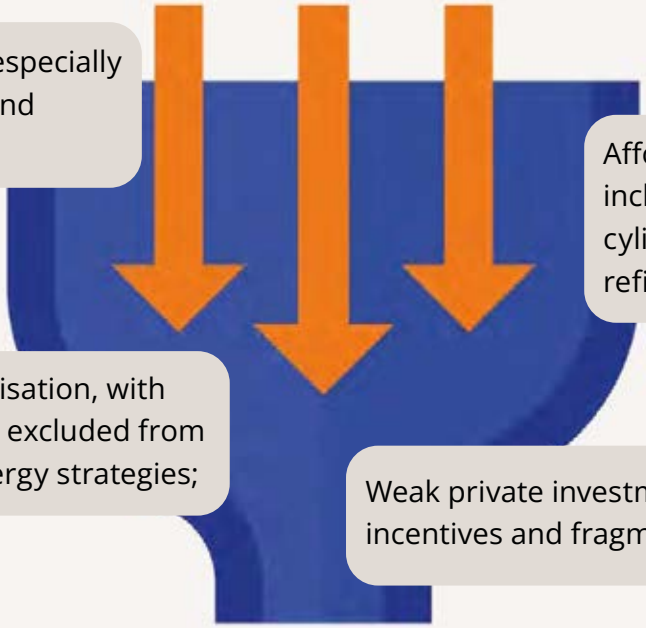
Picture: NNPC Ltd

[14] https://www.iea.org/reports/universal-access-to-clean-cooking-in-africa/executive-summary

[15] *Idem.*

[16] https://www.iea.org/news/accelerating-clean-cooking-investment-can-propel-africa-towards-full-access-by-2040

Despite a surge in LPG imports across the continent, domestic consumption remains far below potential. This reflects a set of persistent bottlenecks:



- Infrastructure gaps, especially in last-mile delivery and cylinder logistics;
- Affordability barriers, including the cost of cylinders, stoves, and refills;
- Limited policy prioritisation, with cooking access often excluded from national Gas and energy strategies;
- Weak private investment, due to unclear incentives and fragmented demand.

These are solvable challenges — and countries like Ghana, Senegal or Kenya are demonstrating that with the right mix of public-private partnerships, regulatory clarity, and consumer engagement, LPG uptake can expand rapidly (*See Case Study: Kenya's LPG Growth Strategy Starts Yielding Results: Page 30*). But to unlock this potential at scale, clean cooking must be embedded in national energy planning — not treated as an add-on to electrification.

CASE STUDY:
Kenya's LPG Growth Strategy Starts Yielding Results

Kenya has positioned itself as a regional leader in clean cooking by placing liquefied petroleum gas at the centre of its national energy planning. In October 2023, the government launched the National LPG Growth Strategy, setting ambitious targets to more than double the per capita LPG consumption from 6.5 kg to 15 kg, and expand household LPG penetration from 24% to 70% by 2028.

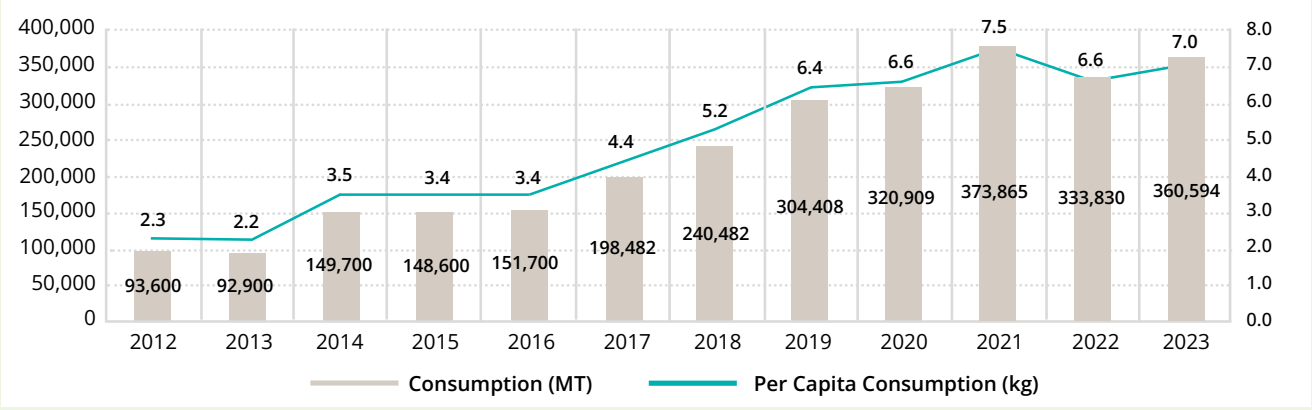
These goals are anchored in a comprehensive approach that enhances the entire LPG value chain — from importation, storage, and distribution to last-mile delivery — with a focus on improving both accessibility and affordability. The strategy complements broader targets under the 2025–2034 Energy Plan[17], which aims to increase LPG's share in Kenya's cooking mix to 35% by 2030[18], up from 31% in 2023.

To facilitate LPG uptake, Kenya has paired policy ambition with targeted fiscal and financial incentives. The government has progressively reduced the Value Added Tax (VAT) on LPG to 8%, and the 2023 Finance Bill proposed to fully exempt LPG from VAT, Import Declaration Fees, and the Railway Development Levy — making it more affordable across income segments. At the same time, the country has leveraged its strong microfinance and mobile banking infrastructure to scale innovative financing models.

With over 68% of adults using mobile money, pay-as-you-go (PAYG) LPG models have gained traction, particularly in informal settlements. Smart meters allow consumers to purchase LPG in small increments, improving affordability and usage tracking. Pilot programmes have shown promising results, with 12 kg per capita annual usage and 90% loan repayment rates among participating households[19]. By integrating policy reform, digital finance, and private sector partnerships, Kenya is building one of Africa's most dynamic LPG ecosystems — offering a practical, scalable roadmap to clean cooking access.

Figure 11: LPG penetration is growing in Kenya, where the government targets an LPG consumption of 15 Kg per capita by 2030

LPG consumption: metric tonnes vs. Kg/capita



Source: Energy and Petroleum Regulatory Authority (EPRA) Kenya

[17] https://energy.go.ke/sites/default/files/Final%20Draft%20NEP%202025-2034%20(1).pdf

[18] https://documents1.worldbank.org/curated/en/955741536097520493/pdf/129734-BRI-PUBLIC-VC-LW89-OKR.pdf

[19] *LPG Roadmap for Africa. LPG's Game-Changing Role in Providing Access to Clean Cooking Fuels to Africa. World Liquid Gas Association, December 2024.*

The growth of Africa's natural gas sector offers a unique opportunity to align upstream supply with domestic development priorities, including access to modern, clean cooking fuels.

Picture: NNPC Ltd

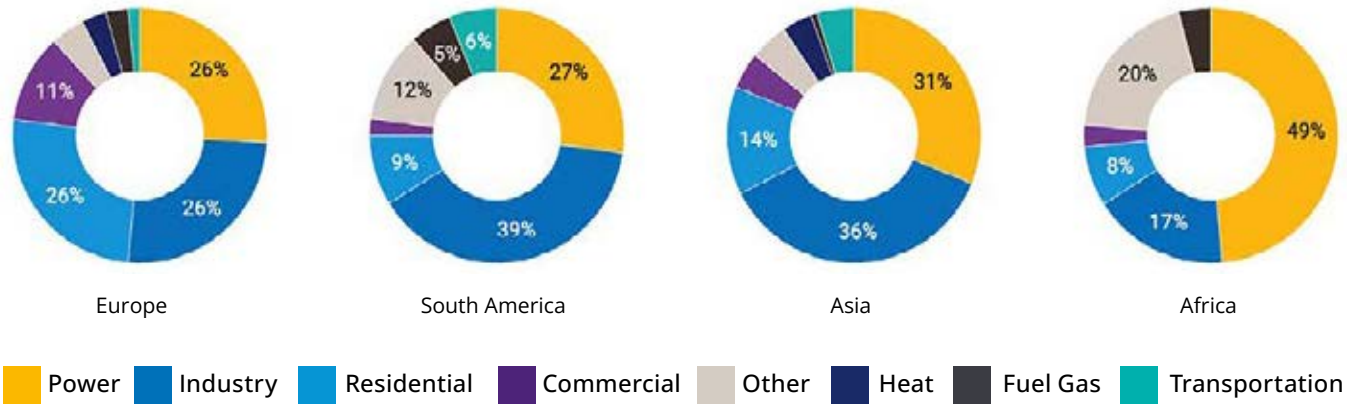
LPG, as a by-product of the continent's growing natural gas production, represents a near-term, high-impact opportunity to improve health, reduce emissions, preserve forests, and support broader economic development.

Importantly, it also offers a pathway to flare monetisation in many sub-Saharan African countries, and an additional revenue stream for natural gas producers seeking to diversify output (*see Case Study: Seplat Energy's Flare Reduction Strategy: Page 103*). But seizing this opportunity will require investment, regulatory support, and political leadership, backed by a recognition that clean cooking access is foundational to Africa's energy future.

Meanwhile, natural gas demand is heavily concentrated in the power sector, unlike in developed and other developing regions where natural gas plays a broader role in driving industrialisation and diversified economic activity (see Figure 12). This narrow demand profile limits natural gas' potential as a catalyst for structural and sustainable transformation across the continent.

Gas' under-utilisation in industry notably prevents its uses as a competitive energy source and feedstock for domestic manufacturing, agro-processing, petrochemicals, cement, steel, and other energy-intensive industries.

Figure 12: Gas use in Africa remains power-centric, unlike global norms



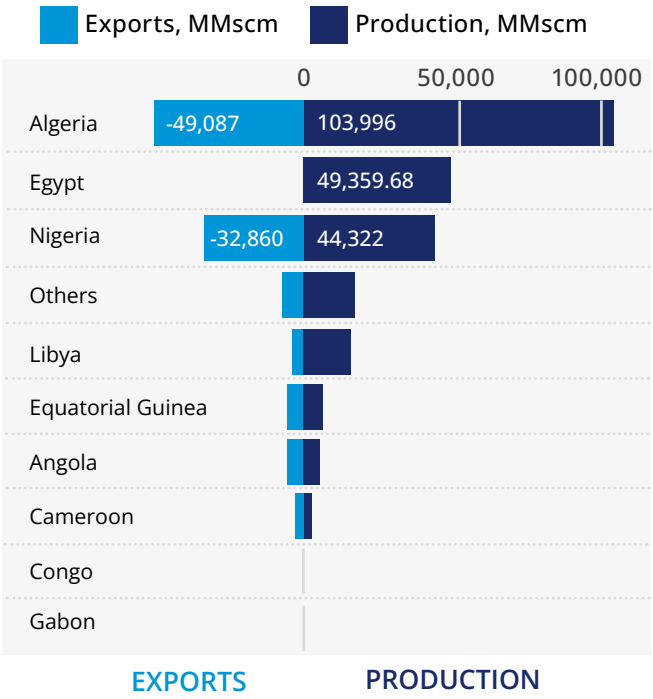
Source: Global Gas Report 2024, IGU

This limited use of natural gas outside the power sector is both the result of commercial strategies that prioritise exports (see Figure 13) — particularly through large-scale LNG and cross-border pipeline deals — but also a reflection of Africa's still-nascent industrial base. In the absence of widespread industrialisation and manufacturing value-add, there are few domestic offtakers capable of absorbing significant natural gas volumes for productive use. As a result, much of the continent's natural gas remains tied to international markets or underutilised altogether.

This dynamic must shift. As countries pursue industrialisation, localisation, and economic diversification, Gas will become increasingly central — not just as a power source, but as a strategic enabler of industrial activity. The structural transformation Africa is aiming for will require more Gas, not less — and aligning Gas development with domestic industrial policy is key to unlocking its full value (see Section 2).

A deliberate pivot toward Gas-for-development, not just natural gas-for-export, can help Africa translate its natural resource wealth into real economic transformation. As global demand for low-cost, low-carbon industrial production grows, African countries have a window of opportunity to position themselves — but only if they unlock Gas for domestic industry, not just for global buyers.

Figure 13: With the exception of North Africa, most sub-Saharan African natural gas is reserved for exports



Source: OPEC Annual Statistical Bulletin

Picture: Seplat Energy

African Natural Gas Markets in a Volatile Pricing Environment

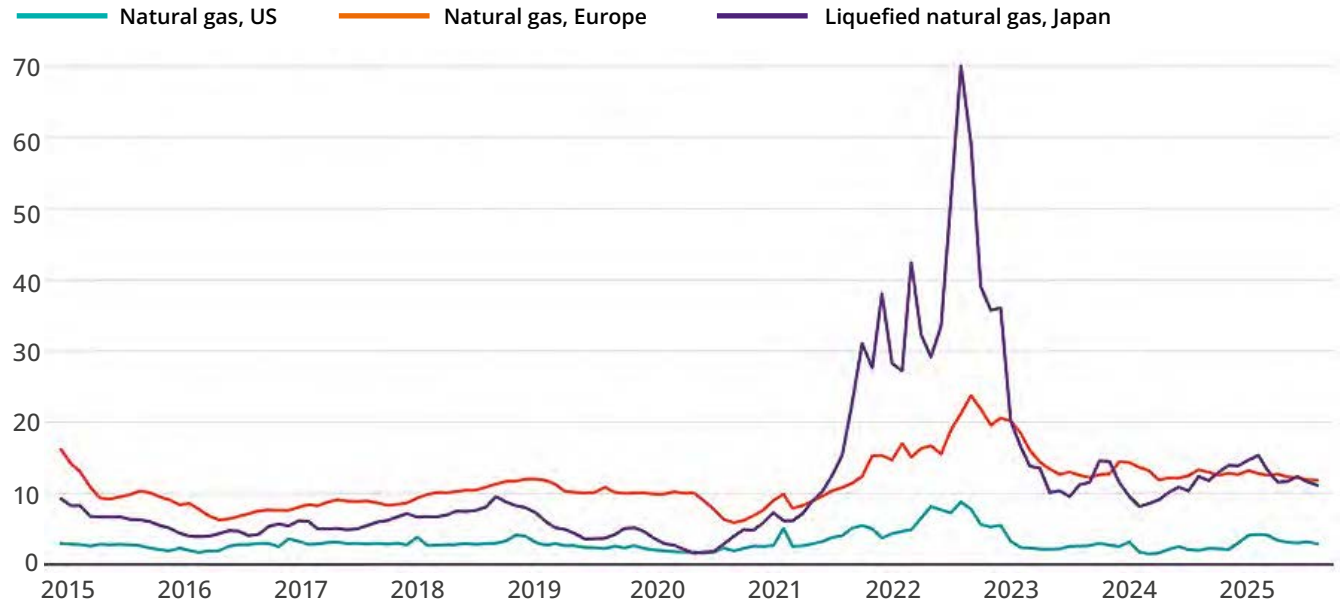
Since our last Gas for Africa report (2023), the global natural gas market shock triggered in 2022 exposed deep vulnerabilities in Africa's energy systems. Skyrocketing natural gas prices cascaded through the continent's energy and agricultural supply chains, pricing millions of households out of essential commodities such as LPG for cooking and urea for fertiliser.

The crisis underscored Africa's heavy reliance on imported fuels and global commodity prices, and made clear the need to develop stronger domestic and regional supply chains that can cushion external shocks and support energy sovereignty. The price surge also had a chilling effect on domestic natural gas project development, particularly for projects or ventures that rely on imported natural gas or floating regasification units. In Senegal and Ghana, for example, plans to grow natural gas availability via LNG imports slowed as higher prices made imports unaffordable and domestic monetisation less viable[20].

At the same time, elevated prices have reinvigorated interest in export-led natural gas strategies. LNG developers in Mozambique, Mauritania–Senegal, and Congo have benefitted from stronger market signals and renewed commercial momentum. While prices have since stabilised, they remain structurally higher than the pre-2022 average (see Figure 14), giving continued incentive

Figure 14: Natural gas prices have remained elevated since the 2022 price shock

Global natural gas prices fluctuations, in USD/Metric Million British Thermal Unit (MMbtu)



Source: World Bank Commodity Prices Data

[20] *Importantly, the expansion of global LNG capacity — with over 210 million tonnes per annum (mtpa) of liquefaction capacity under construction or approved for development at the end of 2024 (see IGU World LNG Report 2025)— is expected to stabilise prices over time, reducing the exposure of future African importers to the kind of price shocks seen in recent years.*

for African exporters — provided the pace of project development can accelerate and address persistent barriers around security, regulation, and financing.

However, the same market conditions driving export momentum also highlight the urgency of innovating domestic Gas development. New business models, pricing frameworks, and financing tools are essential to make Gas accessible and bankable for African households, SMEs, industries, and utilities.

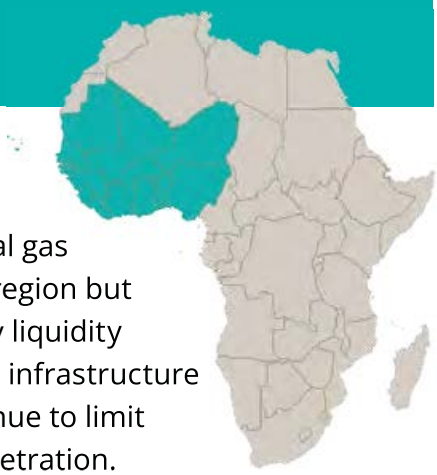
Without such innovation, natural gas risks remaining an export commodity rather than a driver of structural transformation. Crucially, export growth also offers a chance to align strategies with domestic priorities — leveraging revenues and infrastructure to expand local access and accelerate monetisation.

A notable example is Congo LNG, which only moved to export surplus natural gas after more than a decade of building a domestic market — demonstrating how export and domestic development can go hand in hand when sequenced strategically.

Picture: NNPC Ltd

Regional Dynamics

West Africa[21] builds momentum in natural gas monetisation

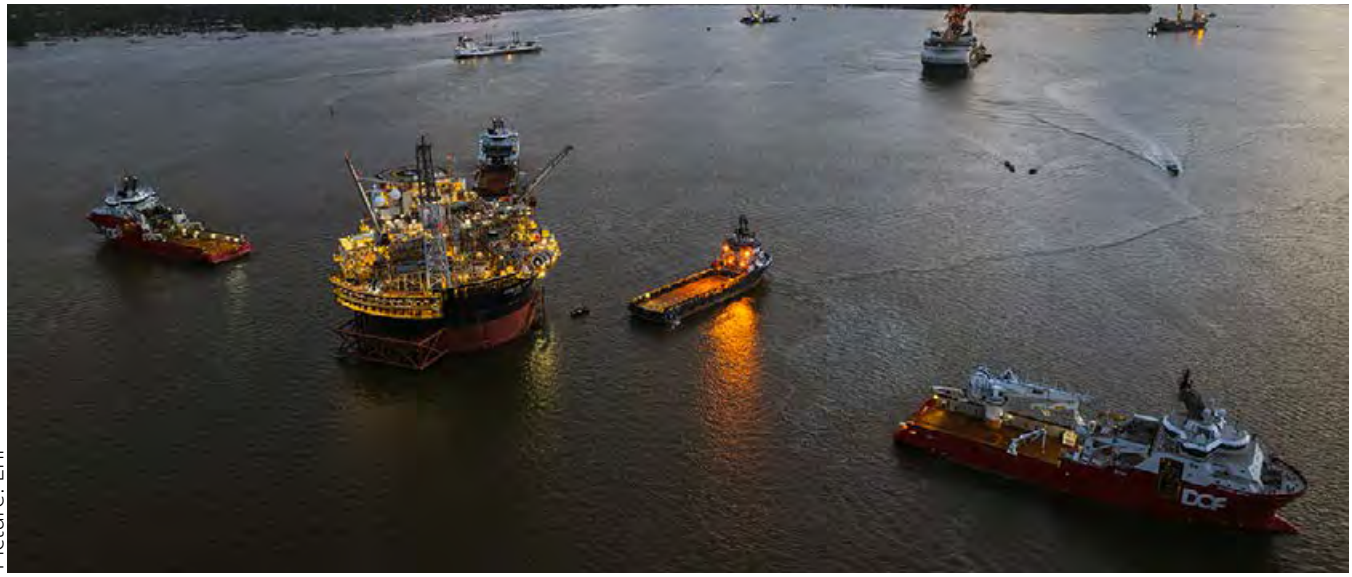


Status

West Africa is entering a decisive phase in its natural gas story. While reserves and production are still concentrated in Nigeria, new offshore projects in Senegal, Mauritania, Côte d'Ivoire, and Ghana are reshaping the region's natural gas landscape.

At the same time, growing domestic demand is testing how quickly infrastructure can move natural gas from wellhead to market. Nigeria remains the region's main natural gas exporter through the Nigeria LNG (NLNG) terminal, but the export map is beginning to diversify. Senegal and Mauritania have emerged as LNG exporters, starting 2025, from the Greater Tortue Ahmeyim (GTA) field operated by bp.

Domestically, the power sector remains the main natural gas offtaker in the region but is challenged by liquidity constraints and infrastructure gaps that continue to limit natural gas penetration. Virtual pipelines and mini-LNG projects have expanded over the years to bridge some of these gaps, offering flexible supply to off-pipeline power and industrial users. In parallel, large-scale projects are advancing — Nigeria is pushing ahead with the AKK pipeline to unlock demand in the Northern part of the country, while Senegal's Réseau Gazier du Sénégal[22] (RGS) has laid the groundwork to connect offshore natural gas fields to domestic power stations through an extensive onshore pipeline network.



Picture: Eni

[21] *Mauritania, Senegal, The Gambia, Guinea-Bissau, Cabo Verde, Guinea, Sierra Leone, Liberia, Côte d'Ivoire, Ghana, Mali, Burkina Faso, Togo, Benin, Niger, Nigeria.*

[22] *See project details: https://www.petrosen.sn/rgs/*

Picture: Eni

Outlook

The next five years will be pivotal for West Africa's natural gas sector as a wave of large-scale projects come onstream and midstream networks expand. In Senegal and Mauritania, Phase 2 of the GTA project could double liquefaction capacity to 5 mtpa.

Meanwhile, completion of Train 7 at NLNG will increase terminal capacity to 30 mtpa; while additional projects like Padah LNG will further grow capacity to 33.6 mtpa — cementing Nigeria's position as Africa's largest liquefied natural gas (LNG) exporter. The Nigerian government is also advancing its Decade of Gas[23] initiative and introducing several policy instruments to incentivise natural gas monetisation, and expand domestic penetration in industry and transport.

In Côte d'Ivoire, Eni's Baleine field has injected renewed momentum into the natural gas sector at a critical time, as rising population and demand tighten the supply-demand balance. The field entered production in 2023 at 17.5 MMscf/d, ramped up with a second phase at the end of 2024, and is targeting a final investment decision on a third phase to lift output to 200 MMscf/d[24].

Finally, a long-awaited LNG import terminal in Tema, Ghana could progress towards commissioning while plans are in motion to build a natural gas distribution network across the Tema industrial zones where aluminium, steel, cement and processing industries are in need of energy for both power, steam and heat.

As demand continues to rise across West Africa amid rapid population and economic growth, the question is no longer whether the region has the resources, it is whether it can monetise them fast enough to power economies, industrialise, and compete in global LNG markets.

[23] *See details: https://decadeofgas.com.ng/*

[24] *https://www.eni.com/en-IT/media/press-release/2025/09/eni-completes-sale-30-stake-to-vitol-in-cote-d-ivoire-baleine-project.html*

Southern Africa's[25] natural gas future balances promise and uncertainty

Status

From declining legacy supply to new exploration prospects and growing LNG trade prospects, Southern Africa's natural gas landscape is diversifying from a historically narrow base to a multi-directional, multi-player market.

Angola has long relied on associated natural gas from its oil fields, monetised through LNG, LPG, and power projects, yet most volumes still serve upstream operations or are reinjected.

The past decade has seen new reserve bases discovered offshore Mozambique and South Africa, while the latter faces an imminent supply cliff as reserves dry up in Pande and Temane[26] — its primary source of natural gas delivered via the ROMPCO pipeline.

Meanwhile, Namibia is emerging as a new frontier, with sizable deepwater-associated natural gas discoveries, and the long-stranded Kudu natural gas field now advancing toward a domestic gas-to-power development[27].

However, infrastructure remains uneven; Angola aims to expand the use of natural gas in power and industry, but to realise this vision the country must also focus on developing a robust natural gas value chain, including the expansion of production infrastructure, the establishment of efficient transportation networks, and securing investments in natural gas processing plants, pipelines, and related infrastructure. On the other hand, South Africa benefits from a well-developed distribution network that can integrate future LNG imports and new domestic sources, while Namibia's natural gas value chain is yet to be built.

Picture: iStock

Luanda, Angola

[25] *Angola, Namibia, South Africa, Botswana, Zambia, Zimbabwe, Lesotho, Eswatini, Mozambique, Malawi, Madagascar.*

[26] *https://www.engineeringnews.co.za/article/depleting-gas-reserves-threaten-future-gas-security-2024-09-20*

[27] *https://www.bwenergy.no/assets/namibia/*

Picture: Eni

Outlook

Across the region, natural gas' monetisation is set to accelerate, albeit from different starting points.

In Mozambique, the long-delayed Mozambique LNG project led by TotalEnergies is expected to restart in 2025 following improved security conditions in Cabo Delgado, with commissioning possible by 2029. Together with the Coral South and planned Coral North FLNG units, it could firmly position the country as a top-tier global LNG exporter while maintaining its role as a key regional supplier. Domestic allocation from Mozambique LNG, along with the potential development of the Matola LNG Import Terminal in Maputo, could also help cement Mozambique's position as a regional natural gas supplier for the SADC region.

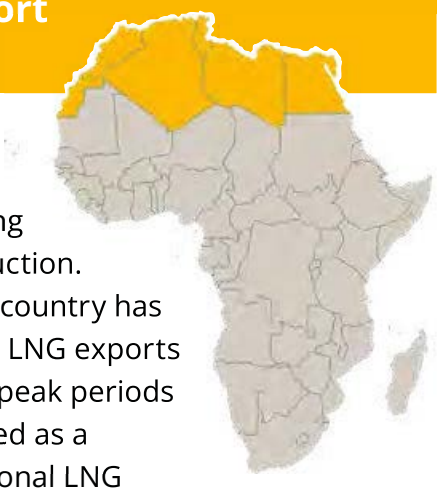
For South Africa, natural gas has become the clear alternative to moving away from coal and decarbonising its power sector, but an imminent shortfall will test how quickly LNG imports, new upstream finds, and regional trade can replace supply from Mozambican fields. Planned LNG import terminals at Richards Bay and Coega would anchor a more diversified, import-enabled supply system. 2025 saw notable progress on that front with the signing of the 25-year terminal operator agreement at Richards Bay with Zululand Energy Terminals (ZET), a joint-venture of Vopak and Transnet Pipelines.

Namibia's path will hinge on solutions for deepwater-associated natural gas and timely execution of Kudu, supported by associated infrastructure at Walvis Bay that could position it as a regional hub.

Finally, Zimbabwe could emerge as a new natural gas market this decade following successful natural gas exploration led by Invictus Energy in the onshore Cabora Bassa Basin. In 2025, a landmark deal with Al Mansour Holdings was sealed under which the Qatari investment firm will provide up to $500m to finance the natural gas project, with a potential impact on energy security for Zimbabwe and the rest of the SADC community[28].

[28] https://www.reuters.com/business/energy/qatars-al-mansour-holdings-bets-zimbabwe-energy-deal-with-australias-invictus-2025-08-27/

North Africa[29] seeks to balance natural gas export ambitions with rising domestic demand



Status

North Africa remains the continent's most mature natural gas region, anchored by Algeria, Libya and Egypt, with long-established production and export infrastructure to Europe via the TransMed and Medgaz pipelines, as well as LNG terminals. Libya continues to export to Italy through the GreenStream pipeline, although flows remain sporadic due to operational and security challenges.

Domestically, natural gas has supported industrial growth and served as a source of stable baseload power in the region, supported by a well-developed natural gas value chain. However, Egypt's natural gas market is currently under acute pressure. Surging electricity demand during the summer months has led to exceptionally high natural gas consumption in the power sector, outpacing domestic production. As a result, the country has had to suspend LNG exports entirely during peak periods and has emerged as a significant seasonal LNG importer.

Morocco has adapted to the closure of its natural gas supply from Algeria in 2021 by securing reverse-flow imports via Spain. In 2023, Shell signed a deal with ONEE (Morocco's electricity and water utility) to supply 0.5 billion cubic meters (bcm) of LNG annually under a 12-year agreement. The LNG is shipped to Spanish ports, regasified, and transported through the GME pipeline, supplying much needed feedstock natural gas for Moroccan power plants[30].

Picture: Bigstock

[29] *Morocco, Algeria, Tunisia, Libya, Egypt.*

[30] *https://fr.le360.ma/economie/le-maroc-devient-le-plus-gros-acheteur-de-gaz-en-provenance-de-lespagne_Q7E7BMDQHVA27PIRURTXRHNO3Y/*

Outlook

North Africa is expected to remain Africa's leading Gas-producing region by 2030, but its export potential will be increasingly constrained by domestic market needs. Importantly, the maturity of its Gas sector makes it an ideal environment for technology deployment, including carbon capture and storage (*see Case Study: Eni's Holistic Approach to Technology, Decarbonisation and Development: Page 109*).

Algeria will retain its role as a dependable supplier to Europe, while plans for an EU-backed North Africa–Europe hydrogen corridor are advancing in parallel[31].

Egypt's near-term outlook will remain shaped by tight market conditions; surging summer electricity demand, declining domestic output, and volatile pipeline imports from Israel that will keep LNG exports curtailed during peak months. Seasonal LNG imports are set to continue until new upstream projects and import stability restore a surplus for export.

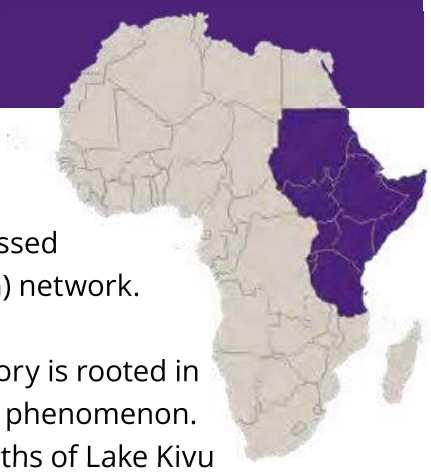
Morocco's natural gas role is expected to expand as it seeks to replace coal in power generation and supply its industrial base. Reverse-flow imports via the Maghreb–Europe pipeline are expected to grow, while domestic developments progress. Sound Energy's micro-LNG project at Tendrara targets first output in late 2025, while plans are in motion to develop an LNG import terminal at the Nador West Med Port[32]. Finally, Morocco remains a key proponent of the African-Atlantic Gas Pipeline (AAGP), a long-term natural gas pipeline originating in Nigeria and crossing the whole West African region.

Picture: Bigstock

[31] https://international-partnerships.ec.europa.eu/policies/global-gateway/southern-hydrogen-corridor-connecting-north-africa-italy-austria-and-germany_en

[32] https://www.environnement.gov.ma/en/133-a-la-une/4323-signature-d-un-protocole-d-accord-relatif-a-la-coordination-des-pouvoirs-publics-en-vue-de-la-mise-en-oeuvre-d-un-programme-de-developpement-d-infrastructures-gazieres-durables

Tanzania is at the centre of export ambitions and cross-border trade in East Africa[33]



Status

Gas has historically played a marginal role in East Africa's overall energy mix. With the exception of Tanzania and Rwanda, hydropower and geothermal generation have anchored the region's baseload supply, creating a fundamentally different Gas dynamic from other African regions.

Tanzania has successfully monetised its natural gas resources for over two decades, using production from Songo Songo and Mnazi Bay to supply power generation, feed key industries in Dar es Salaam, and increasingly support the transport sector through a growing compressed natural gas (CNG) network.

Rwanda's Gas story is rooted in a rare geological phenomenon. Beneath the depths of Lake Kivu lie vast methane reserves, formed over centuries through photosynthetic activity of algae. Since 2016, this resource has been harnessed to generate electricity, with KivuWatt producing 26 MW of methane-to-power. New projects are now set to extend its impact by extracting methane not only for power generation but, also, for CNG and cooking gas.

Outlook

Over the past two decades, Tanzania has built one of Africa's most functional domestic natural gas value chains. Investments in virtual pipeline solutions are now enabling natural gas to reach industrial hubs and power projects beyond the grid, while the domestic CNG market is accelerating.

With these domestic foundations firmly in place, Tanzania is now looking outward. The existence of natural gas infrastructure, along with world-class offshore proven natural gas discoveries, could well support the growth of a competitive export industry. Progress in negotiations on the multi-billion-dollar Tanzania LNG export terminal[34] could set the stage for commercialising some 47 Tcf of natural gas. In the long term, the same infrastructure that connects fields to domestic markets could anchor a broader regional Gas economy. Memorandums of Understanding are already in place for pipelines to Mombasa in Kenya, where power plants rely on imported diesel and heavy fuel oil (HFO), and to Uganda and Zambia.

In parallel, Ethiopia is reactivating long-stalled plans to monetise its domestic natural gas reserves in the Calub and Hilala fields, located in the Somali region. In 2025, the country commissioned the first phase of the Ogaden LNG project, broke ground on Dangote Industries' future Gode urea plant and announced future plans for a 1,000 MW gas-to-power plant[35].

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[33] *Tanzania, Kenya, Burundi, Rwanda, Uganda, South Sudan, Sudan, Ethiopia, Eritrea, Djibouti, Somalia.*

[34] *https://www.bloomberg.com/news/articles/2025-04-30/tanzania-says-42-billion-lng-deal-delayed-on-local-content-use*

[35] *https://www.ebc.et/english/Home/NewsDetails?NewsId=2025*

From export gains to local value creation in Central Africa[36]

Across Central Africa, flaring intensity remains among the highest in Africa due to the persistent challenge of aggregating flare volumes from multiple operators and the limitations of under-developed domestic markets[37]. This presents an opportunity for innovative Gas monetisation strategies, some of which are already taking shape through new LPG, LNG, and gas-to-power developments that turn previously flared Gas into real economic value.

Picture: Eni

Status

Central Africa has made tangible strides in natural gas monetisation despite modest reserves, with Cameroon, Equatorial Guinea, and more recently the Republic of Congo, establishing themselves as LNG exporters.

In 2018, Cameroon became the first African country and only second in the world to deploy a Floating LNG (FLNG) via the Hilli Episeyo project, supported by public–private cooperation from state-owned SNH and Perenco. Congo began its LNG exports in early 2024 via Eni's Tango FLNG and will boost capacity to 3 mtpa with the Nguya FLNG expected at the end of 2025.

Domestic consumption has mostly been limited to the power sector, except in Equatorial Guinea which maintains a robust and diversified midstream-downstream natural gas infrastructure hub at Punta Europa, supporting the production of methanol, LPG, as well as exports via EG LNG[38]. Gabon has long leveraged associated natural gas for power generation, with Perenco's early investment in the Batanga gathering network now expanded to include a domestic liquefied petroleum gas (LPG) plant.

[36] *Chad, Cameroon, CAR, Equatorial Guinea, Gabon, Sao Tome and Principe, Republic of Congo, Democratic Republic of Congo.*

[37] *See World Bank 2025 Global Gas Flaring Tracker Report - https://www.worldbank.org/en/programs/gasflaringreduction/publication/2025-global-gas-flaring-tracker-report*

[38] *https://www.spglobal.com/commodity-insights/en/research-analytics/equatorial-guineas-gas-mega-hub-ignites-west-africas-lng-poten*

Outlook

The next phase of Gas transition in the region hinges on whether current project momentum can be translated into sustained regional transformation. In Congo, Eni expects to commission the second FLNG unit at the end of 2025[39], bringing the total capacity of the Congo LNG project to 3 mtpa. But with domestic markets still small, the challenge is ensuring that export-led growth drives meaningful local value creation.

Gabon offers one potential blueprint: the Cap Lopez LNG terminal, scheduled for completion by Perenco in 2026, will aggregate associated natural gas from multiple offshore hubs and feed a liquefaction facility targeting 700,000 tonnes per annum (tpa) of LNG. Crucially, the project will also produce 25,000 tpa of LPG[40], enough to make Gabon fully self-sufficient in cooking gas. By pairing LNG exports with domestic fuel security, the country is showing how export infrastructure can be designed from the outset to serve both global markets and domestic needs. Importantly, it comes with the laying of an offshore natural gas gathering pipeline network that can ultimately serve nearby operators seeking flare monetisation opportunities.

The opportunities and risks of this transition are nowhere more evident than in Cameroon, where the Hilli Episeyo LNG, operating under an eight-year purchase agreement, is set to expire in 2026. The project has been central to the country's export earnings and its expected decommissioning will close an important chapter in offshore LNG unless replacement capacity is secured.

The bigger prize, however, lies in how Cameroon can repurpose the infrastructure it has built over the past decade from natural gas fields and processing plants to pipelines and power assets. This robust foundation can now be used to expand domestic Gas use across industry, households, and transport.

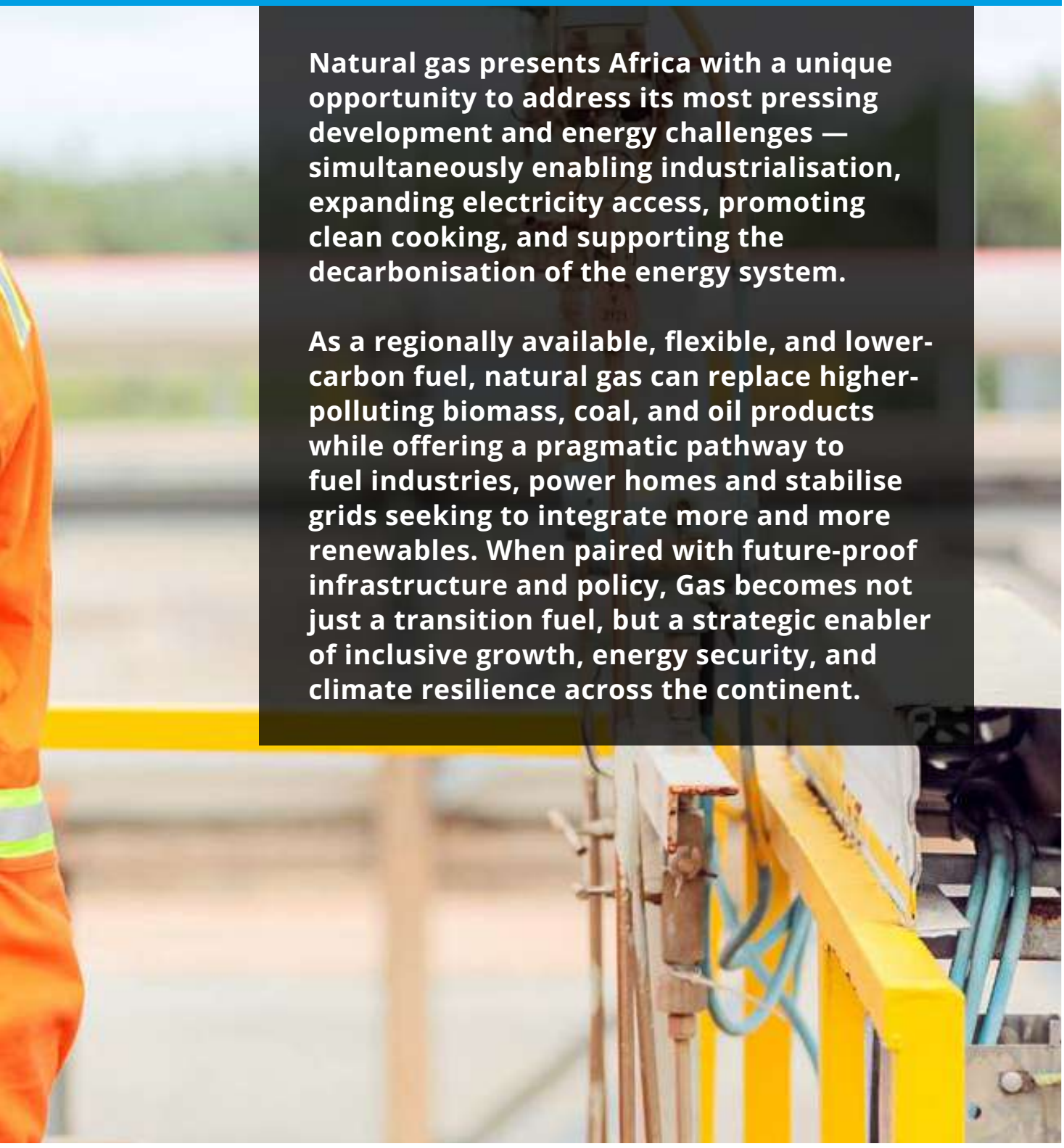
Picture: Eni

[39] https://www.eni.com/en-IT/media/press-release/2025/08/nguya-flng-ready-for-phase-2-of-congo-lng-project.html

[40] https://www.dixstone.com/news/near-shore-liquefaction-barge-lng-storage-awarded-to-dixstone.html

Picture: Ghana Gas

2 / Africa's Natural Gas Opportunities



Natural gas presents Africa with a unique opportunity to address its most pressing development and energy challenges — simultaneously enabling industrialisation, expanding electricity access, promoting clean cooking, and supporting the decarbonisation of the energy system.

As a regionally available, flexible, and lower-carbon fuel, natural gas can replace higher-polluting biomass, coal, and oil products while offering a pragmatic pathway to fuel industries, power homes and stabilise grids seeking to integrate more and more renewables. When paired with future-proof infrastructure and policy, Gas becomes not just a transition fuel, but a strategic enabler of inclusive growth, energy security, and climate resilience across the continent.

The Local Opportunity

The energy imperative

Gas-to-power alone cannot solve Africa's energy challenges, but it plays a critical role in building reliable, resilient, and future-proof systems.

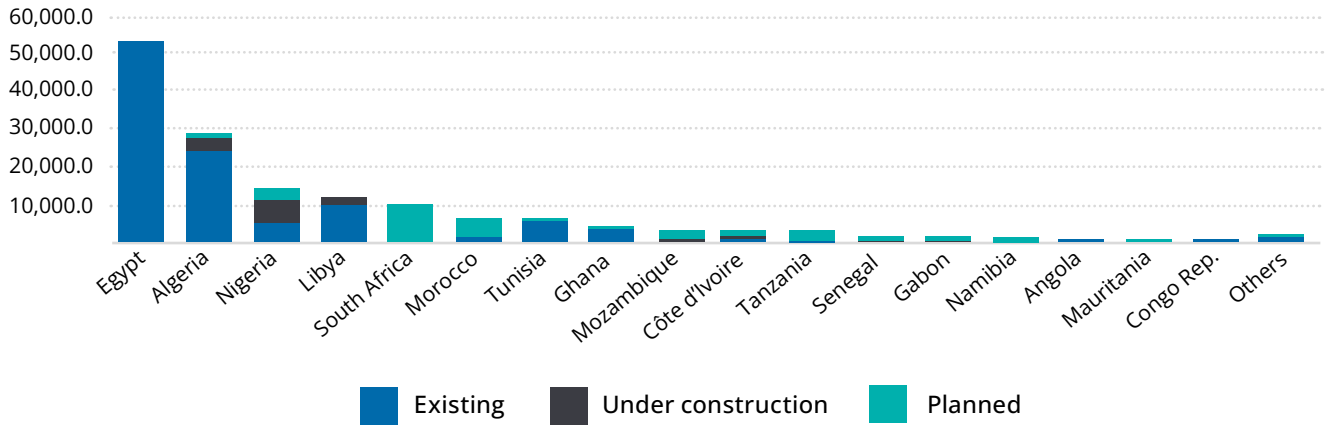
Over the past decade, Africa's gas-to-power sector has made tangible strides, especially in North Africa, where Egypt and Algeria serve as regional leaders. In both countries, gas-fired power represents some 78 gigawatts (GW) of grid-connected capacity and accounts for the lion's share of electricity generation—reflecting a strategic reliance on abundant domestic reserves.

Across sub-Saharan Africa, however, gas-to-power development has been slower and more uneven, currently representing some 66 GW of grid-connected capacity. Many thermal power stations across the region continue to depend on expensive, carbon-intensive fuels like diesel or heavy fuel oil (HFO), much of it imported (see Section 2.3). This reliance inflates generation costs, burdens fiscal budgets, and results in frequent power shortages. In South Africa for instance, the utility frequently burns diesel for peaking power generation, at three to four times the cost of LNG[41].

Africa currently has over 115 GW of installed gas-to-power capacity, with an additional 6.6 GW under construction and 33 GW in the planning phase (see Figure 15). These figures highlight both the scale and the fragility of Africa's gas-to-power landscape.

Figure 15: Gas-to-power has remained concentrated in North Africa but the projects pipeline is diversifying

Gas-to-power capacity per country as of December 2024, in MW



Note: Nigeria's "existing" capacity represents only available capacity on the grid. Existing power plants whose capacity is constrained by supply disruptions or evacuation challenges is earmarked here as "under-construction" to reflect its recovery potential.

Source: Hawilti Research

[41] *"Addressing South Africa's Gas & Power Cliff", Standard Bank Group presentation, September 2025.*

In many cases, public utilities operate with weak balance sheets, making it difficult to secure power purchase agreements (PPAs) that are bankable for investors. These challenges are compounded by regulatory delays and a lack of clear, coordinated policies to support project development.

In markets such as Mozambique, Mauritania, Senegal, South Africa, and Côte d'Ivoire, large-scale developments are now advancing, drawing on both domestic production and plans for LNG import terminals.

The pipeline of planned projects is particularly growing in sub-Saharan Africa, reflecting the continent's continued appetite and need for dispatchable power. Yet a significant portion of installed capacity relies on dual-fuel turbines that frequently operate on imported oil products when natural gas supply is unavailable (in Egypt, Ghana, Sudan, or Senegal), calling for additional measures to secure reliable supply in the long-term and mitigate supply disruptions.

Despite its strong potential, gas-to-power project development in Africa remains constrained by a combination of structural and financial challenges.

Key bottlenecks include long lead times, uncertain pricing frameworks, underdeveloped midstream infrastructure, and the limited creditworthiness of national utilities.

Access to affordable capital remains a critical barrier, particularly in sub-Saharan markets where project risk is perceived to be high. In countries where imported LNG will be required

Picture: Ghana Gas

to fuel gas-to-power plants, such as Morocco or South Africa, price volatility could threaten the economic viability of new projects. As a result, slower natural gas adoption risks entrenching reliance on coal or imported oil derivatives, locking in high emissions and generation costs, and missing the opportunity to build more resilient and diversified power systems.

The strategic value of natural gas lies in its role as a flexible and dispatchable fuel, which is especially important as African countries scale up intermittent renewable energy sources.

In North Africa, large-scale solar photovoltaic (PV) investments, particularly in Egypt, Tunisia, or Algeria, require grid-balancing mechanisms that only flexible generation like natural gas has been able to provide. Gas-fired power plants are well-suited to ramp up quickly in response to dips in solar output or wind speeds, ensuring grid stability and reliability.

Similarly, in countries heavily reliant on hydropower such as Angola or Tanzania, natural gas is essential to mitigate generation variability during dry seasons or prolonged droughts. This system-wide value strengthens the case for gas-to-power not only as a transitional fuel, but also as a foundational piece of resilient, future-ready energy systems in Africa. The fact that natural gas supports both renewables integration and hydropower stability makes it a strategic hedge in the face of climate volatility and rising demand.

Despite challenges, success stories offer replicable models. Egypt has demonstrated how integrated gas-to-power planning can stabilise national grids and enable renewables growth. Smaller examples in Côte d'Ivoire or Tanzania are equally showing how scalable gas-to-power systems can deliver reliable electricity to industrial hubs or growing urban centres.

The industrialisation imperative

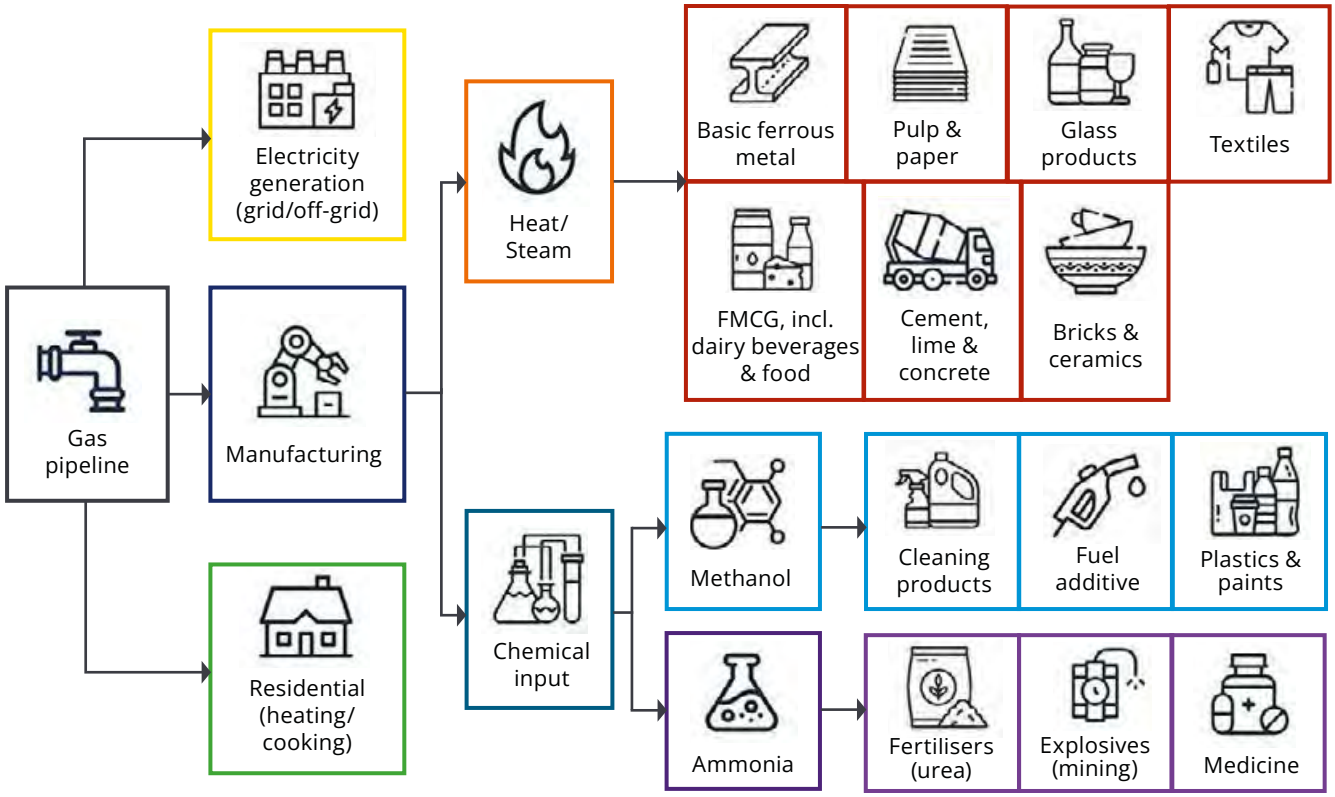
Natural gas is often viewed through the lens of electricity generation but, in industrial economies, its true value lies in its versatility — as a source of energy, a provider of industrial heat and steam, and a raw material for essential products. For Africa, leveraging this full spectrum of uses is critical to unlocking the next phase of structural economic transformation.

Natural gas is a unique industrial enabler. It generates high-temperature process heat for industries like cement, steel, glass, ceramics, and bricks. It produces steam required for pulp and paper, food processing, textiles, and pharmaceuticals. It fuels kilns, furnaces, and dryers used in manufacturing and agro-processing. And it serves as a feedstock for chemicals and fertilisers, including ammonia and methanol — core building blocks for agriculture and industrial chemistry.

These industrial uses of natural gas are central to the development of a resilient,

Picture: Seplat Energy

Figure 16: The multiplier effect and natural gas use cases



job-rich manufacturing base[42]. Fertiliser plants powered by natural gas support food security and reduce reliance on volatile imports. Cement, steel, and ceramics industries rely on natural gas to produce essential inputs for Africa's growing construction and infrastructure needs. In agro-processing, natural gas supports value addition through drying, pasteurisation, cooling, and sterilisation — all critical to reducing post-harvest losses and building integrated agricultural supply-chains (See The Case for Fertilisers, page 55).

Yet in Africa, natural gas remains underutilised in these sectors, primarily due to the dominance of export-oriented development models and the absence of coordinated gas-to-industry strategies. While upstream investments have focused on exports or gas-to-power, little attention has been paid to building domestic offtake infrastructure, expanding natural gas distribution networks, or aligning pricing and policy frameworks with industrial needs.

In markets where natural gas utilisation has diversified, such as Tanzania where it is used by transport, metals, cement, glass or textile industries, gas-to-industry consumption still represents just 1% of total demand[43].

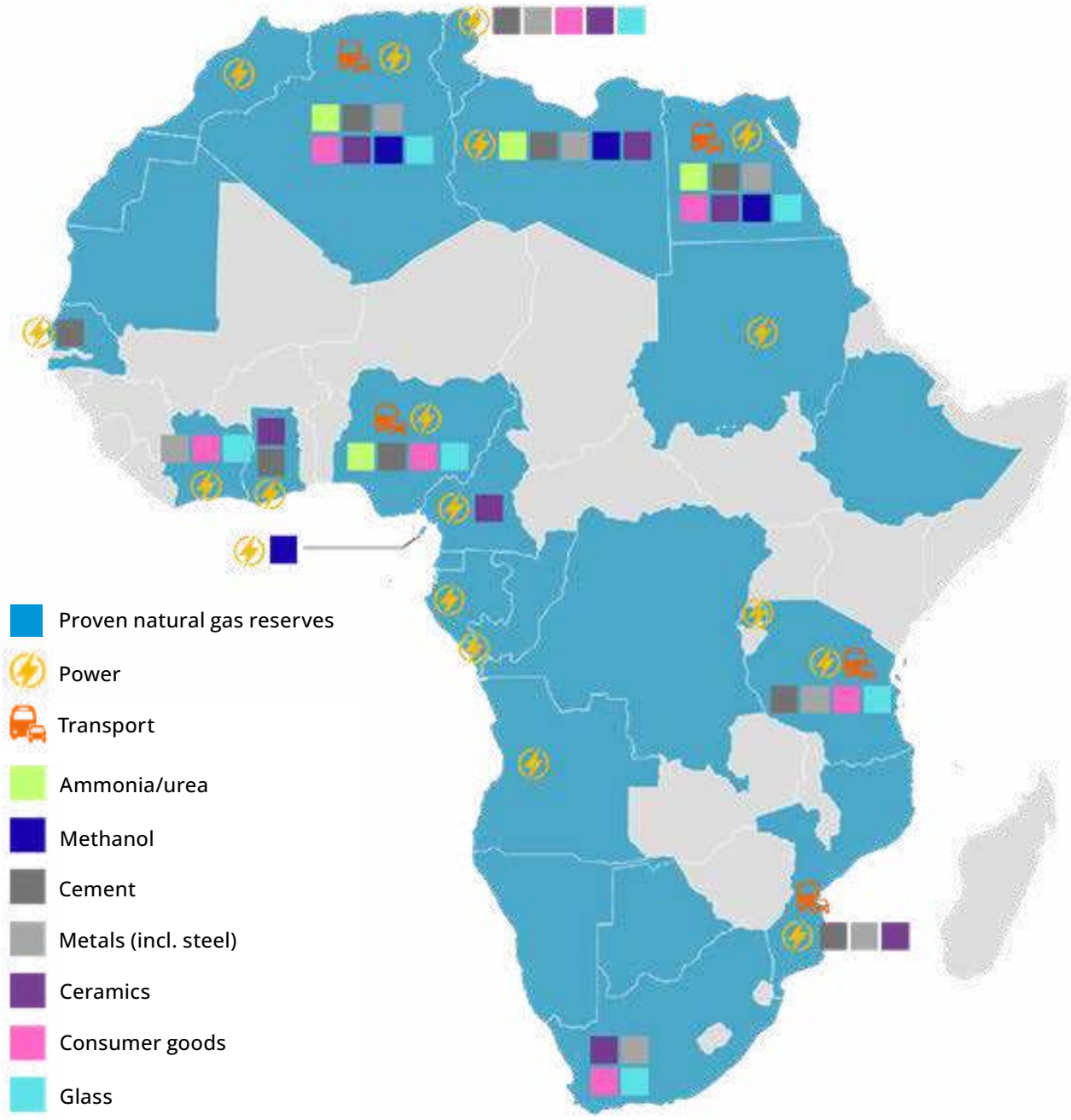
[42] *In South Africa for instance, industrial natural gas users contribute about R700 billion annually – or 8% of the country's gross domestic product (GDP) – and support around 75,000 direct jobs, according to the Industrial Gas Users Association of Southern Africa (IGAS-SA).*

[43] *Natural Gas Performance Reports, Energy and Water Utilities Regulatory Authority (EWURA) - https://www.ewura.go.tz/pages/natural-gas-performance-reports*

In contrast, countries like Egypt, Algeria and, increasingly, Nigeria have built integrated Gas-based industrial ecosystems — where natural gas is not just a fuel but a foundation for economic growth (see Map 1). Egypt's fertiliser and petrochemical exports are among the highest in Africa, supporting employment, trade, and fiscal stability. In Nigeria, industrial natural gas distribution networks are emerging around free zones and Gas hubs, with growing interest in captive power and process heat for industry.

Map 1: The uses of African natural gas in industry have largely been limited to a few economies

Utilisation of natural gas across Africa as of 2024



Source: Gas for Africa Maps; Hawilti Research

A look at the diversity of natural gas utilisation across the continent reveals several groups of countries (see Map 1), including:

- **The frontrunners** *(Algeria, Egypt, Nigeria, Tunisia, Libya, Equatorial Guinea)*: countries that have historically monetised natural gas across power, industry, and/or residential sectors, with relatively developed infrastructure and policy frameworks.
- **Emerging domestic users** *(Ghana, Tanzania, Mozambique, Côte d'Ivoire, Cameroon, Morocco)*: countries with active natural gas use in limited or pilot-scale applications (industry, transport, households), but where overall penetration remains low and infrastructure underdeveloped.
- **The latent newcomers** *(Mauritania, Senegal, Gabon, Republic of Congo, Angola, Namibia, Botswana, Ethiopia, Democratic Republic of Congo)*: countries with proven reserves or recent discoveries but no meaningful domestic monetisation to date or limited to power generation only. These markets have potential but are still at a pre-development stage.

North African examples show what is possible with intentional Gas-to-industry planning. They also highlight the risk of missed opportunities: in countries where new reserves of natural gas have recently been discovered (such as Angola, Mauritania, Senegal, Namibia or Ethiopia), the absence of midstream infrastructure has so far prevented a productive and inclusive use of natural gas, despite significant import-substitution opportunities in manufactured products such as fertilisers or steel.

The industrialisation imperative is not just about using natural gas — it's about maximising its multiplier effect.

In a continent seeking to move from raw material exports to value-added production, natural gas offers the energy backbone for manufacturing, agro-processing, and transformation at scale.

Picture: NNPC Ltd

To tap into this potential Africa needs to embed Gas within its broader industrialisation agenda. This means:

- Designing natural gas policies that prioritise domestic industrial offtake.
- Creating pricing frameworks that support competitiveness.
- Investing in small- and mid-scale natural gas infrastructure to reach economic zones and industrial clusters.
- Encouraging public-private partnerships to build processing, transmission, and distribution assets that serve industry.

The infrastructure imperative

Expanding natural gas transmission and distribution networks is central to enabling Africa's households, industries, and commercial centres to access cleaner, more reliable, and more affordable energy. For this potential to be realised, however, natural gas must be delivered to where demand is — which today remains a major challenge across most of sub-Saharan Africa.

North Africa's natural gas infrastructure provides a clear illustration of what is possible. Algeria, Egypt, and Tunisia have built extensive natural gas infrastructure systems that connect millions of residential and industrial users to domestic natural gas supply (see Figure 17).

Together, these countries have achieved widespread natural gas penetration by investing in national transmission and distribution networks over several decades, led by policy incentives and well-capitalised public utilities such as Algeria's Sonelgaz and Egypt's GASCO. Their networks supply natural gas to tens of millions of people and hundreds of industrial users, including energy-intensive sectors like metals, cement, and construction materials.

In Egypt, this infrastructure has supported a strategic policy shift from subsidised and imported LPG to piped domestic natural gas, reducing butane import bills and expanding access. As of 2025, 15.5 million Egyptian households were already connected to natural gas, representing over 62 million Egyptians[44] with access to clean cooking and heating. Similar trends have been observed in both Algeria and Tunisia where the number of natural gas connections has grown to 8.1 million[45] and over 1 million[46], respectively.

This level of infrastructure maturity across North Africa stands in contrast to that of sub-Saharan Africa, where natural gas penetration remains extremely limited. Critical midstream and downstream infrastructure is either absent

[44] https://www.ecofinagency.com/news-industry/2509-49008-egypt-adds-572-000-homes-to-gas-grid-despite-supply-shortfalls

[45] https://www.sonelgaz.dz/fr/1409/gaz

[46] https://www.steg.com.tn/fr/page/gaz-naturel

or underdeveloped, preventing natural gas from reaching key demand centres — even in countries with significant reserves. Gas transmission grids are yet to truly anchor last-mile connectivity, as illustrated by the higher ratio of natural gas transmission pipelines over distribution networks in sub-Saharan Africa (see Figure 18). As a result, industries and households remain unconnected and locked into more polluting and expensive fuels, missing out on the economic and environmental benefits of natural gas.

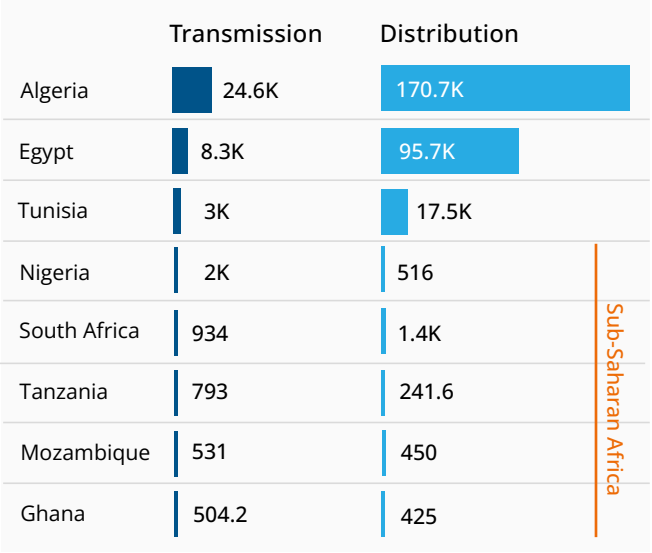
However, a number of positive developments are emerging. In Senegal, new investments aim to monetise offshore natural gas reserves through a national pipeline network, designed to supply natural gas to power plants and heavy industries like fertilisers, ceramics, and steel. In Ghana, plans are advancing to build distribution infrastructure to serve the Tema industrial zone. Côte d'Ivoire is preparing a similar extension to bring natural gas to its PK24 Industrial Zone near Abidjan, supporting manufacturing and logistics operations[47].

Nigeria is currently sub-Saharan Africa's most advanced market for natural gas distribution, enabled by a robust public-private framework. The Nigeria Gas Marketing Company Ltd (NGML), in partnership with private operators such as Shell Nigeria Gas, Axxela, or NIPCO Gas, has already deployed over 500 km of natural gas distribution pipelines, with new licenses issued in 2025 to accelerate network expansion into key industrial corridors[48]. With the upcoming commission of the AKK natural gas transmission pipeline, new Northern states and cities will be connected to the Nigerian natural gas grid in the near future, providing additional opportunities to anchor last-mile natural gas distribution infrastructure[49].

These examples show the potential for scalable, commercially viable infrastructure — but also how fragmented progress remains. In most markets, projects face bottlenecks related to financing, land acquisition, demand aggregation, and policy alignment. Few countries have fully integrated natural gas infrastructure planning into their national development strategies, and even fewer have created the regulatory conditions needed to attract long-term investment.

Figure 17: African natural gas infrastructure is largely concentrated in North Africa

Natural as pipeline networks in selected African countries, data in kilometres based on latest years available (2022-2024)



Source: Hawilti research based on national utilities reports and latest years available

[47] *Based on interviews conducted with private and public sector stakeholders in the three countries throughout 2025.*

[48] *https://punchng.com/fg-approves-25-year-licence-for-10-gas-distribution-companies/*

[49] *https://www.vanguardngr.com/2024/06/akk-gas-pipeline-project-will-transform-northern-nigerias-economic-landscape-minister/*

To unlock the full benefits of natural gas, infrastructure must be treated as a strategic enabler of economic development, not just an export pathway. That means:

- Prioritising distribution infrastructure in and around industrial hubs and urban centres;
- Aligning natural gas supply with local demand for power, heat, and feedstock;
- Creating bankable project structures that allow public-private collaboration at scale.

If scaled with the right approach, natural gas infrastructure can serve as the backbone for cleaner, more affordable energy access across Africa — powering factories, homes, businesses, and essential services in a way that supports long-term growth and resilience.

Picture: Ghana Gas

The Case for Fertilisers

The urea industry represents one of the most immediate and high-impact pathways to monetise domestic natural gas while supporting agricultural productivity, import substitution, and intra-African trade.

Urea, a nitrogen-based fertiliser produced from natural gas, accounts for over 60% of Africa's total fertiliser consumption[50], yet much of it is imported from overseas markets and exposes African farmers to price volatility and supply disruptions. This became particularly evident during the Russia–Ukraine war, when Gas price spikes and supply bottlenecks led to record-high fertiliser prices and contributed to food inflation across multiple African markets.

Ethiopia has signed a $2.5bn deal to build a new urea plant to monetise discovered natural gas in the landlocked country

Picture: iStock

[50] *AfricaFertilizer (AFO) initiative.*

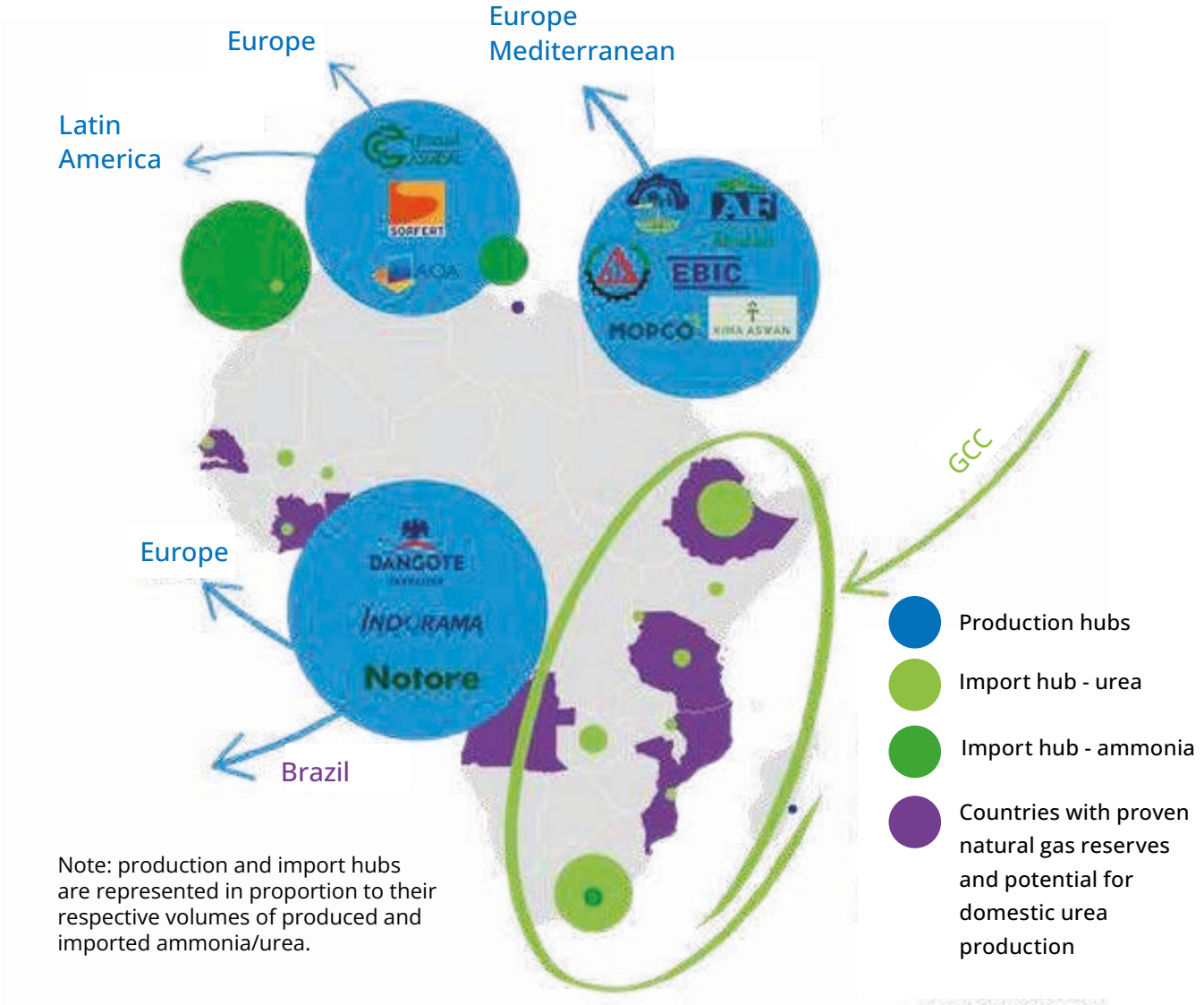
Picture: NNPC Ltd

Despite widespread continental demand, Africa's urea production is highly concentrated. Egypt, Nigeria and Algeria dominate the landscape, but their exports are primarily directed to Europe and Latin America. Intra-African trade remains marginal. Meanwhile, sub-Saharan Africa — where fertiliser adoption remains the lowest globally — is home to growing natural gas reserves that remain largely disconnected from domestic and regional agro-industrial strategies. Most urea is imported from overseas, particularly from countries of the Arabian Gulf (see Map 2).

Urea production represents a low-hanging fruit for natural gas monetisation because of proven natural gas reserves across the continent and its ability to meet a clear, fast-growing domestic need. The production

Map 2: Africa's urea supply-chains are fragmented despite strong diversification and regionalisation potential

African urea is largely produced in Egypt, Algeria and Nigeria, yet reserved for exports, while natural gas reserves across the continent could easily support import-substitution opportunities in Western, Eastern and Southern Africa.



Note: production and import hubs are represented in proportion to their respective volumes of produced and imported ammonia/urea.

Source: Africa Finance Corporation (2025). State of Africa's Infrastructure Report

of ammonia and urea can be co-located with upstream natural gas fields or industrial zones (Nigeria and Egypt, for instance), providing both an anchor demand for natural gas and a platform to stimulate rural productivity and food security.

The economics of urea production are also compelling. Local production reduces dependence on foreign exchange and external supply chains, while simultaneously allowing governments to reduce fertiliser subsidies and invest in domestic value addition. Urea plants can also serve as anchors for broader industrial development, supporting power generation, logistics, and infrastructure upgrades.

Several African countries are now taking actions to build urea industries. Angola is developing the $2 billion AMUFERT project in Soyo[51], next to the Angola LNG plant and the Soyo gas-to-power station; Tanzania has signed agreements with an Indonesian firm to establish a urea plant that would further monetise its natural gas reserves[52]; Senegal, Ghana, and Mozambique are exploring similar strategies.

Most recently, Ethiopia signed a deal with the Nigerian conglomerate Dangote[53] to build

Picture: Seplat Energy

a $2.5bn urea plant that will monetise its discovered natural gas at Calub and Hilala — a potentially transformative development, given that landlocked Ethiopia is among Africa's largest fertiliser importers (see Map 2).

These emerging hubs could form the basis of regional urea trade corridors, linking production zones in natural gas-rich countries with major agricultural and import markets such as Ethiopia, Malawi, Zambia, and South Africa, where demand is rising but domestic supply remains absent.

To seize this opportunity, governments must embed urea production into national natural gas masterplans and agro-industrial strategies, improve access to natural gas infrastructure and logistics, and provide a predictable policy environment to attract investors.

With the right regulatory framework and investment incentives, urea can serve as the frontline of Africa's industrialisation and energy transition, using domestic natural gas to meet domestic needs — and to fuel the continent's long-overdue agricultural transformation.

[51] *https://amufert.com/*

[52] *https://www.tanzaniainvest.com/agriculture/urea-fertiliser-plant-lindi*

[53] *https://www.dangote.com/dangote-group-ethiopia-sign-agreement-to-build-2-5-bn-fertiliser-plant/*

The Trade Opportunity

Africa's natural gas is increasingly attracting global and regional demand, offering a pathway to foreign exchange earnings, energy security, and cross-border cooperation. This momentum comes amid upward revisions of global LNG demand, which reached 411 million tonnes in 2024 and is now projected to reach up to 718 million tonnes[54] by 2040 — underscoring the continent's strategic relevance as a long-term supply source.

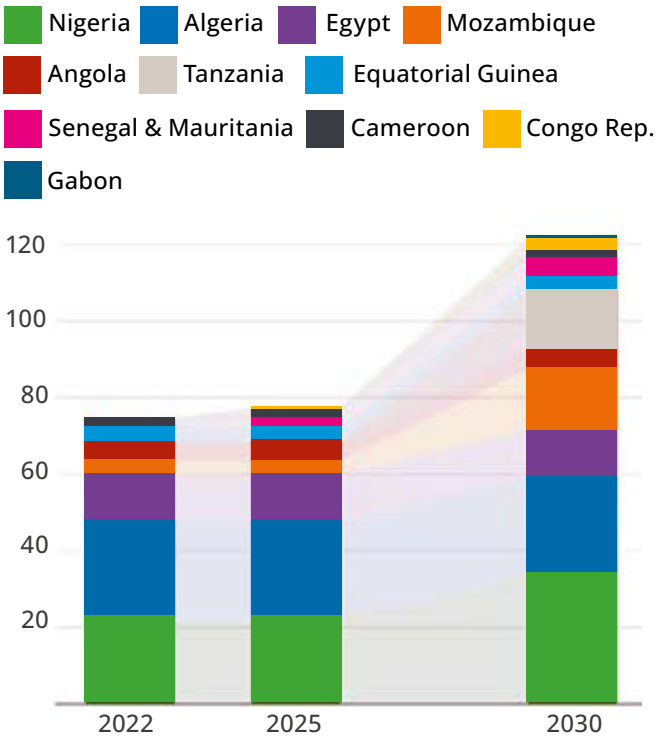
Since the 2023 Gas for Africa Report, Africa's LNG export landscape has gained momentum, with 6.5 million tons per annum (mtpa) of new LNG capacity coming online in sub-Saharan Africa through a wave of floating LNG (FLNG) developments. These include Coral South in Mozambique (3.4 mtpa), Greater Tortue Ahmeyim (GTA) on the Senegal–Mauritania maritime border (2.5 mtpa), and the Tango FLNG unit in the Republic of Congo (0.6 mtpa). These projects have marked important milestones, both technically and commercially, for the diversification of Africa's LNG basket.

Construction is also well under-way on additional LNG capacity, including Padah LNG in Nigeria (3.4 mtpa), Nguya FLNG in the Republic of Congo (2.4 mtpa), Cap Lopez LNG in Gabon (0.7 mtpa) and the Coral North FLNG (3.6 mtpa). Together, these newbuilds reflect a rising investor interest in lower-cost, modular LNG solutions that offer faster time to market.

However, these advances still pale in comparison to the continent's full export potential. Key onshore mega-projects, such as Tanzania LNG (15 mtpa) and Rovuma LNG (18 mtpa) in Mozambique, continue to await final investment decisions, while significant offshore discoveries in Nigeria, Mauritania, Senegal, and Equatorial Guinea remain stranded or underdeveloped. Progress has also stalled or been delayed on critical brownfield and greenfield projects, notably the expansion of Nigeria LNG (TrainSeven, 7.6 mtpa) and the Mozambique LNG project (12.88 mtpa), both of which are pivotal to scaling Africa's global natural gas role.

Figure 18: Africa's LNG export capacity has the potential to reach over 123 mtpa by 2030

Africa's LNG export capacity in mtpa



Note: capacity projections to 2030 are made assuming the commissioning of key projects awaiting FIDs, including Tanzania LNG and GTA Phase 2, and completion of the Mozambique LNG terminal.

Source: Hawilti Research

[54] *IGU World LNG Report 2025; Shell LNG Outlook 2025.*

There are signs of renewed momentum. Mozambique LNG is in the process of resuming construction, while a final investment decision (FID) was taken by Eni on the Coral Norte FLNG in October 2025[55]. In Nigeria, the signing of new supply agreements for NLNG, including from indigenous natural gas producers such as Aradel, First E&P, and Amni International, is a step toward restoring feedstock security in the short and long-term[56].

Equatorial Guinea has also re-engaged on the EG-27 LNG project, with Afreximbank now appointed as advisor to advance development of this critical block that includes the Fortuna natural gas discovery[57].

As noted in the 2023 Gas for Africa Report, Africa remains at a disadvantage in the global LNG race until it can address its execution challenge. The continent continues to face perceptions of slow execution, high development risk, and uncertain delivery timelines, which make it more difficult to secure financing in an increasingly competitive market.

While Africa enjoys a geographic advantage, close proximity to European buyers and access to Asian markets via the Indian Ocean, these factors alone are no longer sufficient to attract long-term capital. Global investors and offtakers are prioritising speed, reliability, and scale, and other natural gas-producing regions are moving fast to capture market share (see Section 3). This message remains even more relevant today; realising Africa's full natural gas export potential will depend on continued progress in project development timelines, regulatory alignment, and infrastructure execution.

While much of the focus in Africa has been on natural gas exports, an equally important — and growing — development is the rise of natural gas imports across the continent. A diverse group of countries is turning to imported natural gas to replace costlier and dirtier fuels, improve energy reliability, and support industrial and environmental objectives. From seasonal demand management to long-term decarbonisation strategies, natural gas imports are emerging as a pragmatic solution to fill energy gaps and diversify supply.

Today, Morocco, Tunisia, South Africa, Benin, Togo, Ghana, Senegal, and even Egypt are all engaged in some form of natural gas import, though each under different market dynamics and infrastructure arrangements.

An LNG vessel off Dakar, Senegal

Picture: iStock

[55] https://www.eni.com/en-IT/media/press-release/2025/10/pr-eni-announces-final-investment-decision-mozambique-coral-north-project.html

[56] https://www.reuters.com/business/energy/nigeria-lng-inks-long-term-contracts-secure-gas-supply-2025-08-23/

[57] https://www.afreximbank.com/afreximbank-mandated-as-advisor-on-4-5-billion-eg-27-lng-project-in-equatorial-guinea/

In Tunisia, roughly 60 to 70% of natural gas consumption is met through imports from Algeria via the Trans-Mediterranean pipeline, which also supplies Italy. Similarly, South Africa remains fully dependent on imported natural gas from Mozambique through the ROMPCO pipeline, one of Africa's most successful cross-border natural gas ventures to date (*See Case Study: ROMPCO's contribution to cross-border gas trade and regional industrial growth: Page 100*). In West Africa, Benin and Togo are fully reliant on Nigerian natural gas transported via the West African Gas Pipeline (WAGP), while Ghana, though still relying primarily on domestic production, supplements supply through the same corridor (see Map 3).

Map 3: The West African Gas Pipeline now integrates supply from both Nigeria and Ghana

Source: Gas for Africa Maps

More recently, two countries have emerged as new LNG importers, reflecting distinct supply challenges. In 2025, Senegal became the first sub-Saharan African country to import LNG, supplying floating infrastructure to displace high-cost oil derivatives in power generation. The move is central to Senegal's broader goal of reducing electricity costs and decarbonising its grid. Egypt, a major natural gas producer and exporter, has also been forced to temporarily halt LNG exports in summer months. In 2025, surging electricity demand for cooling amidst record-breaking heatwaves required the country to deploy four FSRUs to meet peak domestic demand[58].

Looking ahead, natural gas imports are expected to play a larger role in Africa's energy strategies — especially in countries seeking to transition away from coal and oil. Morocco and South Africa, two of Africa's largest and most coal-dependent economies,

[58] https://egyptindependent.com/egypt-secures-gas-supplies-to-all-sectors-with-four-fsrus-vessels/

are at the forefront of this shift. Both are investing heavily in LNG import infrastructure: Morocco through the Nador West Med Port LNG terminal, and South Africa through the Richards Bay LNG terminal. In both countries, imported natural gas is essential not only to supply thermal power plants and reduce power sector emissions, but also to support the decarbonisation of transport and heavy industry.

The rationale is clear. Gas imports, particularly LNG, offer these countries a cleaner, more flexible alternative to coal and fuel oil, while supporting the scale-up of renewable energy by providing secure baseload capacity. For these large economies, building reliable import infrastructure is a cornerstone of national energy security and economic competitiveness.

As energy demand grows and infrastructure expands, natural gas imports are set to become a long-term fixture in Africa's energy landscape. Their role will vary, from seasonal balancing to base supply, and from industrial heat to grid backup, but their strategic relevance will only deepen as African countries look for cleaner, cost-effective fuels that align with their development ambitions.

The case for regional and cross-border natural gas trade

Regional integration of natural gas infrastructure offers one of the most strategic opportunities to unlock scale, reduce costs, and build resilient energy systems across the continent.

Sub-Saharan Africa's natural gas markets remain fragmented, with isolated pockets of supply and scattered demand centres — a pattern that limits the efficiency of resource utilisation and undermines the commercial viability of new projects.

Cross-border pipelines such as the Trans-Mediterranean Pipeline (Transmed) and the Republic of Mozambique Pipeline Company (ROMPCO) have already demonstrated the benefits of regional natural gas trade. Transmed has long served as a critical energy corridor between Algeria, Tunisia, and Italy — supplying natural gas to both North Africa and Europe. Similarly, ROMPCO has enabled South Africa to access Mozambican natural gas for decades, helping to support the operations of some of its largest industries and factories. These projects offer proven models of how regional coordination, infrastructure investment, and stable offtake agreements can drive shared benefits across borders.

But these success stories remain the exception. Across most of the continent, natural gas infrastructure is nationally confined, with minimal cross-border interconnection. As a result, countries with large reserves are often unable to monetise them domestically or regionally, while natural gas-hungry industrial hubs remain dependent on expensive or unreliable energy. This disconnect is particularly acute in West and Central Africa, where regional natural gas demand is growing, but infrastructure remains piecemeal.

There is now a clear opportunity to rethink natural gas development through a regional lens. By aggregating demand across multiple markets — including smaller economies that cannot justify standalone infrastructure — regional pipelines and shared regasification assets can create viable economies of scale.

Cross-border supply arrangements also reduce risk for investors by providing more diversified offtakers and improving the credit profile of natural gas buyers.

A number of regional integration proposals are under discussion (see Table 1), including the Nigeria–Morocco Gas Pipeline, which would connect West African coastal markets with North African and European demand; and plans to link East African natural gas production hubs (Mozambique, Tanzania) with regional consumers in Zambia or Uganda.

Though complex, these projects represent an important evolution in how Africa thinks about natural gas monetisation — moving from export-focused development to networked regional supply chains.

Table 1: Proposed regional natural gas corridors in Africa

	Start	End	Notes
African-Atlantic Gas Pipeline	Nigeria	Morocco	Establishment of a new regional corridor extending WAPCo to Côte d'Ivoire, Liberia, Sierra Leone, Guinea, Guinea-Bissau, The Gambia, Senegal, Mauritania.
Trans-Saharan Gas Pipeline	Nigeria	Algeria	Potential to supply Niger while linking to Algeria's export infrastructure in the north.
Central African Pipeline System (CAPS)	Multiple	Multiple	Regional pipeline system proposed to interconnect the 11 countries of the Economic Community of Central African States (ECCAS).
Tanzania-Kenya	Tanzania	Kenya	Potential to help decarbonise thermal power plants in Mombasa.
Tanzania-Uganda	Tanzania	Uganda	Potential line along the EACOP pipeline to grow penetration in landlocked Uganda.
Tanzania-Zambia	Tanzania	Zambia	Potential line along the TAZAWA pipeline to grow penetration in landlocked Zambia.
Angola-Zambia	Angola	Zambia	Potential line along Lobito corridor to grow Gas penetration in Southern Africa's copperbelt province by monetising Angolan natural gas.
Namibia-Zambia	Namibia	Zambia	Potential line strengthening Walvis Bay trade corridor by monetising Namibian natural gas.

Realising this potential will require greater alignment on infrastructure planning, regulatory harmonisation, and regional energy market frameworks, as well as leadership from regional economic communities and financial institutions. But the prize for achieving this is significant.

A more integrated African natural gas market could lower costs, attract investment, support industrialisation, and strengthen energy security across the continent.

The Decarbonisation Opportunity

For natural gas to continue playing its critical role in helping meet future energy demand in Africa, while tackling climate change and improving air quality, encouraging the switch away from coal and diesel and managing methane emissions, must become priorities for both producers and consumers.

Decarbonising upstream operations

The global pressure to reduce methane emissions and eliminate routine flaring is growing, and with it the expectation for oil and Gas producers to adopt cleaner and more transparent operating practices. In Africa, where natural gas remains underutilised domestically and emissions intensities are rising, tackling flaring and managing methane emissions are not just climate imperatives — they are commercial necessities.

Eliminating flaring has the dual benefit of reducing carbon emissions and making more natural gas available for local economies. At the same time, methane management requires a shift in how projects are developed,

Picture: iStock

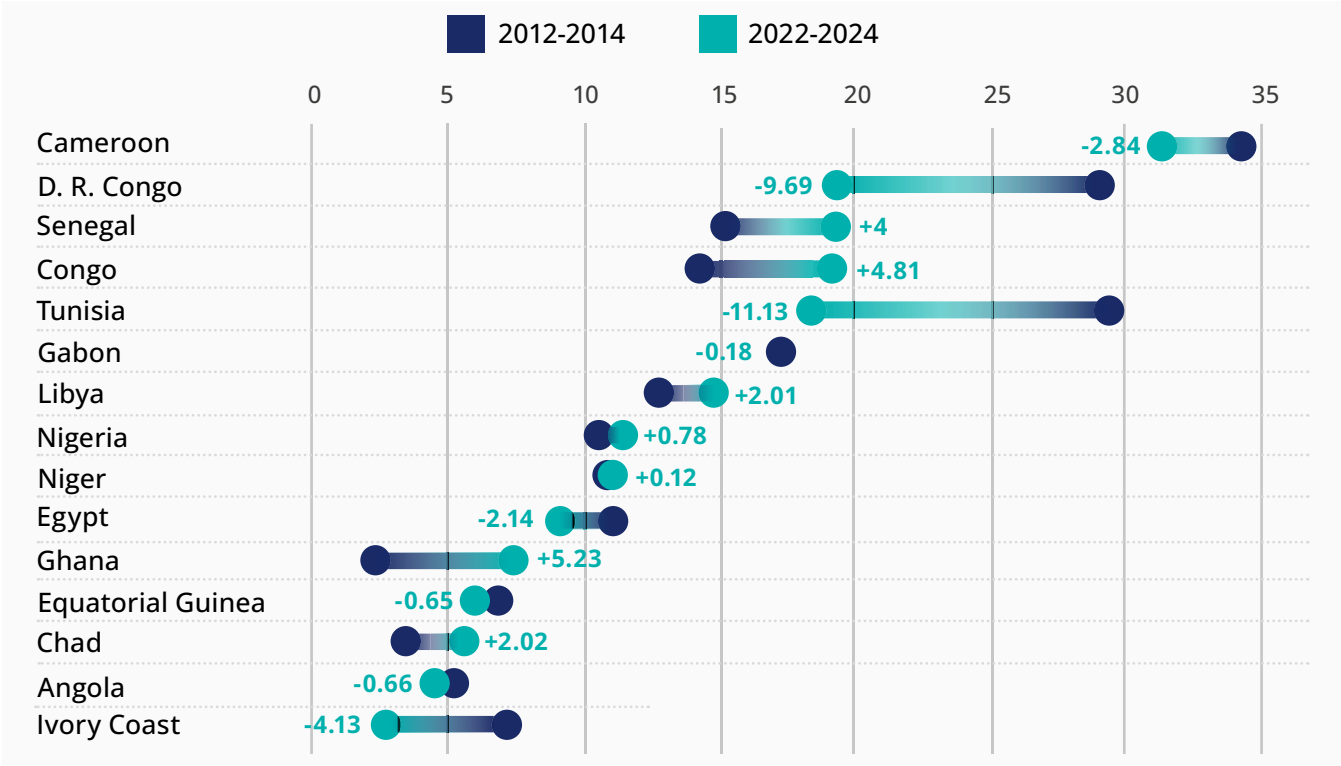
operated, and maintained. These efforts are now becoming a baseline requirement for the Gas industry's license to operate, especially as global buyers, financiers, and regulators demand cleaner molecules and higher standards of transparency. Failure to act could increasingly limit the African Gas producers' access to finance and markets.

Despite some successful flare reduction strategies in Africa, flaring remains pervasive in the continent's largest producing countries. Nigeria, Algeria, Libya, and the Republic of Congo have all reported declines in total flared volumes in some years, but this is largely due to falling oil production. Flaring intensity, the volume of natural gas flared per barrel of oil, has increased in many cases, indicating a deterioration in upstream operational efficiency (see Figure 19).

Picture: iStock

Figure 19: Flaring intensities remain high in smaller producing countries in the Gulf of Guinea

Flare intensity differences 2012-14 vs. 2022-24, in m3/bbl

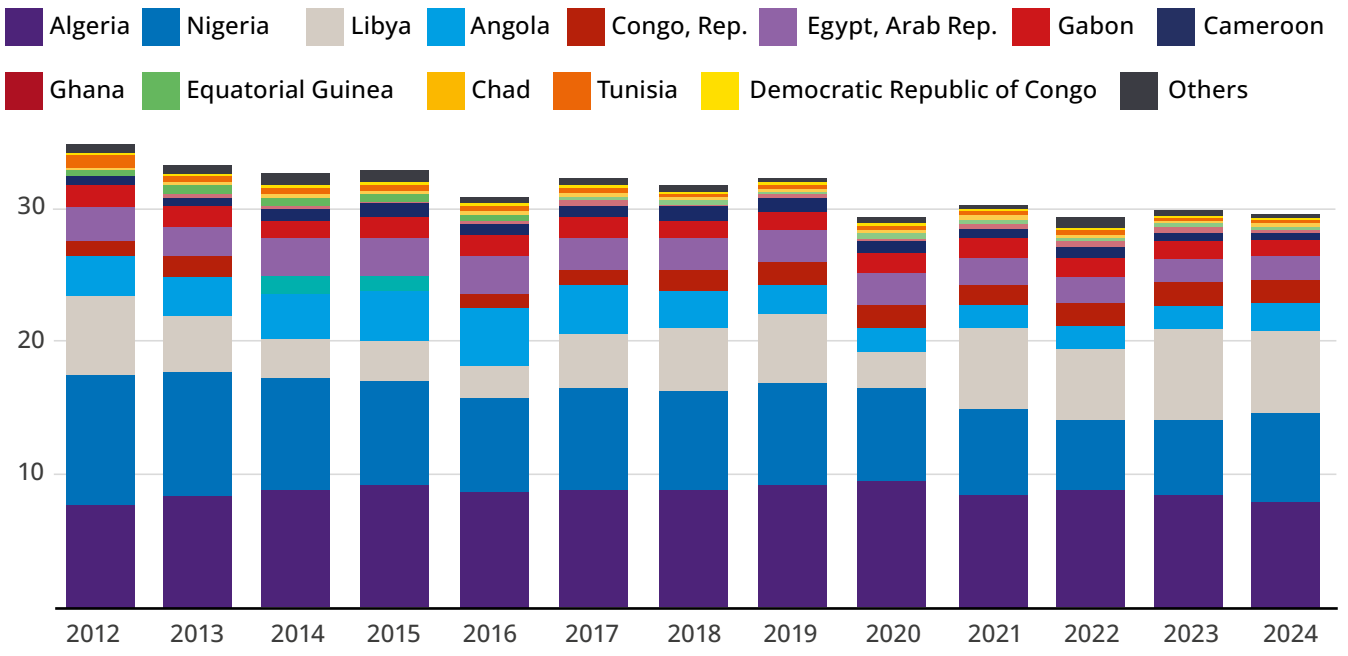


Source: World Bank

Africa currently flares around 30 billion cubic metres (Bcm) of natural gas annually, a level that has fluctuated with production shocks, particularly in Libya (see Figure 20). At 2024 global natural gas prices, this represents a wasted economic value of between USD 3.8 billion and USD 12.6 billion, depending on benchmark pricing[59]. These losses are not only economically unjustifiable — they also undermine Africa's natural gas narrative and long-term competitiveness in a carbon-constrained global market.

Figure 20: With the exception of Angola, most African hydrocarbons producers have seen flaring volumes broadly unchanged over the past decade

Gas flaring, in billion cubic metres (Bcm)



Source: World Bank

Picture: iStock

[59] *Assumes flared natural gas has a heating value of 1,020 British thermal units per standard cubic foot (BTU/scf), that 1 cubic meter equals 35.315 standard cubic feet and that the recovered natural gas would obtain a price based on a Henry Hub natural gas spot price of US$3.42 per million BTU and European Union natural gas import price of US$11.59 per million BTU (as of April 2025). For more, see Global Gas Flaring Tracker Report 2025, The World Bank.*

Several structural and systemic challenges continue to impede progress on flaring and methane mitigation[60]. These include:

- Weak or inconsistently enforced policies and regulations, leading to ineffective governance of flaring and venting;
- Inadequate capital allocation by governments and operators, often prioritising oil revenues over natural gas valorisation;
- Lack of infrastructure or limited access to it, making natural gas capture and monetisation technically or commercially unfeasible;
- Uncertain project economics, particularly in older fields or those with small associated natural gas volumes;
- Limited project preparation capacity and financial constraints that delay investments in bankable flare reduction initiatives.

Nonetheless, positive examples of private-sector-led infrastructure development are emerging across Africa and are already contributing to meaningful reductions in flaring. Angola has successfully monetised associated natural gas through the Angola LNG export terminal, reducing flaring and building one of Africa's most reliable natural gas export platforms[61]. If the Angolan case is a guide to the future, similar success stories will soon be replicated in Central Africa. In the Republic of Congo, Eni's Congo LNG project (commissioned in phases between 2024 and 2025) is expected to absorb significant volumes of associated natural gas, and in Gabon, Perenco's Cap Lopez LNG project will also convert associated natural gas into LNG and LPG while developing a new offshore gathering system that can be accessed by multiple operators seeking flare monetisation opportunities[62]. Such infrastructure illustrates how small-scale, modular solutions can help solve flaring at the source, especially in mid-sized or fragmented basins.

On methane, the situation is more complex due to limited detection, reporting, and monitoring capabilities. Methane emissions

[60] *See Global Gas Flaring Tracker Report 2025, The World Bank.*

[61] *See for instance Angola LNG Case Study by the Columbia Centre on Sustainable Investment - https://ccsi.columbia.edu/sites/ccsi.columbia.edu/files/content/docs/publications/CCSI-Capterio-Flaring-Case-Study-Angola-ALNG-June-2025.pdf*

[62] *Perenco Sustainability Report 2024.*

in the natural gas value chain arise primarily from venting, fugitive leaks, and incomplete combustion ("methane slip").

The Methane Guiding Principles outline ten key practices for upstream methane mitigation. At the core is the need to accurately detect, quantify, and report methane emissions across upstream, midstream, and downstream assets. However, most African producers still lack robust methane measurement systems, especially for fugitive and vented emissions, which are often underreported or completely unmeasured.

In this context, baseline data collection must be a top priority. Establishing representative datasets over a full operational cycle (typically a year) is necessary to determine where and when methane losses occur — whether from wellheads, pipelines, storage tanks, compressors, or pneumatic devices.

Key mitigation strategies include:

1. Regular leak detection and repair (LDAR) programmes, especially for known high-emission equipment;
2. Upgrading or replacing pneumatic controllers with electric or low-bleed alternatives;
3. Improving asset integrity and maintenance regimes, particularly for ageing infrastructure;
4. Designing methane mitigation measures into new projects from the concept stage, including improved seals, automated monitoring, and efficient combustion systems;
5. Utilising captured associated natural gas for reinjection, on-site power generation, or commercial distribution.

Picture: Seplat Energy

Africa's natural gas industry will not remain competitive on reserves alone. As the world demands cleaner supply chains and lower lifecycle emissions, the ability to cut flaring and control methane emissions could increasingly affect Africa's ability to attract capital, secure offtake agreements, and position natural gas as a credible development enabler. Success will depend not only on adopting best practices — but on embedding them into the core of how upstream projects are financed, permitted, operated, and measured.

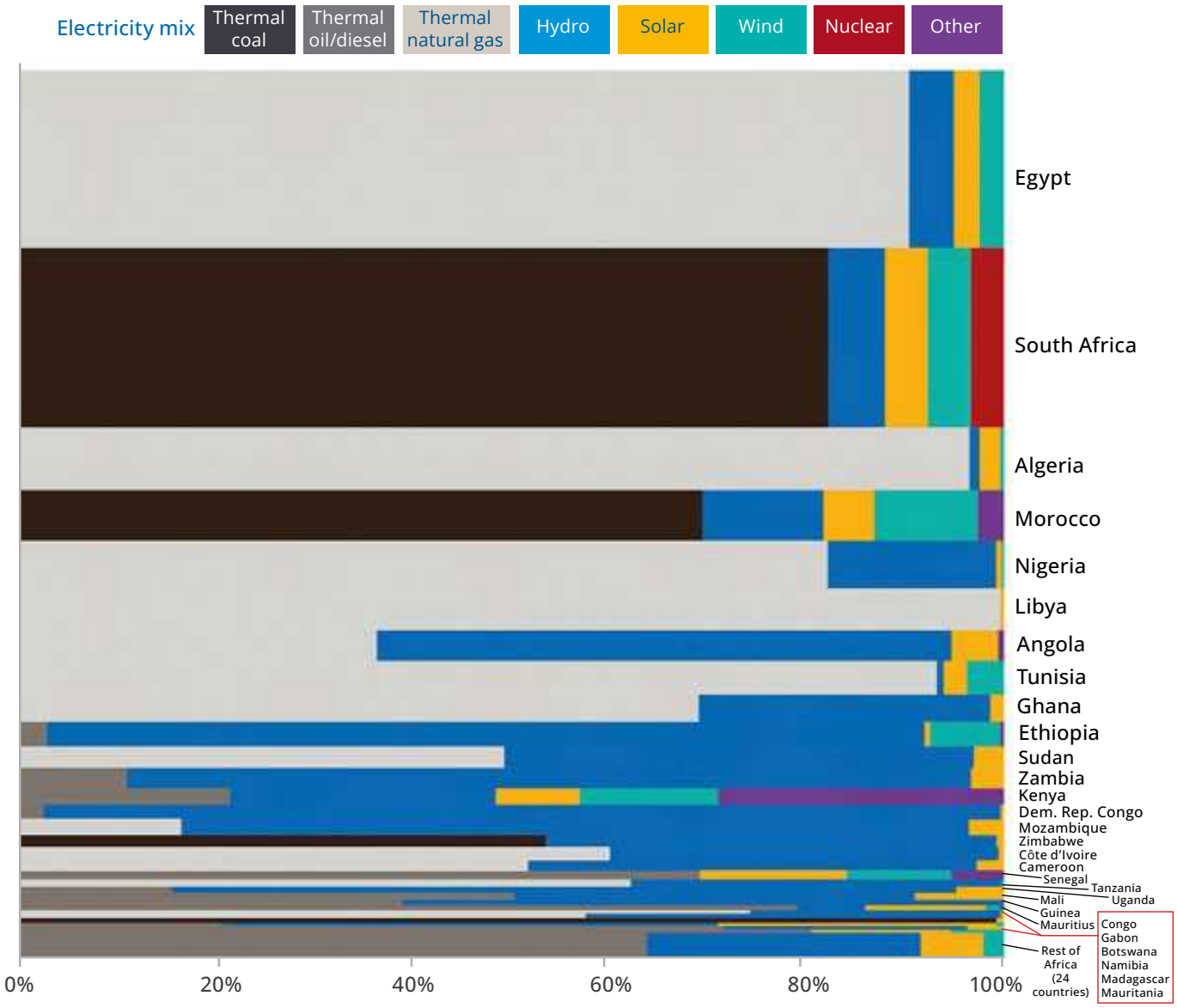
Decarbonising the power sector and balancing the electricity mix

Natural gas has a crucial role to play in delivering cleaner and more reliable power systems across Africa, particularly as countries seek to reduce the use of coal and imported oil products while meeting rapidly growing electricity demand. As the continent's power needs rise and renewable generation scales up, natural gas offers a flexible and lower-emission alternative that can both stabilise grids and displace high-carbon fuels.

A look at Africa's overall electricity mix reveals where these opportunities are, with clear coal-to-gas switching opportunities in South Africa and Morocco, and oil-to-gas opportunities across Western and Central Africa (see Figure 21).

Figure 21: Africa's electricity mix shows clear decarbonisation opportunities by switching away from coal and imported oil derivatives

Africa's electricity mix represented in proportion to each country's installed power generation capacity



Source: Africa Finance Corporation (2024). State of Africa's Infrastructure Report

Gas-fired generation provides firm, dispatchable capacity — making it well-suited to replace coal in baseload applications and heavy fuel oil (HFO) or diesel in peaking and backup roles. It can also operate efficiently in combined-cycle configurations, lowering operating costs and improving system efficiency compared to legacy oil-fired plants. In this way, natural gas is emerging as a strategic tool for reducing both the carbon intensity and cost of electricity generation.

Significant progress is underway in key thermal power markets such as South Africa[63], Senegal[64], and Morocco[65], where governments are advancing natural gas import infrastructure to enable strategic fuel switching and reduce reliance on high-emission fuels. Among them, South Africa stands out as the most pivotal case — not only as Africa's largest economy but also as the only G20 country without grid-connected gas-to-power capacity. Despite growing electricity demand and widespread load shedding, the country frequently relies on diesel-fuelled peaking plants and an ageing coal fleet to keep the lights on. With over 8 GW of coal-fired capacity scheduled for retirement by 2030[66], natural gas is expected to play a critical role in maintaining baseload supply and stabilising the grid.

According to an initial draft of the national gas master plan, gas-to-power could contribute between 2 GW and 16.6 GW to the country's future generation mix — a range that underscores both the urgency and the scale of South Africa's gas-to-power opportunity[67].

Picture: NNPC Ltd

Beyond emissions reduction, natural gas also supports climate adaptation goals. In drought-prone regions where hydropower plays a central role in the generation mix, natural gas can serve as a reliable substitute during periods of low rainfall. Countries such as Angola, Tanzania, and parts of the Sahel increasingly face volatility in hydro output due to changing weather patterns. In these contexts, natural gas offers a critical hedge against seasonal shortfalls, helping to ensure grid stability and maintain power system resilience.

These shifts are not just environmental — they are also economic. Gas turbines offer far greater thermal efficiency than oil-fired generators and benefit from lower fuel costs, especially when supplied via domestic or regional sources. At the same time, switching to natural gas eliminates many of the local air pollutants associated with coal and oil, improving public health outcomes and reducing the environmental footprint of industrial development.

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[63] https://www.vopak.com/newsroom/news/news-zululand-energy-terminal-signs-agreement-operate-south-africas-first-lng?language_content_entity=en

[64] https://lngjournal.com/index.php/latest-news-mainmenu-47/item/113573-maiden-lng-cargo-arrives-at-karmol-powership-in-senegal

[65] https://fr.le360.ma/economie/gaz-naturel-le-projet-du-terminal-gnl-active_K7KQKPZVRVDTTCJOAVY2B2XUZI/

[66] *"Addressing South Africa's Gas & Power Cliff", Standard Bank Group presentation, September 2025.*

[67] *A copy of South Africa's draft gas master plan can be accessed at* https://www.gov.za/sites/default/files/gcis_document/202404/50569gon4760.pdf

Decarbonising the transport sector

Natural gas also presents a compelling opportunity to decarbonise Africa's transport systems — most notably in freight, public transport and shipping — by offering a cleaner, more affordable, and domestically available alternative to costly imported fuels.

1. Transitioning vehicles to compressed natural gas (CNG) or liquefied natural gas (LNG) not only aligns with emissions reduction goals but, also, reduces reliance on volatile oil imports and supports governments in alleviating the fiscal burden of fuel subsidies.

2. Developing LNG bunkering infrastructure offers a strategic opportunity to serve the growing demand for cleaner maritime fuels, as the shipping sector — responsible for 3% of global GHG emissions — seeks to decarbonise. With over 1,000[68] LNG-powered vessels already in service globally, ports such as Alexandria, Casablanca, Lagos, Walvis Bay, Cape Town, Durban, Richards Bay, and Mombasa are well-positioned along key shipping lanes to become regional bunkering hubs.

A powerful precedent for large-scale adoption of LNG in transport has emerged from China, where sales of LNG-heavy-duty trucks surged in 2023 and 2024. In the first half of 2024 alone, approximately 109,000 LNG-powered heavy trucks were sold[69], nearly tripling the figure from 2019, and representing about 35% of heavy-duty truck sales over that period. This shift contributed to a significant reduction in diesel demand: by mid-2024, LNG trucks had displaced around 8% of China's gasoil consumption[70].

Within Africa, several countries are embarking on pilot and early-stage transitions to natural gas transport (*see Case Study: Compressed Natural Gas (CNG) in Transportation – Lessons from Nigeria and Tanzania: Page 105*).

Nigeria, in response to rising fuel prices following the removal of gasoline subsidies, has launched a CNG vehicle conversion programme, converting over 100,000 vehicles to CNG and aiming to scale to 1 million within the next few years. The initiative promises nearly 50% reductions in vehicular fuel costs, though challenges remain around infrastructure availability and public awareness.

Picture: West African Gas Pipeline Company

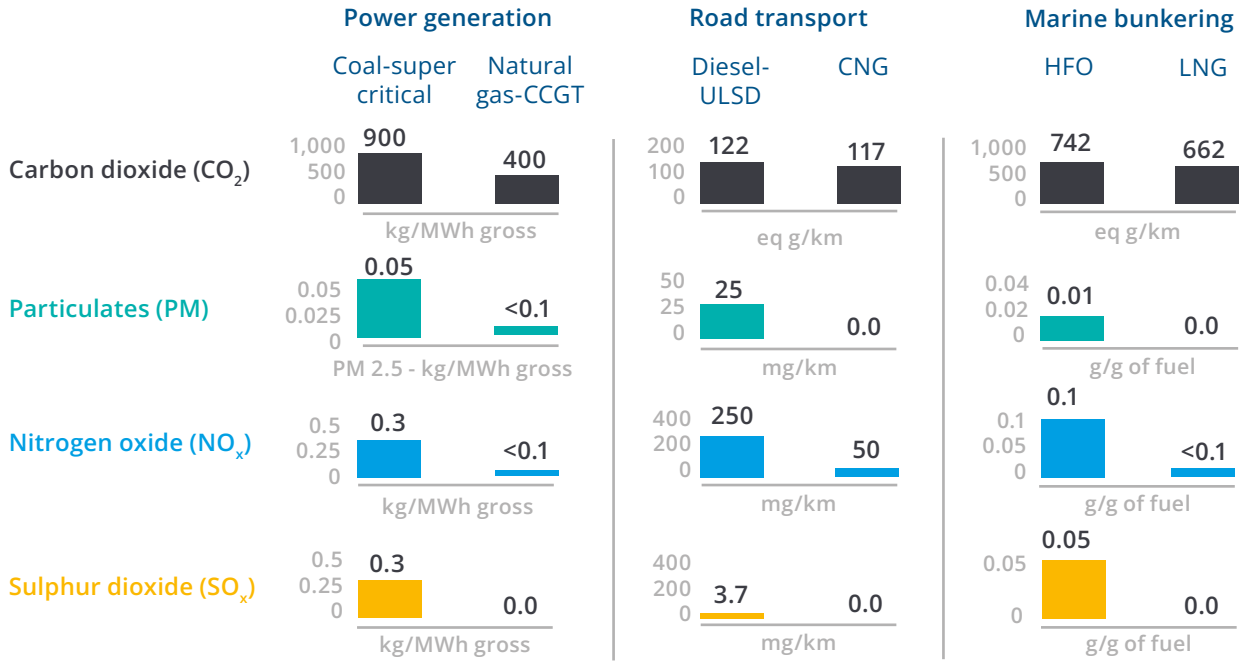
[68] https://totalenergies.com/news/news/bunker-lng-marine-energy-transition
[69] https://www.reuters.com/business/energy/lng-fuelled-trucking-accelerates-asia-denting-diesel-demand-2024-10-23/
[70] https://www.spglobal.com/commodity-insights/en/news-research/latest-news/lng/062624-china-nears-peak-gasoil-demand-as-lng-fueled-heavy-duty-truck-sales-surge

These developments underscore natural gas' triple advantage, delivering environmental, fiscal, and energy security benefits. Deploying CNG or LNG fleets lowers carbon emissions and reduces air pollution, fostering healthier urban environments (see Figure 22).

The shift also relieves governments of the cost burden associated with fuel subsidies, aligning transport policies with broader energy affordability objectives.

Finally, for natural gas-producing countries, using natural gas in transport creates a domestic market and diversifies demand away from volatile export-dependent models.

Figure 22: Emissions factor for natural gas vs. coal and oil



Source: NETL, EEA, OIES, BCG analysis

But scaling up natural gas transport requires strategic investments and policy support. Key enablers include:

Expanding CNG/ LNG refuelling infrastructure in urban and peri-urban centres.

Developing vehicle conversion programmes and incentivising fleet transitions.

Ensuring reliable domestic natural gas supply — especially in countries with upstream production.

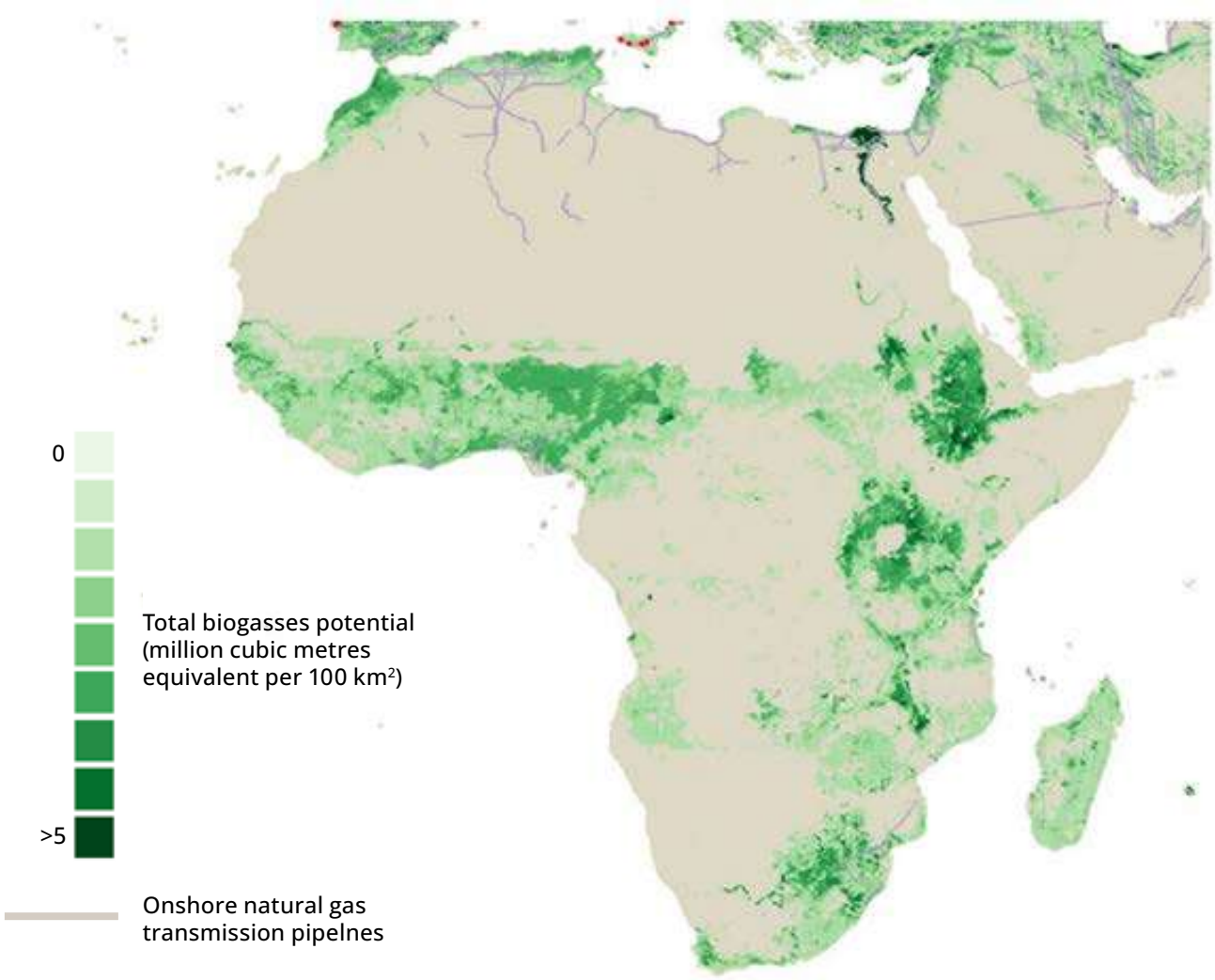
Offering policy and fiscal incentives for early adoption, including subsidies, tax reductions, and public procurement mandates.

The potential of Africa’s biogas sector

Despite its potential of producing 120 Bcm equivalent (bcme)[71], biogas remains one of Africa’s most underutilised energy assets. Across the continent, vast quantities of organic waste — from agriculture, livestock, food systems, and municipalities—go unmanaged, releasing methane into the atmosphere. Yet this same waste could be converted into clean, locally produced energy in the form of biogas and biomethane, helping countries reduce emissions, improve waste management, and boost energy access.

The latest assessment released in 2025 by the International Energy Agency (see Map 4) estimates the continent’s biogas potential at 120 Bcme, or 65% of Africa’s current Gas demand.

Map 4: Africa’s biogas potential is concentrated in Nigeria, South Africa and Ethiopia, along with several East African countries (Uganda, Kenya, Tanzania)



Source: IEA (2025). Outlook for Biogas and Biomethane: A geospatial assessment, May 2025.

[71] *Based on the latest assessment of the International Energy Agency in “Outlook for Biogas and Biomethane. A global geospatial assessment,” May 2025*

Biogas technologies are particularly well-suited for Africa's development priorities.

In rural areas, they can reduce dependence on firewood and charcoal, improve health outcomes through cleaner cooking, and eliminate methane emissions from animal waste and crop residues. In urban settings, biogas and biomethane can transform organic waste liabilities into energy and fertiliser assets — contributing to negative emissions, more resilient cities and improved sanitation. Yet, progress remains limited due to insufficient investment, low awareness, and underdeveloped waste infrastructure.

But the strategic opportunity extends further. As African countries expand their Gas infrastructure, including pipelines and distribution networks, the continent is well-positioned to develop biomethane (or renewable gas) as a drop-in substitute for natural gas and for the development of a circular economy.

Biomethane is chemically identical to natural gas and can be injected directly into existing natural gas networks with no modification to pipelines, appliances, or engines. This seamless integration makes biomethane uniquely cost-effective, particularly in countries that already have a natural gas infrastructure in place. Currently, 10% of Africa's biogas potential is located less than 20km away from natural gas transmission pipelines, particularly in Nigeria and South Africa[72].

Among the proven low-carbon gas technologies — including hydrogen and carbon capture, utilisation and storage (CCUS) — renewable gas could hold the greatest potential to reduce emissions across existing Gas systems in the long-term. Unlike hydrogen, biomethane requires no blending limits or combustion constraints, and when produced from sustainably sourced feedstocks, it can deliver emissions reductions of 80% or more across the full fuel lifecycle.

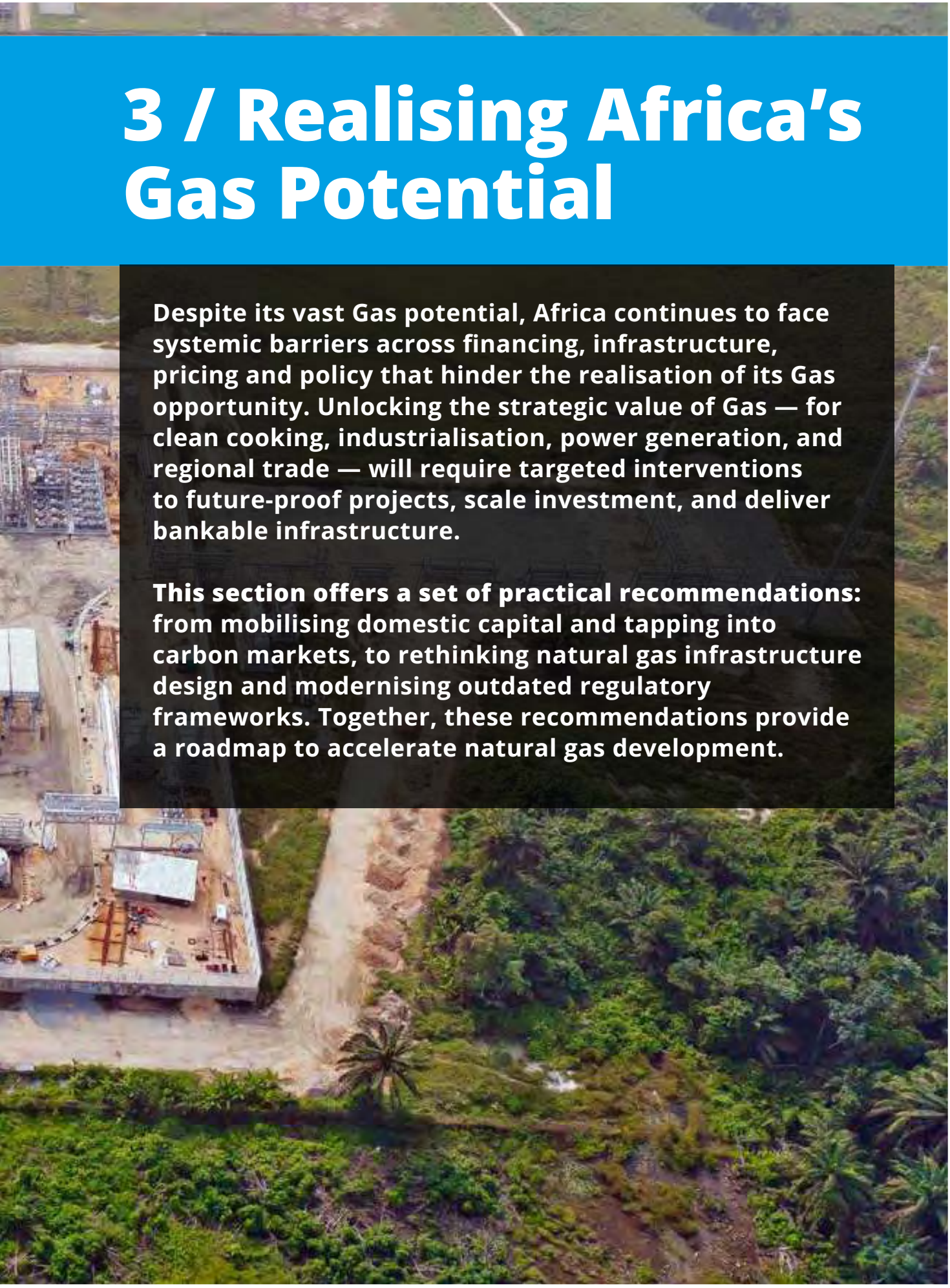
For African markets, this presents a low-cost, low-barrier opportunity to decarbonise the natural gas sector while expanding local value chains around waste management, agriculture, and clean energy. Countries that already have growing natural gas transmission and distribution networks are particularly well-placed to integrate biomethane production into their national energy strategies. In Denmark, for instance, 40% of Gas demand is already met from biogases, while India has set a 5% biomethane blending target for compressed natural gas (CNG) to cut reliance on imported fuels.

Picture: Ghana Gas

[72] *Source: IEA (2025). Outlook for Biogas and Biomethane: A geospatial assessment, May 2025.*

Picture: Seplat Energy

3 / Realising Africa's Gas Potential



Despite its vast Gas potential, Africa continues to face systemic barriers across financing, infrastructure, pricing and policy that hinder the realisation of its Gas opportunity. Unlocking the strategic value of Gas — for clean cooking, industrialisation, power generation, and regional trade — will require targeted interventions to future-proof projects, scale investment, and deliver bankable infrastructure.

This section offers a set of practical recommendations: from mobilising domestic capital and tapping into carbon markets, to rethinking natural gas infrastructure design and modernising outdated regulatory frameworks. Together, these recommendations provide a roadmap to accelerate natural gas development.

Table 2: Summary of Challenges and Recommendations

Challenge	Recommendation
UNLOCKING FINANCING	Future proofing Gas projects for long-term viability
	Unlocking capital pools to finance the domestic Gas economy
	Tapping into Carbon Markets to accelerate emissions-saving Gas projects
EXPANDING GASIFICATION INFRASTRUCTURE	Innovating and reforming the power sector
	Diversifying offtakers beyond the power sector
	Maximising regional cooperation to unlock economies of scale
	Promoting a focus on flexibility, modularity, and connectivity
ADOPTING PRAGMATIC POLICY FRAMEWORKS	Updating master plans to reflect industrial, regional, and decarbonisation priorities
	Adopting robust Gas codes and regulatory instruments that bring clarity and confidence
	Streamlining permitting and fast-tracking project approvals to accelerate delivery

Unlocking financing

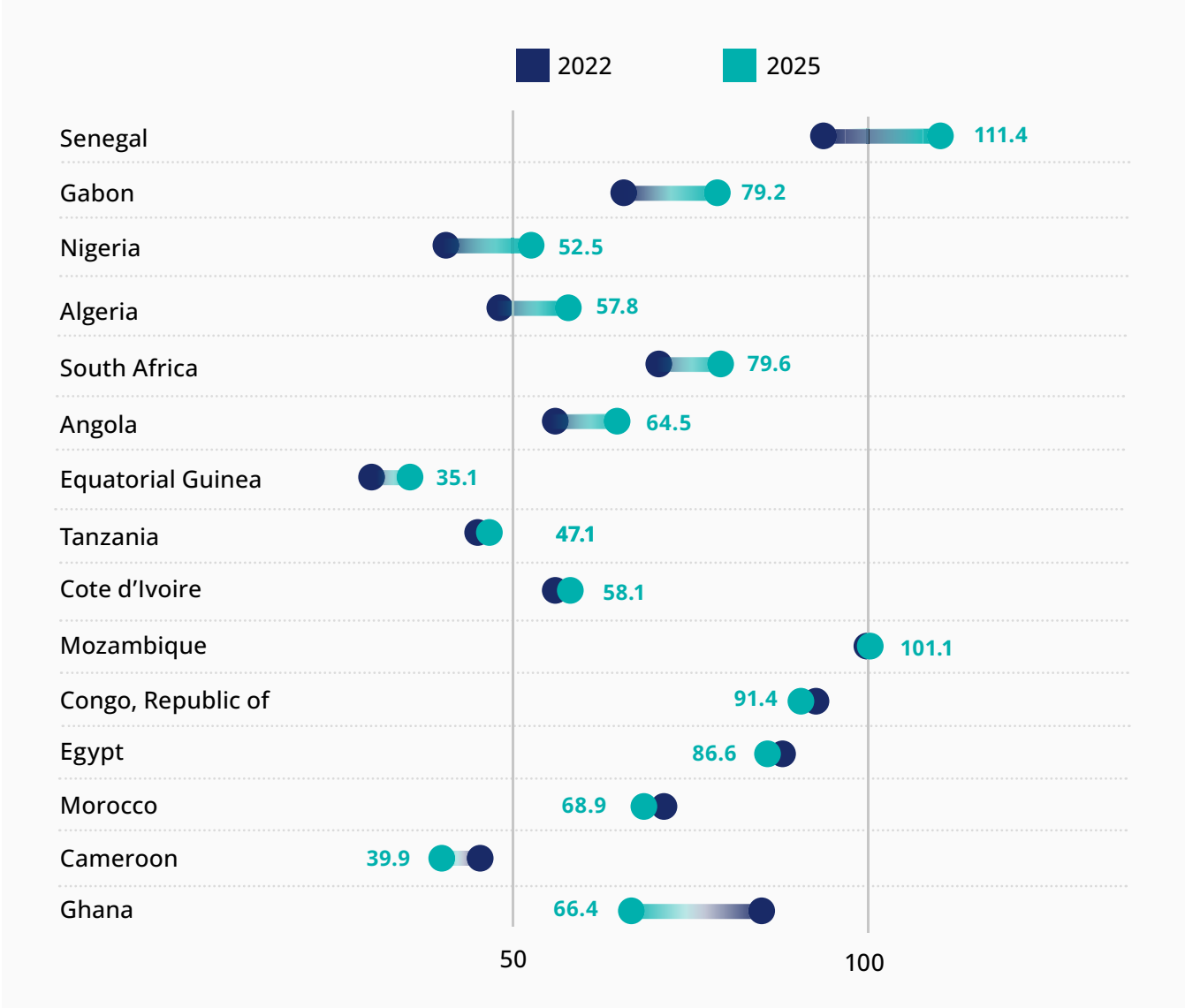
Africa's aspirations for a robust Gas sector are coming up against a challenging financial reality.

Many governments are already navigating high debt burdens and constrained fiscal spaces, making it increasingly difficult for states to underwrite large-scale natural gas transmission and pipeline infrastructure — historically a domain of public financing. At the same time, international capital flows for natural gas are becoming more competitive and conditional. Traditional sources — export credit agencies, commercial banks, development finance institutions — are exercising greater scrutiny over project risks, carbon credentials, and execution timelines.

Picture: West African Gas Pipeline Company

Figure 23: Public debt levels remain elevated across Africa

Government debt, in % of GDP in selected African countries



Source: IMF

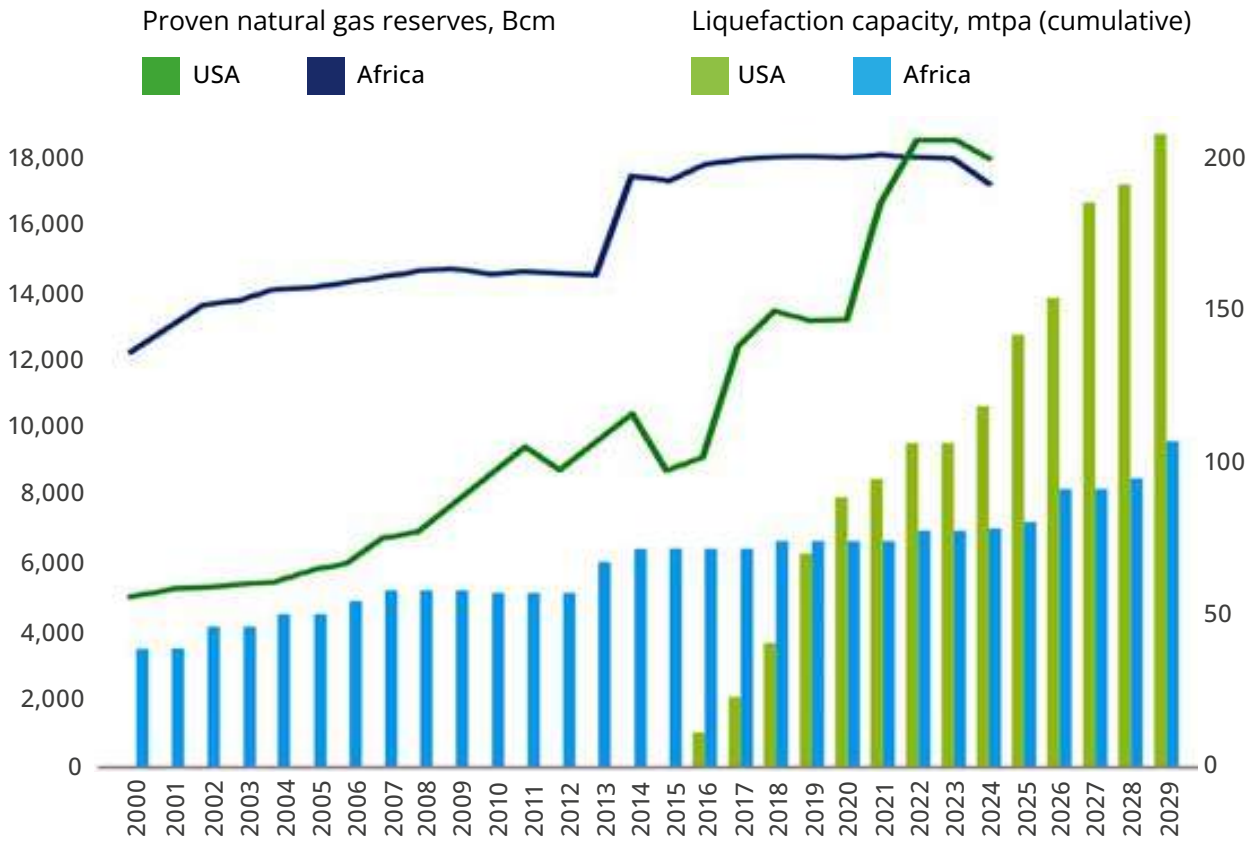
More encouragingly, however, recent signals suggest both flexibility and continued appetite for natural gas. Where project development is swift and backed up by sound policy, capital has followed (see Figure 24). In 2025 for instance, Venture Global closed a $15.1bn project financing package for its third greenfield LNG project in the US in under six years, attracting over $34bn of commitments from international banks and requiring no outside equity investment[73].

The U.S. experience demonstrates that when policy clarity, infrastructure readiness, and credible project structures align, capital can flow at scale — even in a competitive global environment.

Meanwhile, the World Bank is also gradually changing its strategy to energy financing, particularly in emerging economies where it has announced an "all of the above" approach that includes lending for natural gas, nuclear and renewable energy[74].

Figure 24: Despite having similar reserves potential, the USA and Africa have witnessed a radically different pace of project execution

Proven natural gas reserves vs. liquefaction capacity



Note: Liquefaction capacity includes only existing terminals and projects under construction as of 2025; excludes planned capacity.

Source: OPEN ASB data, IGU World LNG Report, U.S. EIA Report, Hawilti Research

73 https://investors.ventureglobal.com/news/news-details/2025/Venture-Global-Announces-Final-Investment-Decision-and-Financial-Close-for-Phase-1-of-CP2-LNG/default.aspx

74 https://www.cgdev.org/blog/world-banks-all-above-approach-energy-poor-countries-welcome-change

In Africa, recent investment activity underscores that capital interest is alive.

Recent deals activity include several mergers and acquisitions (M&A) and project financing transactions such as:

- Adnoc's 10% stake acquisition in Mozambique's Area 4 from Galp Energia[75] in 2024;
- ASP Isotopes' proposed acquisition of Renergen and its South African helium and LNG business in 2025[76];
- Unanimous approval of the US EXIM Bank's $4.7bn loan to Mozambique LNG in 2025[77];
- The alliance of Qatar's Al Mansour Holdings with natural gas explorer Invictus Energy in Zimbabwe in 2025[78];
- OPEC Fund for International Development (OFID) and the Islamic Development Bank (IsDB) financing the initial studies of the African Atlantic Gas Pipeline between Nigeria and Morocco[79].

These transactions reveal real investment appetite from both North America and several Middle Eastern states, particularly in natural gas projects with established and proven reserves, strong upside, and scalable infrastructure potential.

Different segments of the natural gas value chain demand different pools of capital with varying risks profiles. International capital remains indispensable for upstream development and export scale LNG projects, which require large, syndicated debt and equity packages — beyond the capacity of local banks. For instance, Mozambique LNG's project raised more than $14.9 bn in project finance, drawing heavily on Export Credit Agencies and multiple international commercial lenders[80].

Development and sustainable finance instruments have particular relevance for segments like flare gas monetisation and clean cooking given their direct impacts on development and decarbonisation. In 2024 for instance, the African Development Bank (AfDB) and several public and private sector partners pledged over $2bn for clean cooking in Africa

75 https://www.adnoc.ae/en/news-and-media/press-releases/2023/adnoc-to-acquire-10-equity-stake-in-major-lng-development-in-mozambique

76 https://ir.aspisotopes.com/news-events/press-releases/detail/63/asp-isotopes-inc-announces-an-agreement-relating-to-the

77 https://www.exim.gov/news/exim-board-directors-votes-proceed-47-billion-lng-equipment-and-services-transaction-after

78 https://www.invictusenergy.com/letter-from-the-md-3/

79 https://opecfund.org/media-center/press-releases/2021/opec-fund-approves-us-284m-for-global-development-operations

80 https://totalenergies.com/media/news/news/total-announces-signing-mozambique-lng-project-financing

by 2030, including for LPG production and infrastructure[81].

The most underleveraged source of capital is domestic financing by African banks, but also institutional capital from pension funds, sovereign wealth funds, or insurance pools. Development finance institutions (DFIs) such as the Africa Finance Corporation (AFC) and Afreximbank have increasingly stepped into the space once dominated by international DFIs, particularly as foreign counterparts scaled back engagement in conventional energy throughout the 2010s and 2020s. Today, both institutions are backing several transformative Gas projects across the continent — from gas-to-power in Senegal, to flare monetisation in Nigeria, and LNG export infrastructure in Equatorial Guinea. Their deep understanding of local market conditions, ability to deploy blended capital, and role in de-risking complex projects make them indispensable players in Africa's Gas sector — especially in frontier markets where traditional financing is more constrained.

In parallel, domestic institutional capital has a growing role to play in financing local Gas infrastructure, particularly where local currency financing can help mitigate foreign exchange risks and currency mismatches. Promising examples include the mobilisation of pension funds capital in Nigeria to support natural gas investments, and the participation of Senegal's sovereign wealth fund (FONSIS) in financing the country's planned natural gas transmission network. These models illustrate the untapped potential of domestic capital pools to support scalable, context-appropriate energy infrastructure — especially in midstream and downstream segments often overlooked by global financiers.

• Recommendation: Futureproofing Gas projects for long-term viability

As global capital markets and energy policies continue to evolve, futureproofing must become a central pillar of Africa's Gas development strategy[82]. Developers seeking to attract long-term capital will increasingly need to demonstrate that their projects are resilient and aligned with global expectations of a lower carbon future. Futureproofing is not just about compliance — but rather about creating bankable, adaptable business models that anticipate the demands of a world steadily moving toward lower-carbon energy systems. Natural gas stands out as a uniquely adaptable fuel — offering immediate emissions benefits today, and the flexibility to evolve into a low-carbon energy carrier tomorrow. Not only does it provide an immediate opportunity to displace higher-emission fuels like coal and heavy fuel oil, but it is also the only fossil fuel that can be progressively decarbonised. With the right

81 https://www.argusmedia.com/ja/news-and-insights/latest-market-news/2568085-funding-of-2.2bn-pledged-to-clean-cooking-in-africa

82 *Futureproofing in this context means finding solutions to guarantee environmental sustainability and compatibility with the goals of the Paris Agreement. Today, it requires upholding the best available standards for minimising and eliminating emissions, maximising efficiency, and being ready for further decarbonisation.*

infrastructure in place, natural gas systems can evolve to deliver low-carbon and zero-carbon gases such as biomethane and hydrogen — extending the asset life and relevance of today's investments well into the future.

In practical terms, futureproofing starts upstream, where exploration and production projects must minimise their emissions footprint from the outset. This includes prioritising low-carbon feedstocks, eliminating routine flaring, and capturing associated natural gas for reinjection or monetisation. Africa's first net-zero upstream project was commissioned by Eni at the Baleine Field in Côte d'Ivoire in 2023 while several future production hubs are following suit. In Angola, for instance, TotalEnergies is developing an all-electric and zero emissions FPSO for its upcoming Kaminho project[83]. Future upstream developments should aim to be net-zero in operation, while existing brownfield sites can be upgraded through a range of efficiency and decarbonisation measures — such as cogeneration systems, flue gas metering, advanced air compression, or the use of renewable energy for operations.

Similarly, future-ready midstream and downstream infrastructure must anticipate the molecules of tomorrow. In the midstream and downstream segments, the focus should shift to emissions across the value chain and the need to develop infrastructure that is compatible with emerging decarbonisation technologies. This includes integrating renewable-powered compression and liquefaction, preparing for carbon capture, utilisation and storage (CCUS) where feasible, and building pipelines, storage, processing facilities, and power plants that are adaptable to low-CO_2 Gas alternatives — including hydrogen, biogas/biomethane, and syngas. Algeria's growing interest to study the repurposing of some of its natural gas export pipelines to Europe to include hydrogen is a prime example[84].

Finally, the ability to eliminate methane emissions will become a defining factor for both future-proofing credibility and capital attraction. African projects, many of which are still in early stages or being built from scratch, have a rare opportunity to integrate zero-methane-emission design principles from the start. Leveraging the latest science, technologies, and greenfield construction advantages, Africa can build a Gas sector that is not only growth-oriented — but also sustainable and investment-ready for decades to come.

Picture: Eni

83 https://totalenergies.com/news/press-releases/angola-totalenergies-launches-kaminho-deepwater-project

84 https://www.upstreamonline.com/hydrogen/algeria-aims-to-repurpose-gas-pipelines-for-hydrogen-exports-to-europe/2-1-1724635

• Recommendation: Unlocking local capital pools to finance the domestic Gas economy

Africa's domestic institutional capital is vast, underutilised, and critical to scaling Gas infrastructure. While international finance remains essential for large-scale ventures, Africa's ability to unlock local pools of long-term capital — particularly from pension funds, insurance schemes, and sovereign wealth funds — will be key to financing domestic Gas infrastructure. These sources are uniquely positioned to support midstream and downstream projects in local currency, reducing exposure to exchange rate volatility and currency fluctuations.

Unlocking this capital requires tailored financial instruments and risk-mitigation mechanisms. Mobilising institutional capital into infrastructure — especially in risk-sensitive sectors like natural gas — demands innovative structures, strong credit enhancement, and a supportive regulatory alignment. African institutional investors, such as pension funds, typically face regulatory or fiduciary constraints

Picture: WAGPO

that limit exposure to non-investment-grade assets. To overcome this, domestic intermediation platforms must offer guarantees or blended finance tools that de-risk investments and meet the strict criteria of institutional investors.

The scale of the opportunity is considerable: the Africa Finance Corporation estimates that African institutional investors held over $1.17tn in assets under management in 2025[85] — the majority still tied up in short-term, low-yielding instruments. Redirecting even a modest share of these funds toward energy infrastructure could be transformative.

85 *State of Africa's Infrastructure Report 2025, Africa Finance Corporation.*

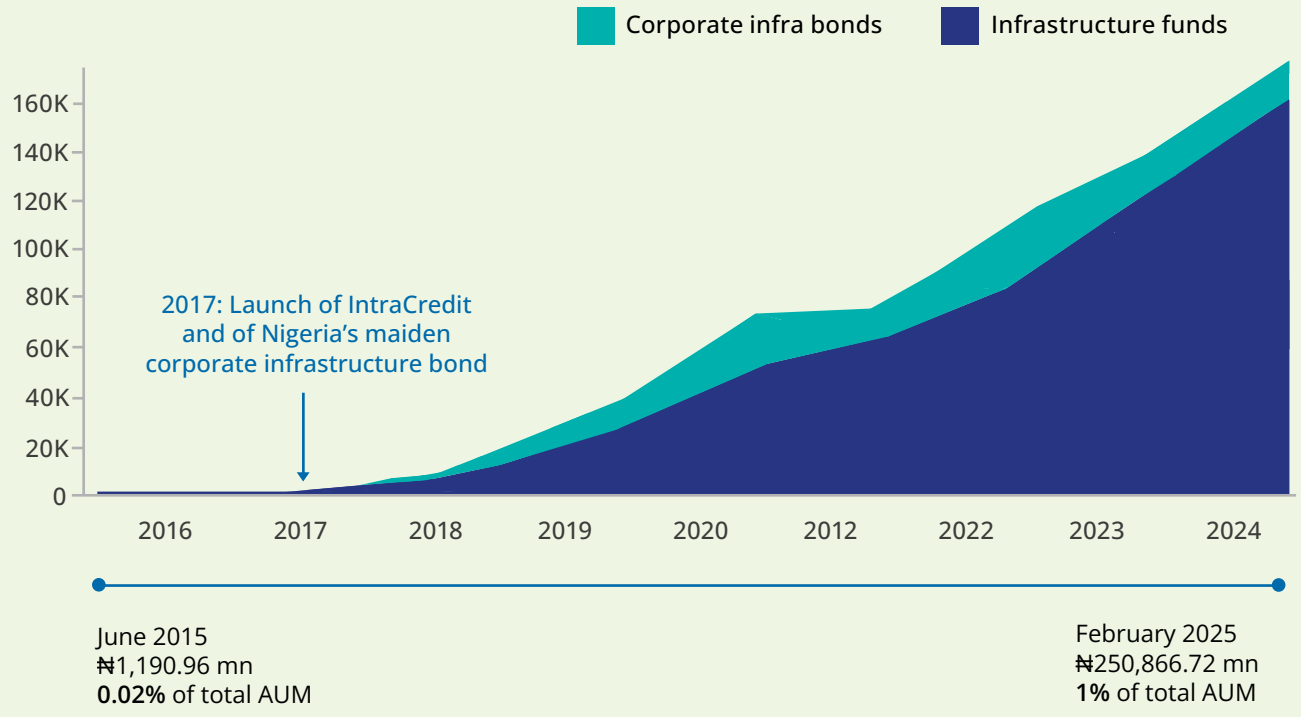
CASE STUDY:
InfraCredit – Unlocking Pension Capital for Nigerian Gas Infrastructure

Nigeria's InfraCredit offers a replicable model of how to channel pension capital into natural gas infrastructure projects. Established in 2017 with support from the Nigeria Sovereign Investment Authority (NSIA), GuarantCo, and the Africa Finance Corporation (AFC), InfraCredit is a public-private guarantee institution that provides local currency guarantees for infrastructure bonds[86]. These guarantees elevate the credit rating of infrastructure projects, making them eligible for pension fund investment under Nigeria's regulatory framework.

InfraCredit's model has already begun to shift Nigeria's institutional capital landscape. By reducing credit risk and improving project bankability, InfraCredit has enabled pension funds to increase allocations to infrastructure from just ₦1.2bn (0.02% of total AUM) to over ₦242bn (1%) — roughly $155m. Several natural gas-focused ventures have directly benefited from this approach, including gas-to-power plants, a domestic LNG terminal, and an LPG storage terminal. InfraCredit proves that, with the right enabling mechanisms, domestic capital can finance critical Gas infrastructure at scale — and do so in ways that are more aligned with local needs, currency realities, and long-term energy planning.

Figure 25: In less than a decade, Nigeria has grown its pension funds allocation to infrastructure financing from $6m to over $155m

Nigeria's pension industry infrastructure portfolio, ₦/mn



Source: PenCom

86 *For details, see https://infracredit.ng/*

• Recommendation: Tapping into Carbon Markets to accelerate emissions-saving Gas projects

Carbon markets have become the main entry point for investment in clean cooking — but Africa risks being left behind without stronger domestic systems. Data from the Clean Cooking Alliance shows that in 2023, 96% of all clean cooking funding globally went to enterprises already generating carbon credits or participating in a registered Programme of Activities (PoA) — up from 57% in 2022[87]. This signals that carbon-linked business models have become the dominant financial gateway for scaling clean cooking solutions. While this trend reflects growing maturity and monetisation in the sector, it also narrows the capital mix — crowding out early-stage, risk-tolerant funding critical for innovation and inclusive access.

For many African enterprises and countries still in the early phases of their clean cooking transitions, this shift introduces structural barriers: without established PoAs or carbon credit experience, they may struggle to access funding. Unless African stakeholders invest in building robust, transparent carbon markets, with tailored methodologies and credible registries, they risk falling behind as carbon revenues increasingly dictate the flow of capital in clean cooking.

Carbon markets offer a powerful — yet underused — mechanism to monetise climate benefits from projects that reduce greenhouse gas emissions, such as flare gas recovery and clean cooking transitions. In natural gas-producing markets, capturing and monetising associated natural gas that would otherwise be flared can yield certified emissions reductions and generate tradable credits. Similarly, clean cooking projects — particularly those shifting households from traditional biomass to LPG, biogas, or improved stoves — can produce carbon offsets by avoiding CO_2 and black carbon emissions. As global demand for high-integrity offsets grows, these sectors could become important revenue generators. But realising this potential requires stronger project design, credible measurement systems, and more reliable markets.

Flare reduction projects are well-suited for carbon monetisation but require robust baselines and certification pathways. Gas flaring abatement offers one of the most direct climate mitigation levers within the oil and gas sector — and a prime candidate for credit generation. Projects that capture and process associated natural gas instead of flaring it can demonstrate clear, measurable emissions reductions. However, few of Africa's flare mitigation projects have tapped carbon markets to date, due in part to technical complexity, limited baseline data, and lack of standardised methodologies adapted to African conditions. Where supported by carbon revenues, flare capture investments can become more commercially viable — particularly in marginal fields or brownfield assets.

Unlocking carbon finance at scale will

87 https://cleancooking.org/wp-content/uploads/2025/08/Industry-Snapshot-Top-Trends.pdf

require new regulatory clarity, aggregation models, and project de-risking. To attract more investment, African countries must adopt clear legal and regulatory frameworks for carbon markets — including approval pathways for crediting programs, baseline methodologies, and revenue-sharing mechanisms. Aggregation models — such as Programmes of Activities (PoAs) — can help scale fragmented projects and lower transaction costs, especially in clean cooking. Equally important are financial de-risking tools: blended finance structures, credit guarantees, or carbon floor price agreements can help developers overcome buyer uncertainty and upfront capital barriers. Development finance institutions have a critical role to play here, including through early-stage concessional capital and results-based financing.

Picture: NNPC Ltd

Building fit-for-purpose gasification infrastructure

Africa's Gas future hinges not just on reserves, but on the infrastructure needed to monetise them.

Despite holding significant Gas potential, much of the continent lacks the midstream and downstream infrastructure to process, transport, and distribute Gas to domestic markets (see Section 2). Pipelines, processing plants, storage, and city or industrial Gas networks remain underdeveloped in most sub-Saharan countries.

As a result, natural gas is often flared, left stranded, or exported in raw form — missing opportunities for domestic value creation.

Gas infrastructure remains overly tied to large-scale power projects which are not always bankable or commercially sustainable. Many current natural gas developments are directly or indirectly anchored to public utilities whose financial health is often weak and whose creditworthiness limits project financing. While power plants offer scale, they can come with long lead times, tariff misalignment, and political risks. This structure narrows the market and delays infrastructure buildout.

• Recommendation: Innovating and reforming the power sector

Power sector reform is essential to unlock the full value of Gas infrastructure. Weak utility balance sheets, misaligned tariffs, and outdated regulatory frameworks undermine gas-to-power project viability. Reforming electricity markets — through cost-reflective pricing, creditworthy Power Purchase Agreements (PPA)s, and flexible procurement models — is critical to ensure that power projects can support, rather than constrain, Gas infrastructure development.

Gas-to-power must be integrated into more flexible, distributed energy strategies. Rather than relying solely on centralised, grid-connected plants with utility off-takers, countries can increasingly embrace embedded natural gas generation — where power is produced and consumed within a defined localised system, often by commercial and industrial users. This model enhances energy security, reduces transmission losses, and improves project bankability by enabling developers to contract directly with end-users.

Nigeria is demonstrating the benefits of new decentralised gas-to-power business models. Nigeria's 2023 Electricity Act marked a major turning point by decentralising electricity regulation and allowing states to develop, license, and regulate electricity markets within their borders. Since then, several embedded natural gas ventures have emerged that bypass national bottlenecks and demonstrate new pathways for Gas monetisation.

In Aba, northeast of Port Harcourt, Geometric Power has developed Nigeria's first fully integrated and independent power

utility — combining a 141 MW gas-fired power plant, a 27 km dedicated natural gas pipeline, and a ring-fenced electricity distribution network that enables direct power sales to local consumers[88].

Meanwhile in Lagos, energy infrastructure company Elektron Energy is partnering with the local distribution company (EKEDP) to invest $50m into a 30 MW embedded natural gas power plant within a high-income residential area. The project was backed up by a blended finance guarantee from InfraCredit and could replace up to 1,000 diesel generators, significantly reducing emissions and improving air quality[89].

Distributed and modular natural gas solutions must complement — not replace — structural reform of national utilities. Africa's long-term energy transformation will not be possible without addressing the structural weaknesses of national utilities. Across the continent, many power utilities remain financially unsustainable due to chronic under-pricing, high technical and commercial losses, and low collection rates. According to a 2021 World Bank study[90], only one in three utilities in sub-Saharan Africa recovers both operating and debt service costs, and fewer than half operate profitably. When excluding subsidies, the share of financially viable utilities drops to just one in four. The result is a utility sector that continues to undermine investor confidence and delay project development,

Picture: NNPC Ltd

especially for large-scale gas-to-power projects that depend on long-term offtake agreements.

Encouraging examples from East Africa demonstrate that reform is both possible and impactful. Utilities in Uganda and Rwanda have adopted performance-based oversight and management information systems to improve accountability and service delivery. In Uganda, the 20-year concession of Umeme enabled over $33 million in investment, expanded customer connections to 2 million, and maintained revenue collection rates above 99%[91] — before the government bought back the utility in 2025. Other standout performers in Namibia or the Seychelles indicate that replicating these successes will require bold reforms focused on cost-reflective tariffs, improved governance, prepaid metering, and targeted loss reduction strategies. Without these changes, Africa's utility sector will remain a bottleneck — limiting the bankability of grid-connected natural gas infrastructure and constraining the continent's ability to deliver reliable, inclusive, and sustainable energy at scale.

88 https://geometricpower.com/projects/aba-phase-i/

89 https://www.templars-law.com/news/templars-advises-elektron-energy-on-uss50million-30mw-embedded-gas-fired-power-plant-in-lagos-a-first-of-its-kind-power-project-in-nigeria/

90 https://documents1.worldbank.org/curated/en/806071628829645284/pdf/Executive-Summary.pdf

91 *Umeme Annual Report 2024.*

• Recommendation: Diversifying off-takers beyond the power sector

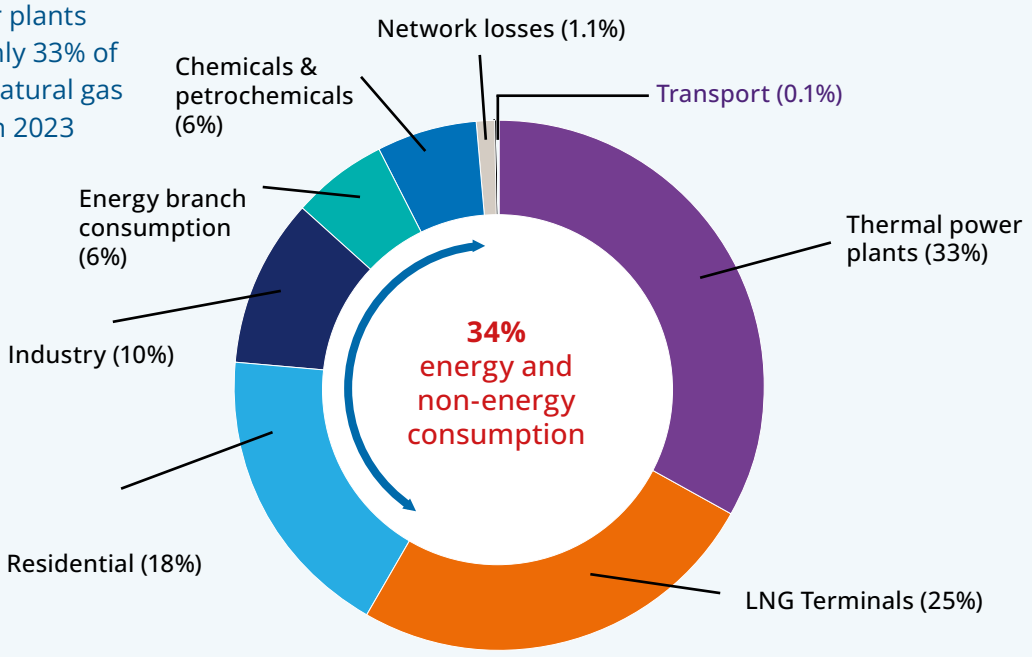
Africa must diversify its anchor off-takers beyond the power sector to unlock the full economic potential of Gas. Unlike every other major region in the world — where Gas demand is driven primarily by industrial and commercial sectors — Africa remains an outlier, with the majority of its natural gas consumption concentrated in power generation (see Section 1).

Industrial and commercial off-takers provide predictable, year-round demand, and are often more creditworthy than state utilities, and require relatively simpler infrastructure compared to grid-connected power plants. As Africa accelerates its industrialisation agenda, Gas can serve as a cornerstone input for energy-intensive sectors such as petrochemicals, fertilisers, methanol, cement, or steel. These industries offer more than energy security — they have strong multiplier effects that create jobs, enable domestic value addition, and expand intra-regional trade.

For this opportunity to materialise, Gas must be priced and delivered in ways that reflect the strategic importance of industrial uptake. Nigeria offers a replicable model in this regard: under its domestic natural gas pricing framework, it applies differentiated tariffs across three categories — power, commercial users, and strategic Gas-based industries. The latter benefits from the most competitive pricing, acknowledging its critical role in

Figure 25: Algeria demonstrates a successful use of natural gas across the economy

Thermal power plants represented only 33% of Algeria's final natural gas consumption in 2023



Source: Bilan Énergétique National 2023, Ministry of Energy of Algeria

supporting exports, industrialisation, and food security through fertiliser production.

Such policies create a pathway to anchor Gas infrastructure on industries rather than utilities, making projects more bankable, diversified, and resilient to power sector volatility. Importantly, a flexible definition of Gas-based industries should be adopted to accommodate various industrial needs across economies and reflect strategic pricing not just for the use of Gas as feedstock but also for its commercial use in power production for large-scale industries like steel or aluminium.

Encouragingly, momentum is building across the continent. In Nigeria, this shift is evident through recent natural gas supply agreements signed in 2024–25 with Nigeria LNG (exports), Brass Fertilizer & Petrochemical (methanol), and the Jindal Group (steel).

More significantly, frontier markets that are yet to produce Gas are leveraging commercial and industrial demand to unlock stranded reserves and strengthen project bankability.

- In Botswana, the pathway to monetising coal-bed methane clearly lies in the commercial sector, with offtake agreements emerging across industrial (SCAW South Africa - steel), mining (Orapa Diamond Mine), and power sectors — through both LNG and piped gas.
- In Zimbabwe, Invictus Energy's recent natural gas discovery in the Cabora Bassa Basin is already supported by an MoU for a supply deal with Sable Chemical Industries, one of the region's biggest chemical producers.
- In Ethiopia, Dangote Industries is advancing plans to utilise natural gas from the Hilala and Calub fields for fertiliser production, with a strong import-substitution potential.

These ventures demonstrate that smaller-scale, commercially anchored natural gas projects — designed for direct industrial use — are not only technically feasible, but increasingly preferable across African markets.

For Africa to build a robust domestic Gas economy, it must adopt this model at scale. That means placing industrial demand at the centre of Gas infrastructure planning, aligning pricing frameworks to support natural gas-based industries, and designing infrastructure that is decentralised, modular, and flexible. By doing so, countries can move away from narrow utility-based models and towards a diversified energy economy that supports both resilience and structural transformation.

• Recommendation: Maximising regional cooperation to unlock economies of scale

While several African countries are pursuing national Gas strategies, the true potential of Gas will only be realised through deeper cross-border integration. The African Continental Free Trade Area (AfCFTA) offers a historic opportunity to align energy development with broader trade and industrial ambitions. Regional natural gas networks — whether through pipelines, shared regasification terminals, or harmonised pricing and regulation — can facilitate demand aggregation, risk-sharing, and greater infrastructure efficiency.

Africa has already demonstrated the benefits of this approach: ventures like the ROMPCO pipeline between Mozambique and South Africa, or the West African Gas Pipeline (WAGP) linking Nigeria to Benin, Togo, and Ghana, prove that regional cooperation is both technically and commercially viable. Moving forward, scaling up these models across sub-regions — such as Eastern or Southern Africa — will be critical (see Section 2.2.). But realising this vision requires political will, regulatory harmonisation, and the creation of clear transit and tariff frameworks that incentivise cross-border trade. If those conditions are in place, regionalisation can anchor larger investments, improve utilisation rates, and position Gas as a backbone of Africa's economic integration and industrial growth.

• Recommendation: Promoting a focus on flexibility, modularity and connectivity

In many parts of Sub-Saharan Africa, the absence of large, creditworthy off-takers has made it difficult to anchor conventional natural gas infrastructure. This constraint has naturally accelerated the rise of small-scale natural gas ventures — including mini-LNG, CNG distribution, and virtual pipeline systems — that offer lower capital intensity, faster deployment, and tailored solutions for industrial and commercial users. While these projects may not immediately transform the continent's natural gas balance, they serve a critical role in de-risking domestic markets, demonstrating viable business models, and establishing the early infrastructure foundations upon which larger systems can eventually scale (Genser Energy in Ghana, Greenville LNG in Nigeria, Renergen in South Africa).

Small-scale Gas infrastructure is particularly well-suited to tap into localised demand from sectors like agro-processing, cement, steel, light manufacturing, and even transport. These users benefit from cleaner, cheaper alternatives to diesel and HFO, while developers gain more flexible and diversified revenue streams. In Nigeria, for example, regulatory support has started to emerge with authorities setting lower natural gas prices for small-scale and

Picture: Seplat Energy

gas-to-industry ventures — as seen in the April 2024 decision by the Nigerian Midstream and Downstream Petroleum Regulatory Authority (NMDPRA) to peg compressed natural gas (CNG) prices at $1.57/MMBtu, below market rates[92].

To fully harness the potential of small-scale Gas, governments should recognise its strategic contribution to long-term Gas development. This could involve granting targeted fiscal incentives, reducing permitting hurdles, enabling blended financing solutions, and offering preferential access to infrastructure corridors. These projects are especially well-positioned to mobilise domestic capital, such as pension funds and sovereign vehicles, and to complement industrial demand in areas not yet reached by national transmission pipelines. By supporting small-scale Gas systems as part of a broader modular approach, African countries can catalyse demand where it exists today — and build the foundation for wider energy access and Gas adoption tomorrow.

Adopting pragmatic policy frameworks

Africa's ability to unlock the full value of its Gas resources — both for domestic use and global export — will depend on the strength and clarity of its policy environment. As the continent seeks to expand its share of the global natural gas market, it faces increasing competition from well-established producers with faster project cycles, lower costs, and more mature investment ecosystems. Attracting and retaining capital will require more than geological potential — it demands a secure, flexible, and forward-looking policy and pricing framework that enables project delivery, aligns with industrial and climate goals, and builds investor confidence. This includes executing a long-term vision for a lower-carbon, Gas-enabled energy system; creating the right commercial and regulatory instruments; and ensuring that domestic energy access and development aspirations remain at the heart of national Gas strategies.

92 https://www.thisdaylive.com/2024/04/24/presidential-cttee-secures-concessionary-pricing-for-mobility-cng-from-nmdpra/

• Recommendation: Updating Gas master plans to reflect industrial, regional, and decarbonisation priorities

Many of Africa's current Gas master plans (GMPs) were designed around export-oriented models or anchored on large-scale power development. But the energy landscape is shifting, and so are industrial priorities. New GMPs must align with broader economic priorities — particularly industrialisation, regional integration, and low-carbon development. This means planning for diversified offtake, integrated infrastructure networks, and the progressive use of low-carbon gases like biomethane or hydrogen. Encouragingly, some countries are taking steps in this direction. Angola's new draft GMP, released in 2024, places strong emphasis on domestic natural gas monetisation for industry, including LNG bunkering and fertiliser production.

In South Africa, the draft GMP under review outlines the use of imported LNG to support power, transport, and industrial demand while phasing out coal. These forward-looking approaches should become the norm across the continent, helping to create bankable markets that reflect real demand and strategic national goals.

• Recommendation: Adopting robust Gas codes and regulatory instruments that bring clarity and confidence

Beyond strategic planning, project execution depends on clear operational and commercial frameworks — from pricing to infrastructure access. Modern Gas codes should include provisions for cost-reflective and segmented pricing, such as Nigeria's differentiated tariffs for power, commercial, and strategic industrial users. They should also set out aggregation clauses to pool demand across sectors or users, facilitate third-party access to pipelines and terminals, and introduce transparent licensing and tariff structures. These tools create the commercial backbone needed to support Gas project development — especially in markets where Gas is being introduced as a new fuel. A harmonised regulatory approach also enables cross-border trade, essential for regional Gas infrastructure to function efficiently and fairly.

Recent steps by countries like Angola and Nigeria show how targeted regulatory and fiscal reforms can improve investment attractiveness. In 2018, a new decree updated Angola's Gas regime by introducing reduced royalties and improved contract terms to stimulate non-associated natural gas (NAG) development. Since then, the country has seen a final investment decision for its NAG project[93] and recently

93 https://www.eni.com/en-IT/media/press-release/2022/07/eni-announces-completion-negotiations-start-up-new-gas-consortium-angola.html

announced a successful NAG exploration well in 2025[94].

In Nigeria, a series of Executive Orders issued in March 2024 introduced a new suite of tax incentives and regulatory reliefs to catalyse investment in upstream and midstream Gas[95]. These include full VAT exemption for Gas-related goods and services, zero import duty on capital equipment, accelerated capital allowances, and tax credits for midstream infrastructure such as Gas processing, pipelines, and LPG plants.

Picture: ND Western

• Recommendation: Streamlining permitting and fast-track projecting approvals to accelerate delivery

Even with reserves, buyers, and funding in place, many Gas projects in Africa are stalled by **slow approval processes**. Fast-tracking key infrastructure — particularly pipelines, processing plants, and LNG import/export terminals — requires not only **institutional coordination**, but also flexible and enabling legal environments.

Governments should establish clear permitting timelines and risk mitigation tools to avoid bureaucratic delays. Small-scale and modular projects, in particular, would benefit from simplified approval processes and dedicated licensing regimes that recognise their strategic importance. Ultimately, the speed at which projects reach financial close and construction will determine whether African Gas can remain competitive in a fast-changing global energy landscape.

94 https://www.azule-energy.com/wp-content/uploads/2025/07/PR_Gajajeira-01-exploration-well_discovery-v3.pdf

95 https://www.nuprc.gov.ng/executive-order/

Roadmap

Key Principles to Supercharge the Development of Africa's Gas Markets

Gas has multiple roles to play in the sustainable development of Africa. The first is to address energy poverty, energising industrialisation and development, and the second is to pave the way towards a low-carbon future. We highlight here our eight key principles – updated from the 2023 Gas for Africa Report – that can help develop and maximise the benefits of Gas resources for African economies. Because of their deep interconnectedness, an ideal approach would focus on addressing each of these principles within a common strategy.

Importantly, we note several positive developments since the last report. These include, among other things, new Gas master plans and policy incentives adopted for the sector in Nigeria, Angola and South Africa (see Section 3: Page 93); a growing pipeline of regionalisation and cross-border natural gas projects across the continent (see Section 1: Page 35); and a growing number of cluster and Gas-to-industry developments within both producing and frontier markets (see Section 3: Page 88).

1. FUTUREPROOFING BY DESIGN

Gas projects must be designed for both environmental and commercial resilience. This means building infrastructure that is low-carbon, modular, and adaptable — able to reduce emissions, integrate clean molecules like hydrogen or biomethane, and meet investor expectations. Futureproofing also requires anticipating market shifts, with facilities designed to be repurposed for domestic or regional use to avoid asset stranding. Projects that combine climate readiness with flexible market integration will be better positioned to attract capital and deliver long-term development impact.

2. FINANCIAL INNOVATION

Unlocking Africa's Gas potential requires a shift in how projects are financed and who finances them. With global capital increasingly competitive, countries must mobilise domestic resources — especially pension funds, sovereign wealth, and insurance pools - that remain largely underused. This demands better credit risk assessment, de-risking tools, and regulatory frameworks to channel local money into infrastructure and energy projects. Domestic banks also need support to take a bigger role. Building their technical capacity — particularly to assess Gas on its own merits rather than as an offshoot of oil — will be critical. Strengthening local financial institutions and pipelines of bankable projects is key to scaling smaller Gas ventures and embedding resilience across the ecosystem.

3. ENABLING GOOD BUSINESS CLIMATE

A safe and stable investment climate will be pivotal to growth and to ensuring that the continent is globally competitive. Sound sector governance and friendly investment jurisdictions can be promoted for Africa to sustainably develop its Gas resources when the opportunity is ripe. On the governance side, regulatory frameworks should seek to address the challenges of the Gas value chain (currency, convertibility, construction, institutional, political, and demand risks) and optimise fiscal regimes accordingly to make projects more bankable.

National oil companies (NOCs) also have a vital role to play as reliable local partners — helping to de-risk projects, navigate regulatory landscapes, and anchor investor confidence through their operational experience and long-term commitment to domestic energy development.

4. REGIONALISATION

Along with the roll-out of the African Continental Free Trade Area (AfCFTA), the development of sub-regional and regional Gas and energy networks can help support better economies of scale and justify investments in infrastructure that work for the whole continent. In doing so, regionalisation can help address energy imbalances on the continent while creating bigger demand centres to anchor lower-carbon energy infrastructure projects. To succeed, this vision requires harmonised Gas pricing frameworks, tariff structures, and infrastructure standards — ensuring that Gas can move efficiently across borders.

Picture: Eni

5. CLUSTER AND ECOSYSTEM INVESTING

Industrialisation plans can favour the creation of manufacturing clusters that bring supply-chains closer to energy sources and raw materials. Industrial clusters developed close to natural gas fields can easily rely on a power plant serving an enclave of industries while offering an opportunity to process additional natural gas into LPG or LNG to convert, store and thereafter transport Gas for domestic and commercial usage.

6. GRADUAL SCALING

The lack of receiving, processing, and distribution infrastructure is hampering the commercialisation and adoption of Gas across Africa.

Small-scale projects rely on modular and flexible supply options and have proven a winning strategy to pre-develop Gas markets, unlock suppressed demand, and eventually justify larger infrastructure investments. Small-scale Gas generation technologies can be further promoted as they come with more operational flexibility and can address a wide range of needs, capabilities, and demand sizes.

7. REFORM ELECTRICITY MARKETS

To increase electricity production and address energy poverty, reforms are needed to restructure electricity markets and increase sector liquidity, while improving operational efficiencies.

Only well-functioning electricity markets can pave the way for the kind of investments Africa needs to bridge its energy deficit and develop resilient power systems. While each market's size and dynamics are different, key reforms include the removal of subsidies to ensure cost-reflective electricity tariffs, the unbundling of state utilities to make the value chain more efficient and encouraging privatisation models such as embedded generation to attract private capital.

8. PRICE ON EMISSIONS

Carbon pricing mechanisms can unlock new financing for low-emission Gas infrastructure and accelerate decarbonisation across the value chain. As carbon-linked business models grow — particularly in clean cooking and flare reduction — Africa must build the frameworks needed to access this capital.

A functioning carbon market can make switching to Gas more economically attractive, while also supporting investment in CCUS, methane mitigation, and associated natural gas monetisation. Strengthening verification systems, improving project pipelines, and enabling access for smaller developers will be key to realising this opportunity.

Appendix

Picture: Seplat Energy

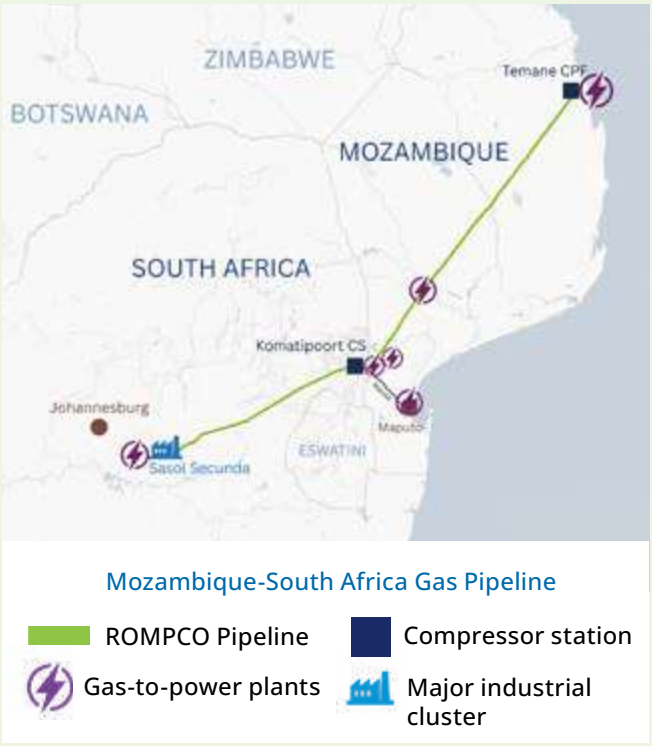
CASE STUDY:
ROMPCO's contribution to cross-border natural gas trade and regional industrial growth

The Republic of Mozambique Pipeline Investments Company (ROMPCO) was established to address a specific challenge: monetising Mozambique's stranded onshore natural gas reserves and delivering them to a viable market. Over two decades later, the 865 km Mozambique–Secunda Pipeline (MSP), which ROMPCO owns and operates, has become a cornerstone of Southern Africa's natural gas infrastructure, supporting industrial activity, power generation, and decarbonisation in both South Africa and Mozambique.

When ROMPCO was established in 2000, the development of Mozambique's Pande and Temane natural gas fields was considered economically unviable, primarily because of their significant distance from major demand centres. To unlock their value, the governments of Mozambique and South Africa partnered with Sasol to develop the cross-border natural gas pipeline which was commissioned in 2004, connecting the Mozambican onshore natural gas fields to Sasol's petrochemical facilities in Secunda and Sasolburg in South Africa.

Map 5: ROMPCO is a key enabler of natural gas trade in Southern Africa

The Mozambique-South Africa natural gas pipeline offers a regional backbone to anchor future Gas penetration across the South African Development Community (SADC) region.



Source: Gas for Africa Maps

Continuous Infrastructure Investment to Meet Growing Demand

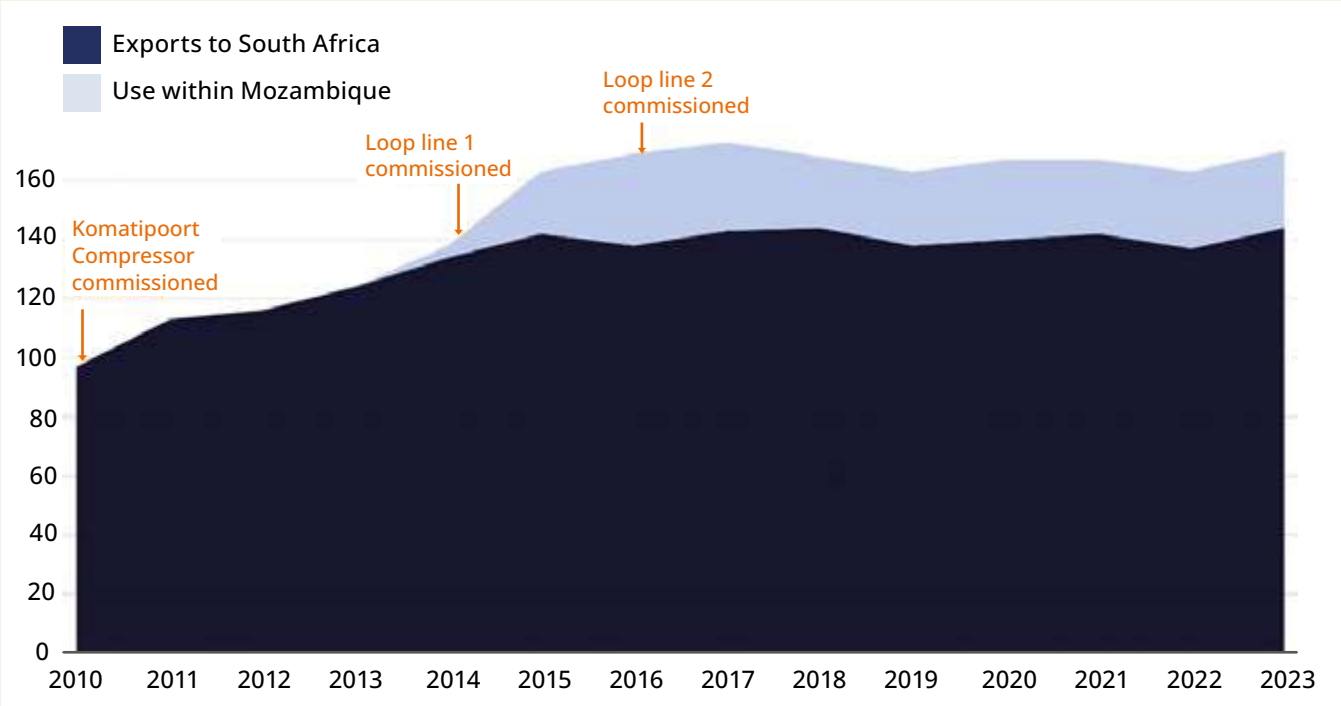
At launch, ROMPCO transported around 126 petajoules (PJ) per year into South Africa, matching the market demand at the time. But the potential for natural gas to displace other fuels in industry was clear. Sasol, as the producer, and a major offtaker, led efforts to grow the market, actively engaging other industrial players to switch from coal and heavy fuel oil to natural gas. That campaign helped develop the South African natural gas market and catalysed industrial natural gas uptake across the country. Today, more than 500 industrial and power customers use natural gas to power their operations — displacing heavier fuels and contributing to lower-carbon energy use across South Africa.

Today, South African industrial Gas users support over 70,000 jobs[96].

[96] https://www.engineeringnews.co.za/article/slg-positioning-company-to-aggregate-south-africas-lng-market-2024-04-15

Figure 26: South Africa imports large volumes of Pande Temane natural gas via the ROMPCO Pipeline

ROMPCO's shipped volumes, in Bscf



Source: ROMPCO

Over time, ROMPCO expanded the pipeline to cater for the Mozambican power and industrial market (see Figure 26), while meeting continued natural gas demand in South Africa. System upgrades were made to unlock additional capacity, including the development of a Compressor Station and Loop Lines, which expanded the capacity of the pipeline to its current 212 PJ/a. With future looping and compression upgrades, and pending natural gas supply, the pipeline's capacity could rise to nearly 400 PJ/a.

Economic and Regional Impact

ROMPCO's contribution to regional economies has been transformative. For Mozambique, the pipeline has generated substantial government revenues through royalties, taxes, and dividends paid.

For South Africa, ROMPCO has delivered a reliable, cleaner-burning fuel to industries and utilities, displacing more carbon-intensive energy sources and enabling cost-competitive production across petrochemicals, manufacturing, and power generation. Sasol's industrial complexes in Secunda and Sasolburg, among other industrial users, have benefited immensely from this secure supply of natural gas.

However, that economic and regional value is built on a finite foundation. Natural gas production from the Pande and Temane fields has plateaued and is projected to decline from 2026 as both fields become increasingly mature. Despite achieving First Gas on its new Production Sharing Agreement (PSA) in May 2024, Sasol will stop supplying natural gas to third-party industrial customers by the end of June 2027, citing depleting reserves[97].

[97] https://www.dailymaverick.co.za/article/2025-04-15-sasol-unveils-bridging-plan-to-avert-sas-looming-gas-cliff/

ROMPCO Will Remain Relevant in the Region Amid Shifting Gas Dynamics

As Southern Africa's natural gas landscape evolves, the ROMPCO pipeline continues to play a vital role in the region's energy system. While supply constraints from the Pande and Temane fields are tightening, the pipeline still provides critical cross-border transport capacity, ensuring stable natural gas delivery into South Africa. Even as Sasol plans to phase out third-party industrial natural gas sales by mid-2027, production from these fields will continue to support its own operational needs for several more years, maintaining ROMPCO's commercial relevance in the near term.

Beyond this existing supply function, ROMPCO's long-term value lies in its ability to adapt to emerging regional natural gas dynamics. New supply and demand centres are forming across Southern Africa, including planned LNG import terminals in Maputo and Richards Bay, which could enable reverse flows or alternative supply routes through the existing pipeline infrastructure. As part of an increasingly interconnected southern African natural gas network, ROMPCO is well-positioned to become a regional backbone for natural gas trading, import substitution, and cross-border industrial integration.

Picture: iStock

CASE STUDY:
Seplat Energy's infrastructure-led flare elimination strategy

Nigeria remains one of the top 10 gas-flaring countries globally, both in terms of volume and intensity, according to the World Bank's Global Gas Flaring Reduction Partnership (GGFR). Despite successive policy efforts to tackle routine flaring, dating back to the 1980s, the practice remains widespread, especially across mature and marginal fields that lack the infrastructure to gather, process, or monetise associated natural gas.

In recent years, Nigeria has taken a stronger policy stance, setting a target to end routine flaring by 2030 in line with the World Bank's Zero Routine Flaring Initiative and its recent alignment with the Global Methane Pledge.

This commitment is backed by new regulatory frameworks, including the 2018 *Flare Gas (Prevention of Waste and Pollution) Regulations*, the 2023 *Gas Flaring, Venting, and Methane Emissions Regulations*, and the *Nigerian Gas Flare Commercialisation Programme* which aim to incentivise gas capture and utilisation, improve emissions transparency, and introduce penalties for wasteful practices. However, achieving these targets will require not only policy ambition but decisive implementation from the private sector. In this context, Seplat Energy stands out as one of Nigeria's few upstream operators making early and sustained investments in flare capture infrastructure and gas monetisation.

Seplat's Flare-Out Commitment: A 2025 Target

In Nigeria, Seplat Energy has committed to eliminate routine flaring by the end of 2025 across its onshore assets — five years ahead of the national deadline. This decision reflects not only Seplat's alignment with national priorities but is also a business case built around emissions reduction, infrastructure expansion, and revenue diversification.

Reducing flaring is central to the company's climate strategy and long-term operational efficiency. With carbon pricing mechanisms likely to emerge under Nigeria's Petroleum Industry Act, Seplat's proactive flare-out efforts are also designed to limit future regulatory and financial risks. Capturing and commercialising flared gas creates new revenue streams, enhances asset productivity, and positions the company as a climate-conscious operator in a carbon-sensitive investment landscape.

Picture: Seplat Energy

Capturing Low-Pressure Gas and Creating Value

To end flaring, Seplat's most pressing challenge is the capture and commercialisation of low-pressure associated natural gas. Routine flaring in these environments has historically been considered technically and economically difficult to address, especially in brownfield assets.

To overcome this, Seplat has taken a two-tiered infrastructure approach, the first one being building compression capacity at field level. The company has deployed screw compressors across several of its flow stations, including Sapele, Amukpe, and Oben, to recover low-pressure natural gas that would otherwise be flared. These compressors make it possible to collect and redirect natural gas into midstream infrastructure for further processing.

Second, it has expanded and upgraded its natural gas processing infrastructure, and once captured, the natural gas is processed through upgraded natural gas processing plants. At the Sapele natural gas plant, Seplat has installed Mechanical Refrigeration Units (MRUs) along with LPG processing facilities that allow for extraction of LPG from the associated natural gas stream — creating a new, marketable product that aligns with domestic clean cooking goals and reduces import dependence.

This combination of field-level capture and midstream monetisation is already yielding results. Mechanical completion has already been achieved for several key projects, including compression facilities at most fields and flow stations, along with the upgrades and expansion of the Sapele and Oben natural gas processing plants. Once fully operational in 2025, the 90 MMscf/d Sapele Gas Plant alone is expected to account for more than 30% of Seplat's overall onshore flare reduction.

These projects are supported by a broader operational programme to improve asset integrity, compressor efficiency, and maintenance, ensuring emissions reductions are sustained over the long term.

Lessons from Seplat: How Infrastructure Enables Impact

Seplat's onshore flare-out strategy shows that private-sector leadership, when paired with investment in enabling infrastructure, can deliver real and measurable emissions reduction. The company's approach is holistic — combining technical retrofits, new build processing capacity, and commercially viable offtake models to transform flared gas into economic value.

Crucially, the repurposing and expansion of midstream assets — including via modular natural gas plants, LPG units, and MRUs — illustrates how flare reduction can support Nigeria's wider natural gas strategy. Captured gas is no longer redirected solely for power generation, but also converted into LPG and potentially CNG, thereby diversifying offtake opportunities.

If project timelines are met, Seplat is on track to become one of Nigeria's first upstream operators to achieve zero routine flaring from its onshore business, well ahead of policy deadlines. In doing so, it is setting a new benchmark for operational discipline, climate alignment, and infrastructure-led transformation in Nigeria's onshore oil and gas sector.

CASE STUDY:
CNG in Transportation – Lessons from Nigeria and Tanzania

Across Africa, the promise of Compressed Natural Gas (CNG) in transportation is no longer an abstract ambition, it is moving from concept to reality. In Nigeria, early private sector investment has built a growing network of conversion centres and refuelling stations, while Tanzania's recent regulatory approvals and infrastructure additions have triggered an uptick in gas-powered mobility. Although CNG remains a small share of the transport fuel mix in both countries, adoption is gathering momentum in a shift driven by cost competitiveness and emissions reduction goals.

Nigeria and Tanzania offer contrasting but complementary stories. Nigeria represents an early mover, where private operators have built the foundations of a national CNG network. Tanzania is the newcomer, where small but strategic interventions are triggering rapid uptake. Together, they reveal what is possible, and what remains uncertain in the race to mainstream CNG mobility in Africa.

Nigeria – A decade of private sector-driven expansion

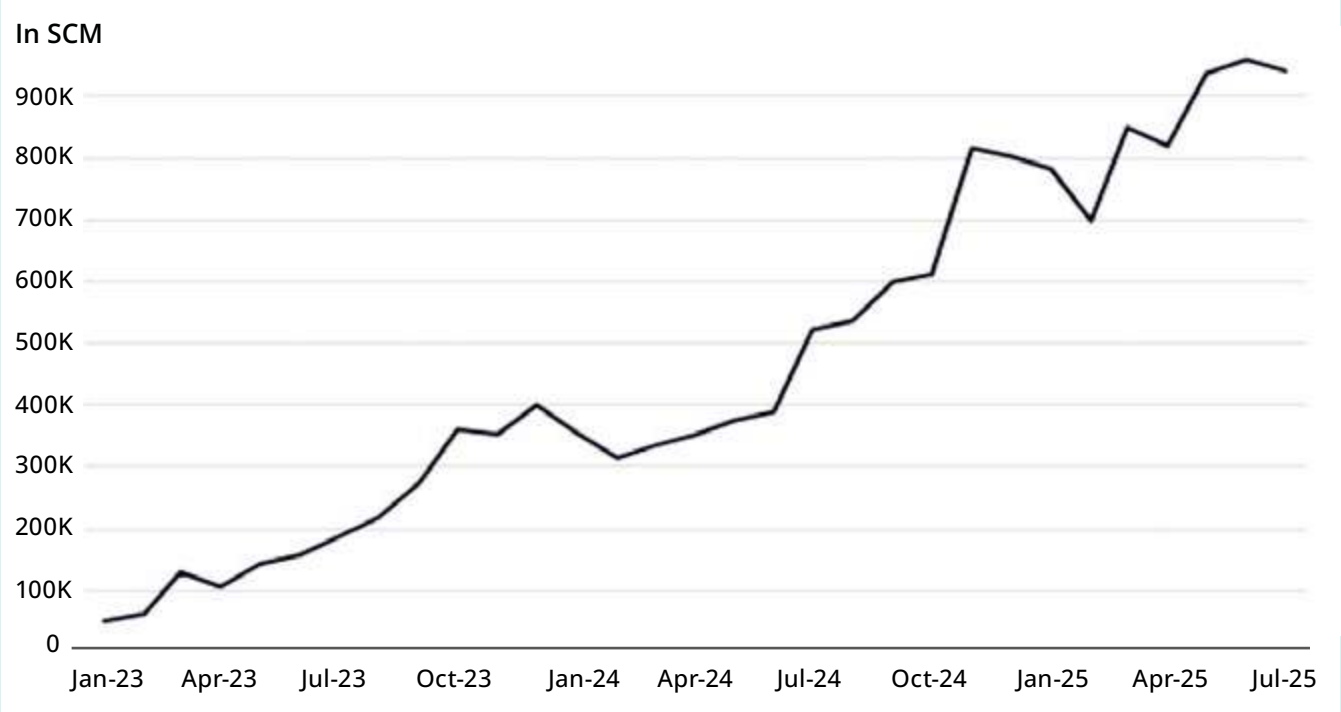
Nigeria's CNG journey began well before it became a central policy priority. As early as 2009, private companies like NIPCO Gas and Powergas invested in compression plants, refuelling infrastructure, and virtual pipeline systems to supply both industry and the transport sector.

Today, NIPCO Gas operates across more than 22 states in Nigeria, with CNG compression plants in Edo, Ogun, Kogi, and Akwa Ibom, and AutoCNG stations feeding thousands of vehicles daily. Under the Presidential CNG Initiative (PCNGI), NIPCO is rolling out 35 new stations nationwide[98], backed by partnerships

Picture: Powergas

98 https://nipcogas.com/nnpc-nipco-partner-to-deliver-cng-as-alternative-fuel-nationwide/

Figure 27: Powergas' CNG injection into Nigeria's natural gas vehicles (NGV) sector has soared by 556% in just two years following the removal of gasoline subsidies in May 2023.



Source: Powergas

with state-owned NNPC Gas Marketing Ltd (NGML) and supported by vertical integration that includes conversion workshops and fabrication facilities.

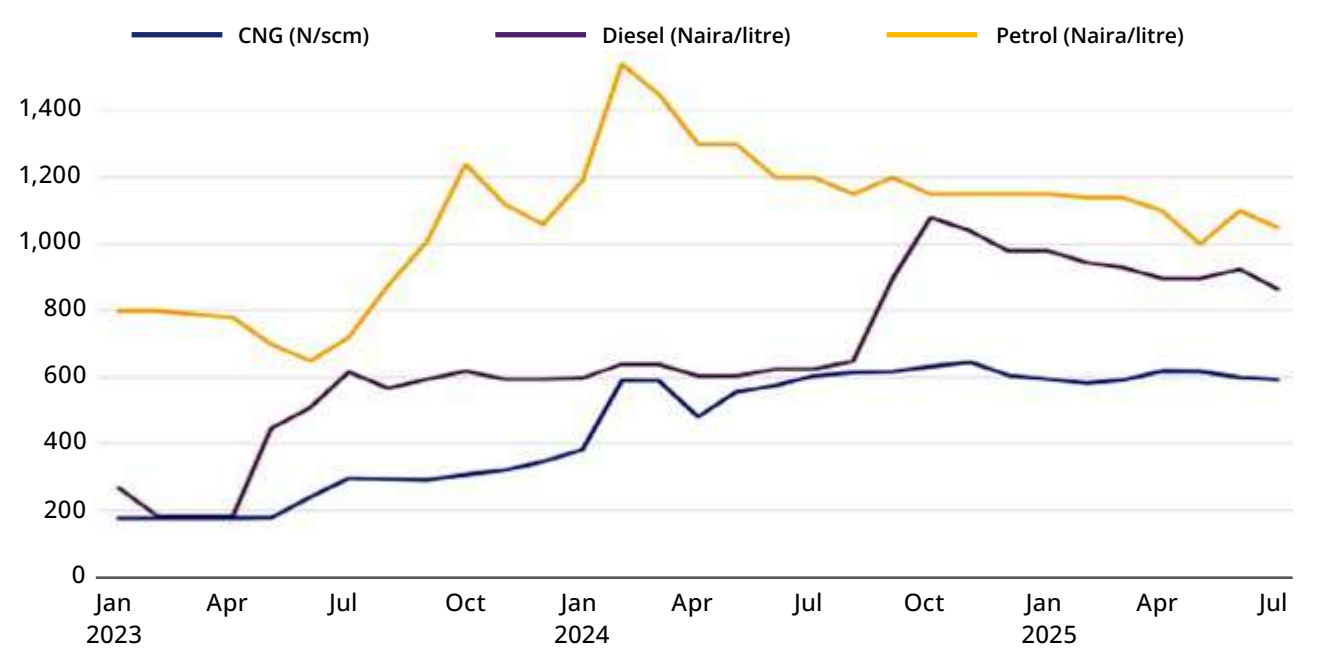
Powergas, another major operator, has supplied consistent natural gas volumes to the transport sector, with data showing a clear surge in demand after the removal of petrol subsidies in 2023 (see Figure 27). Comparative price analyses continue to demonstrate a wide cost gap between CNG and petrol/diesel, making the economic logic for switching compelling even before factoring in decarbonisation benefits (see Figure 28).

Switching from diesel to CNG offers a substantial cost advantage, especially for fleet operators in a volatile fuel-price market like Nigeria. Between January 2023 and July 2025 the average CNG price was about ₦456 per scm. Using the energy equivalence of 1 scm equals 0.93 litres of diesel, this equates to roughly ₦490 per litre of diesel-equivalent.

Picture: NNPC Ltd

Figure 28: CNG in transport offers significant cost advantages compared to oil products

Price comparison petrol, diesel, and CNG in Nigeria, in Naira



Source: Powergas

Over the same period diesel averaged ₦1,071 per litre, implying an average saving of about ₦581 per litre, being roughly 54% lower fuel cost for CNG on an energy-equivalent basis (see Figure 28).

For a heavy-duty truck consuming around 200 litres of diesel daily, the savings are striking. At prevailing diesel prices, and according to Powergas Africa estimates, daily fuel costs would exceed ₦214,200, compared to about ₦98,065 for the equivalent energy in CNG. That translates to a daily saving of roughly ₦116,135 per truck, or about ₦3.48 million each month. For large-scale operators in sectors such as cement, logistics, and food distribution, this can amount to material savings in reduced annual fuel expenditure, freeing up capital for other operational priorities.

Picture: Powergas

The Nigerian market's CNG growth is not without friction. High conversion costs for vehicles, the need for inter-city virtual pipelines, and the slow pace of regulatory harmonisation threaten to blunt momentum. Still, the infrastructure and market base are in place; the challenge is accelerating adoption.

Tanzania – Rapid growth from a low base

From a single station to a nascent network, Tanzania's CNG market has expanded over the past four years, turning a once-niche fuel into a growing part of the transportation fuel mix. In Financial Year (FY) 2020/2021, there was only a single operational CNG station, but by June 2024, there were five[99].

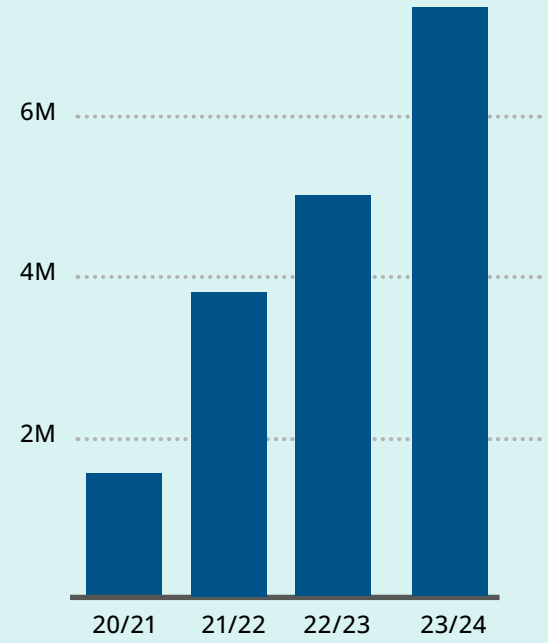
This growth has been catalysed by the issuance of CNG operation licences to Anric Gas Technology Tanzania, Taqa Dalbit, and Dangote Cement, expanding both public and industrial CNG access[100].

According to the Energy and Water Utilities Regulatory Authority (EWURA), CNG production rose from 1,511 MT in FY 2020/21 to 7,268 MT in FY 2023/24[101], most of which is consumed in transportation (see Figure 29). That year also saw 7,000 new vehicles and three-wheelers converted to CNG and the registration of 12 licensed conversion workshops.

However, infrastructure has not kept pace with demand, creating long queues at filling stations. The risk is that early adopters could sour on CNG if refuelling becomes inconvenient — a risk the government is seeking to mitigate by promoting private investment in new stations.

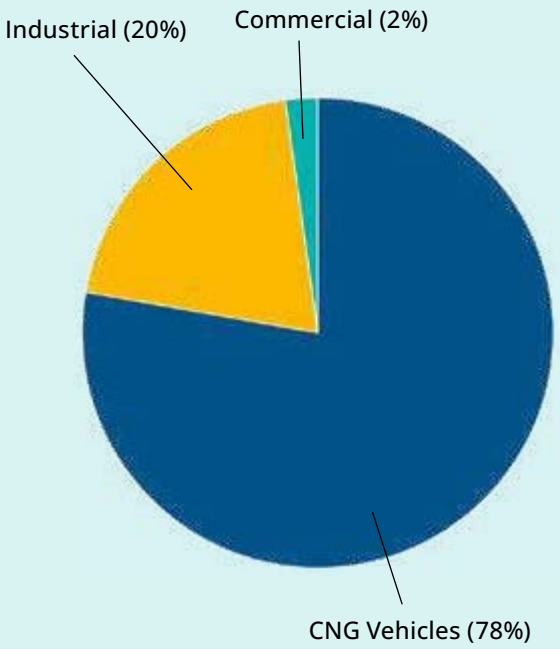
Figure 29: Tanzania's CNG production quadrupled in four years...

CNG production in kg



... as CNG vehicles drive 78% of demand

CNG customer categories in FY 2023/2024



Source: EWURA

99 *Natural Gas Performance Reports, Energy and Water Utilities Regulatory Authority (EWURA) - https://www.ewura.go.tz/pages/natural-gas-performance-reports*

100 *Idem.*

101 *Idem.*

CASE STUDY:
Eni's Holistic Approach to Technology, Decarbonisation and Development

Eni's decarbonisation journey in Africa reflects a pragmatic and inclusive model that balances emissions reduction with energy access and economic development. The company applies an integrated strategy that leverages natural gas as a transition fuel, scales up low-carbon technologies, and implements carbon offset initiatives — all contributing to a new development model for African energy systems. This approach underpins Eni's ambition to reach net-zero emissions by 2050, supported by some of the most stringent absolute and intensity-based reduction targets in the global energy sector.

Compared with other international oil companies (IOCs), Eni places greater emphasis on domestic value creation: approximately 80% of the natural gas it produces in Africa is consumed within the continent. In the Republic of Congo for example, natural gas produced by Eni supports 70% of the country's power generation while its Offshore Cape Three Points (OCTP) project in Ghana currently supplies around 35% of national power demand. In the latter, a major upgrade of the non-associated natural gas (NAG) system was commissioned in 2024 to increase processing capacity from 246 to 270 MMscf/d, supporting growing domestic needs.

Scaling up low-carbon technologies

Eni's strategy first demonstrates how practical and scalable technologies can lower emissions and improve operational performance. At the Baleine Field in Côte d'Ivoire, it has already deployed advanced digital and automated systems to optimise operations and mitigate environmental impact. By combining offshore development with a long-term forest conservation and restoration initiative and clean cooking investments, it is making Baleine the first Net Zero (Scope 1 and 2) upstream development project in Africa.

Picture: Eni

In North Africa, Eni is implementing an even wider portfolio of decarbonisation initiatives in Algeria, Libya, and Egypt. These include the use of solar energy at upstream facilities, the deployment of advanced recovery technologies, and the repurposing of existing infrastructure.

In Libya, its collaboration with the National Oil Corporation (NOC) at the Mellitah Complex will significantly increase natural gas production for both domestic and export markets while integrating decarbonisation technologies. A 120 MMscf/d recovery module is expected to come online in 2026 to deliver natural gas to the Mellitah Complex via the Sabratha platform, reducing emissions by an estimated 1.5 million tonnes of CO_2 equivalent annually.

Picture: Eni

Additionally, Eni expects to commission in 2027 the country's first carbon capture and storage (CCS) facility that will reduce emissions at Mellitah by another 2 million tonnes of CO_2 equivalent.

Advancing carbon offset initiatives

Eni's environmental strategy also includes large-scale nature-based solutions, clean cooking programmes, and the development of carbon credits.

In Côte d'Ivoire, the company has launched a 30-year forest conservation and restoration initiative to plant approximately 12 million native trees, rehabilitate degraded ecosystems, and improve livelihoods for more than 300,000 people. In parallel, its clean cooking programme — initiated in 2022 — has reached over 800,000 people through the distribution of improved cookstoves and certified carbon credits, with a target of 2.5 million people by 2035. These initiatives are subject to rigorous third-party validation and verification to ensure transparency, international compliance, and measurable impact. In Angola, a similar clean cooking programme has been operational since 2024 and already benefits over 500,000 people, with plans to reach 2 million by 2030.

Finally, Eni is rolling out agri-feedstock initiatives to produce vegetable oil for biorefining in a number of countries including Kenya, Congo, Angola and Egypt. Furthermore, a feasibility study conducted in Egypt with the Bioenergy Association for Sustainable Development is exploring the production of biogas from agricultural and animal waste. The circular economy model can generate both power and heat while reducing greenhouse gas emissions, and help integrate low- and zero-carbon gases into the economy.

Eni's integrated approach demonstrates a new model for deploying energy technologies — one that thinks beyond the barrel. By investing not only in upstream natural gas developments but also across the broader energy and economic ecosystem, Eni is helping to build low-carbon supply chains, strengthen domestic energy access, and unlock inclusive socio-economic development. It shows that when hydrocarbons are paired with innovation and long-term vision, Gas investments can serve as a catalyst for broader transformation — not just in energy, but across Africa's emerging low-carbon economy.


IGU
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Hawilti
Gas is essential to human progress and global growth