GLOBAL BUSINESS REPORTS

AFRICA ENERGY 2024

Dear Readers,

It has been nearly 20 years since Global Business Reports started covering Africa's greatest oil and gas stories, and we are proud to revisit the continent's burgeoning energy sector with the release of *Africa Energy 2024*. The result of over 120 interviews and spanning seven countries, the *Africa Energy 2024* report paints a picture of sub-Saharan Africa's most complex and contentious sector.

The first half of 2024 was eventful for Africa's energy sector with the launch of a new African Energy Bank in Brazzaville, Angola's departure from OPEC, and the commissioning of the Dangote refinery in Nigeria, the seventh largest refinery in the world. Amidst the global geopolitical turmoil marked by a series of coups in West Africa, war in Ukraine and mounting political and economic pressure to move away from fossil fuels, Africa's energy leaders are attempting to harness the continent's titanic renewable and non-renewable resources to industrialize and secure energy and prosperity for millions.

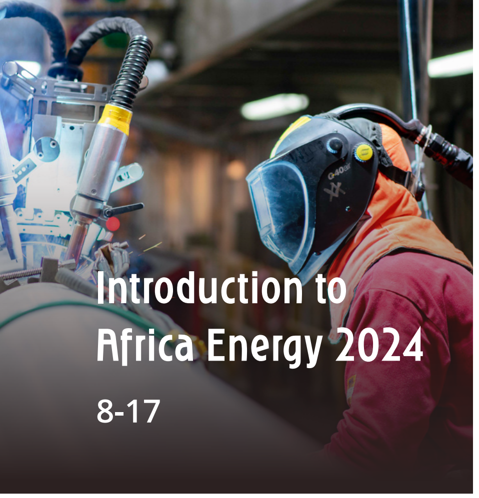
The most ambitious and industrious leaders have rushed to capitalize on the opportunities hidden in adversity. The best have managed to navigate the storm that is the global oil market, which saw a historic rebound in crude prices from its almost worthless levels during the Covid pandemic crash. The war in Ukraine, while straining many supply chains for Africa's industries, also drew Europe away from Russia's gas pipelines towards alternative and often African resources.

Africa is the continent divided into the most countries, and as such, cross-border collaboration is key to strengthening bargaining power on the global stage. Industry organizations such as APPO, ARDA and the AEC have been sounding the rallying cry for pan-African unity. If they are successful, we can expect to see increased cross-border infrastructure, such as the East African Crude Oil Pipeline, and new greenfield developments in the energy space funded by Africans, for Africans.

GBR's team spent five months on the ground, gathering insights from ministers and leading executives from IOCs, NOCs, independents, associations, investors and service providers, to provide a thorough and balanced view of sub-Saharan Africa's ever-evolving energy sector. We provide a voice to the most important players as they share their ongoing projects at home as well as their ambitions in neighboring countries.

We would like to thank all those who contributed to this report and express particular gratitude to our event partners and African industry associations for their support. We hope you enjoy the read.

Alfonso Tejerina
Director and General Manager
Global Business Reports



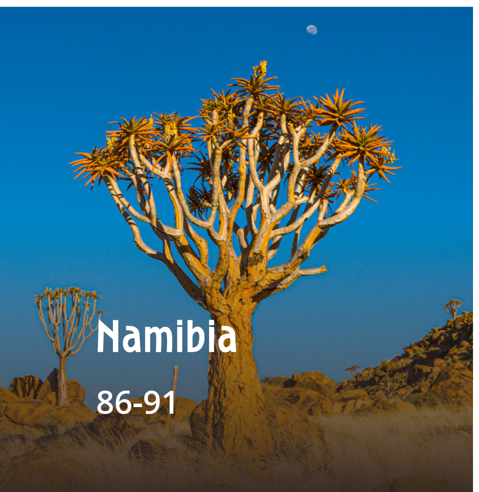


Table of Contents

Introduction

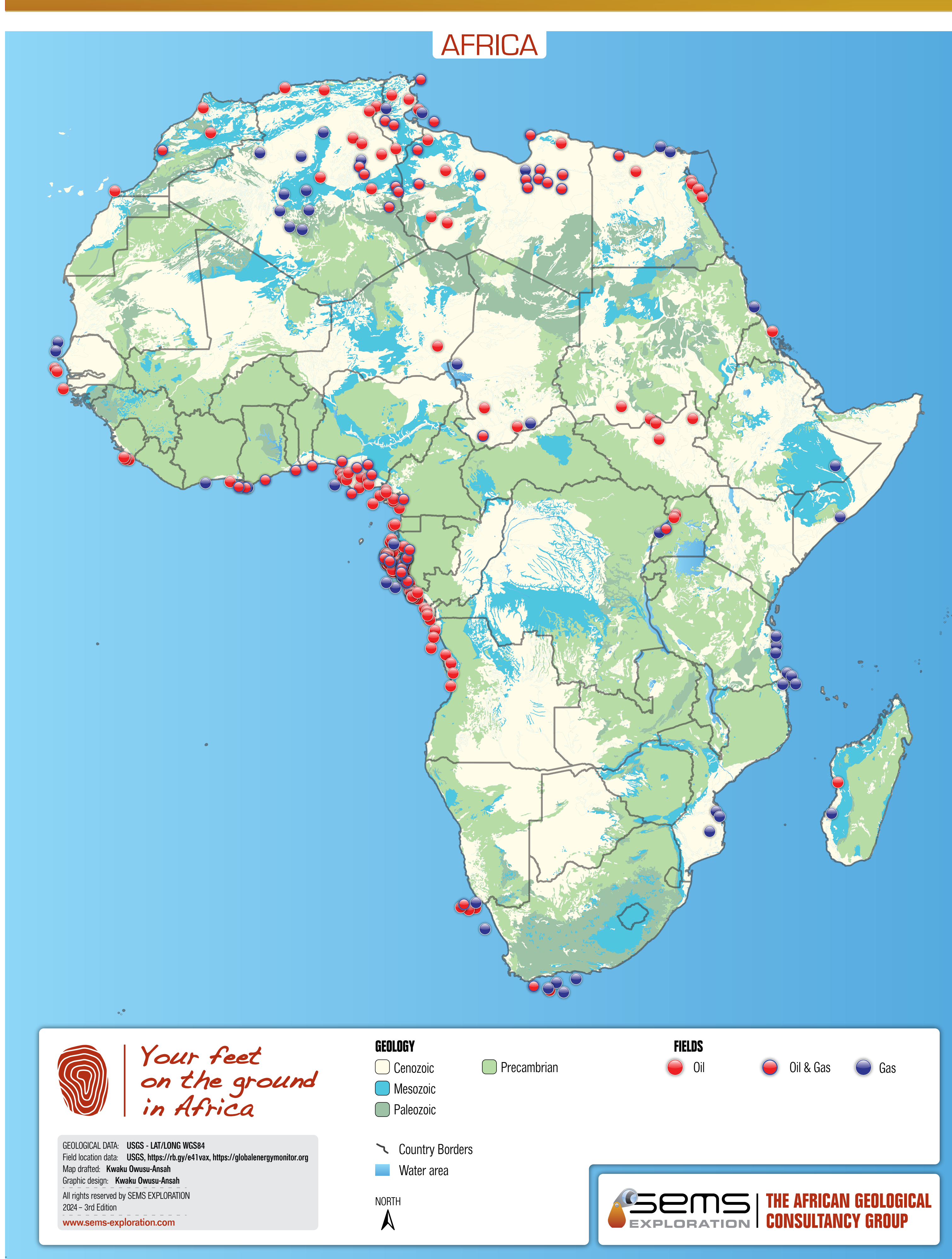
Nigeria

Angola

Namibia

Geographies

Interviews for the report were conducted between February 2024 and July 2024.



Introduction

Natural gas plays a vital role in Africa's energy transition, with increasing prominence in our production mix. Africa's growing energy demands make gas development crucial for regional and global energy security.

Mario Bello
Head of Sub-Saharan Africa Region
ENI

Image courtesy of Westfield Energy Resources

Powering Progress

Addressing energy security across Africa

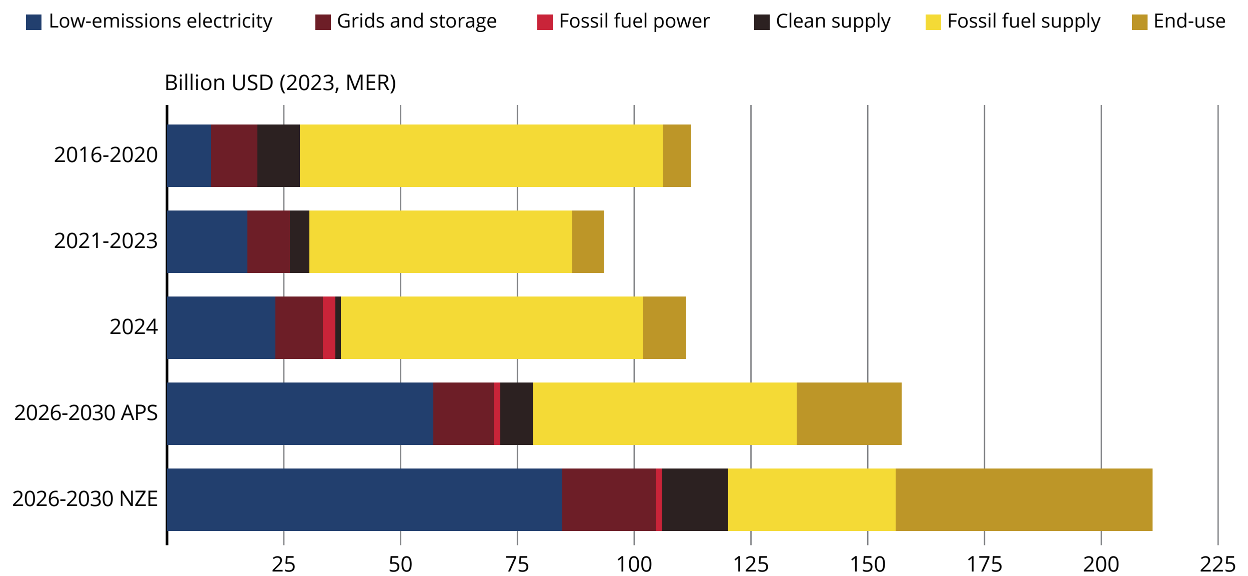
Energy use and development in Africa varies widely across the continent. Some African countries export energy to neighbors or the global market, while others lack even basic infrastructures or systems to acquire energy, while others are simultaneously huge energy exporters but suffer from energy poverty. According to the World Bank, over 900 million Africans lack access to clean cooking fuels and over half a billion people in sub-Saharan Africa are at risk of being left behind without electricity access by 2030. The continent is rich in crude oil, natural gas, sun and wind resources, indicating that there are many possible solutions to this problem, and each of Africa's 54 countries has taken a different approach to tackling the issue.

At the 2024 Sub-Saharan Africa International Petroleum Exhibition and Conference (SAIPEC) in Lagos, Omar Farouk Ibrahim, the secretary general of the African Petroleum Producers' Organisation (APPO) kicked off with an impassioned speech, rallying the ministers, CEOs of national oil companies, executives and oil and gas industry professionals in attendance to pursue hydrocarbon extraction for the economic benefit of Africans everywhere, regardless of the pressure to abandon fossil fuels being applied from the West. The speech was met with a standing ovation – a clear indication that Africa's energy leaders have no intentions of slowing down oil and gas production anytime soon.

APPO and the African Export–Import Bank (Afreximbank) recently inked an agreement to establish an Africa Energy Bank (AEB) in Brazzaville this year to fill the financing gap for oil and gas projects in Africa. Due to increasing global pressure on global financial institutions to cut funding for fossil fuel projects, industry stakeholders will have to look increasingly inward to source funding for oil and gas projects and pan-African collaboration and initiatives such as the AEB will be necessary to mobilize the billions of dollars needed to exploit Africa's untapped natural resources. "A study conducted by APPO established that no one African country has everything it takes to address the challenges identified for the industry by itself. However, when APPO countries pool their resources together, they can surmount all the challenges," said Ibrahim.

Needless to say, Africa's energy leaders are conscious that hydrocarbon resources are finite and contribute to the ever-worsening climate crisis – a crisis that many climate scientists predict will disproportionately impact Africa. "The proposed Bank will support the implementation of an Africa-led energy transition and development strategy. The entity will accelerate Africa's economic development, promote the continent's transition to cleaner energy options in the long-term and align with the core objectives of the African Union Agenda 2063 – the Africa We Want, and the Sustainable Development Goals (UN SDGs)," said Eric Intong, regional COO, Anglophone West Africa, Afreximbank.

Past and future energy investment in Africa in the Announced Pledges Scenario (APS) and in the Net Zero Emissions (NZE) by 2050 Scenario, 2016-2030



Source: International Energy Agency's World Energy Investment 2024 report

Image courtesy of Chevron Nigeria Limited

The strategy here is to leverage hydrocarbon resources to solve energy poverty, industrialize and generate income to be able to eventually domestically produce the equipment and expertise to exploit renewable energy resources, thus avoiding repeating the historical mistakes of being overly reliant on foreign financing – a problem that is currently rearing its head for fossil fuels projects across Africa. "A major challenge for Africa is that most African utilities are technically bankrupt and dependent on overseas funders who have a strong preference for renewable energy technologies," said Martin Mkhabela, director, energy, WSP in Africa.

Although a significant portion of Western financiers are turning away from fossil fuels, primary energy consumption data shows that global oil and gas consumption continues to climb way beyond pre-pandemic highs, despite the rise in the use of renewable energy. In 2023, the Energy Institute reported that fossil fuels made up 81.5% of the world's total consumption of energy that year. With figures as large as these – many financiers will not turn their backs on African fossil fuel projects for some time. "Although some financiers shy away from oil and gas projects, many are returning, recognizing the continued importance of these resources. The world still relies heavily on oil and gas, and there are ways to reduce emissions and make the industry more environmentally friendly, especially with gas. Large companies like TotalEnergies, ExxonMobil, Chevron, Shell, and bp continue to invest in exploration, understanding the long-term need for these energy resources," said Gil Holzman, CEO, Eco Atlantic Oil & Gas.

The realization by Western states that fossil fuels can be wielded as a political weapon by hostile states has added more pressure to end their reliance on foreign states for their energy needs. In the short term, this can open export opportunities for many African nations. "With the war in Ukraine disrupting Europe's access to cheap gas, Nigeria stands at a crucial juncture to position itself as a reliable gas supplier. Additionally, the anticipated shift in the US energy landscape, with a potential decrease in reliance on Nigerian crude oil, highlights the imperative of prioritizing gas production," said Cheta Nwanze, lead partner, SBM Intelligence.

As Europe rushes to wean itself off Russian fossil fuel imports, a once in a lifetime opportunity presents itself for frontier oil and gas markets like Namibia or Sierra Leone. The challenge now is to prove to European financiers and IOCs that they are stable and reliable partners, business-friendly and open to investment. "We have observed a shift in attitudes following the Russia-Ukraine conflict; companies show increasing willingness to venture into Africa due to energy constraints," said Foday Mansaray, director general of the Petroleum Directorate of Sierra Leone.

However, this door may not be open for very long as in the long-term Europe appears determined to achieve energy independence and cut out fossil fuels entirely. The shift is well underway, with aggressive renewables targets in place, evidenced by a -49.1% YoY decrease in the worth of EU energy product imports in Q3 2023. All this points towards a decreased appetite for European fossil fuel imports in the long term – from Africa or elsewhere. The AEB's proponents are all too aware of this, so the bank will also support the development of renewables within Africa so the continent is prepared for the day when fossil fuels eventually become economically and politically unviable. "The proposed Bank will support the implementation of an Africa-led energy transition and development strategy," explained Intong.

African project developers are having to consider the uncertainty that comes with the global energy transition and geopolitics when developing their strategies, such as by building infrastructure to accommodate technologies like Carbon Capture, Utilization, and Storage (CCUS) or flare reduction later in the project's lifecycle. "The

13 >>

Omar Farouk Ibrahim

Secretary General
AFRICAN PETROLEUM PRODUCERS' ORGANIZATION (APPO)

»Now that the markets are going to dry, it is a good opportunity for us to exploit the energy for our own use.«

Can you share some recent developments and milestones at APPO?

APPO started as APPA, the African Petroleum Producers' Association, some 37 years ago, with the objective of bringing together African oil and gas-producing countries to cooperate and collaborate in oil and gas matters. For nearly three decades, the association remained a loose group dealing with oil and gas policy matters. Not much collaboration took place on the platform of APPA. However, the global paradigm shift away from fossil to renewable energies, which received the greatest boost from the signing of the Paris Agreement in 2015, posed challenges for many African countries that have been heavily dependent on oil and gas revenues as well as on foreign financing, technology, and markets for their oil and gas industry. 75% of the oil and 45% of the gas that Africa produces is exported out of the continent.

In 2015, many African oil and gas-producing countries' leaders signed the Paris Agreement, but soon after realized that they should be in no hurry to abandon oil and gas. The subsequent reflection prompted African leaders to reconsider how the implementation of the global energy transition would affect their countries and peoples. It was that concern that informed the decision to reform APPO to identify the challenges that the energy transition shall pose to our members. That was why immediately after the reform, the first assignment given to the Secretariat by the Ministerial Council was to conduct a study of the future of the oil and gas industry in Africa in light of the global energy transition. The study showed us that there are three imminent challenges the industry will face as a result of the energy transition: finance, technology, and markets. Subsequently, the Council of Ministers decided that APPO should formulate concrete proposals on how to tackle these challenges. One of APPO's proposals was to establish the Africa Energy Investment Corporation (AEICORP). However, AEICORP was only funded with US$1 billion, which is nothing in the giant oil and gas sector. As a result, APPO went into partnership with Afreximbank to establish the Africa Energy Bank, AEB, with a startup capital of US$5 billion instead. To address the technology challenge, an audit of all the oil and gas research, development and innovation institutions in member countries was undertaken to establish regional centers of excellence in the various sectors of the industry. As for the markets, we are working on establishing cross-border and regional energy infrastructure across the continent. That way, instead of exporting our energy, we will use it to develop our continent.

How do you view Africa's energy security in the context of the global energy transition?

The global energy transition could be a great opportunity for us to change the face of our continent and its people. No country or society has been able to develop without energy. Europe and the US as well as other developed countries would not be where they are today without the use of ample energy they got from within and outside their borders. The same energy that Africa has in abundance but has failed to use for its own people.

Now that the markets are going to dry, it is a good opportunity for us to exploit the energy for our own use. We should not stop producing oil and gas because the markets that we have relied on are closing. To us, energy poverty poses a more immediate existential challenge than climate change. The countries responsible for the legacy emissions, who are today championing a speedy transition, should look into investing in CO2 removal technologies and remove even 20% of the 2,500 gigatons of emissions they have put into the atmosphere over the last 120 years.

What is the relationship between APPO and OPEC?

Both OPEC and APPO are inter-governmental energy organizations, the former was established in 1960 while the latter came 27 years later. OPEC has set itself the responsibility of stabilizing the global oil market in the best interest of producers, consumers and investors. APPO member countries constitute 50% of OPEC. For APPO, our focus is to find solutions to the peculiar challenges facing the oil and gas industry in Africa. ■

NJ Ayuk

Executive Chairman
AFRICAN ENERGY CHAMBER

»We are combating the demonization of natural gas usage, emphasizing Africa's right to utilize it for development.«

What are some recent developments at the African Energy Chamber and where have your advocacy efforts been focused?

Over the past eight months, the African Energy Chamber (AEC) has been intensely focused on finance, particularly following COP 28 in Dubai, where there was significant global pressure to end or phase out the use of fossil fuels. However, our primary focus remains on what I refer to as the 'ground game' within Africa. This involves addressing energy poverty issues directly in African countries and finding practical solutions that benefit everyday people. We are particularly invested in increasing gas production and ensuring more access to LPG for Africans, particularly for clean cooking. Currently, 900 million Africans lack access to clean cooking technologies, while 600 million lack access to electricity.

We are engaging with stakeholders and businesses, advocating for their voices to be heard. It is essential to understand that to create jobs and opportunities in Africa, we must support and empower businesses. This includes addressing issues such as tax advocacy, incentivizing reforms, and tackling judicial issues to ensure a fair and conducive business environment. We are combating the demonization of natural gas usage, emphasizing Africa's right to utilize it for development. Our advocacy is built on fundamental principles: free market, limited government, individual liberty, and respect for the rule of law. We believe that by upholding these principles, we can foster a prosperous, ambitious, and dynamic African energy industry that benefits all Africans.

Can you provide more details on the MoU you recently signed with the African Petroleum Producers' Association (APPO)?

The MoU emphasizes the critical importance of local content development in driving sustainable growth across the continent's petroleum industry. APPO has been instrumental in fostering cooperation among African nations, particularly in emerging and underexplored regions such as Namibia and Mozambique. These collaborations are not only about exploration and production but also about ensuring that the benefits of the industry trickle down to local communities.

The MoU aims to address several key objectives. Firstly, it seeks to create an enabling environment for local content development, emphasizing job creation, capacity building, and SME empowerment. By prioritizing local participation, we aim to shift the paradigm where Africans are often marginalized in their own industry.

One significant initiative that we are supporting is APPO's proposal for an African Energy Bank. This bank will play a crucial role in financing energy projects across the continent, further driving economic growth and development.

Our partnership with APPO also prioritizes sustainability and social responsibility. We are committed to advocating for a just transition to sustainable energy production, addressing environmental concerns, and tackling energy poverty.

How do you view natural gas as a transition fuel for Africa?

We are committed to sustainability and decarbonization, but we also recognize the imperative for industrialization. Instead of Africans migrating to Europe in search of opportunities, we should be creating jobs and industries right here. Natural gas can fuel our industrialization, from petrochemicals to fertilizer production, boosting agriculture and creating employment. It is about giving our youth a chance to compete globally and to have access to education and opportunities.

How do you perceive the stance of international bodies such as the UN or the IPCC on Africa's decarbonization?

I believe they are out of touch with Africa and everyday Africans. No nation has ever achieved industrialization solely through wind or solar. When the crisis in Russia and Ukraine emerged, wealthy nations like Germany did not opt for solar panels; they sought coal from countries like South Africa, Tanzania, and Mozambique. This highlights the necessity of baseload energy for development. The IEA's projection of 65% EV usage by 2030 ignores the reality of energy poverty in Africa. After COP 26 in Glasgow, European countries and the US continued to pursue oil drilling, despite advocating for fossil fuel phase-outs. This hypocrisy undermines their credibility. Africans recognize the need to develop natural resources for industrialization and refuse to adhere to colonial structures that perpetuate poverty. It is our time to grow and industrialize, regardless of Western or wealthy nations' preferences.

The discrepancy between rhetoric and action is stark, highlighting the need for African nations to prioritize their own development agendas. ■

Mario Bello

Head of Sub-Saharan Africa Region
ENI

> ***Today, over 50% of our hydrocarbon production and reserves come from Africa, and we plan to allocate over 50% of our upstream CapEx here in the future.***

Can you tell us about Eni's presence in Africa?

Today, over 50% of our hydrocarbon production and reserves come from Africa, and we plan to allocate over 50% of our upstream CapEx here in the future, with a focus on gas to bolster domestic energy needs while also meeting European demand and advancing the energy transition.

Can you discuss Eni's operations in West Africa and the importance of recent discoveries in Côte d'Ivoire?

Some of our recent advancements, such as the discovery of Calao in Côte d'Ivoire, are restoring interest in the country's offshore and have opened up new business opportunities for our upstream portfolio, setting the stage for further developments.

In Côte d'Ivoire, Phase 1 of the Baleine project has surpassed all expectations in terms of operational success. Currently, oil production has reached over 23,000 bpd, nearly doubling the initial projection of 12,000 bpd. This strong performance sets the stage for further expansion. With the completion of Phase 2 by the end of 2024, production is expected to increase to more than 60,000 bpd. At full capacity, the field will produce up to 150,000 barrels of oil and 200 million scf of gas per day.

Baleine is a key development for Côte d'Ivoire. Natural gas production is supplied to the national grid to support the country's energy needs and expand its role as a regional hub in the area. On top of that, Baleine will be the first net-zero emissions (scope 1 and 2) development in Africa, leveraging innovative technologies and initiatives.

What is the importance of natural gas to unlocking economic growth in Africa and what is the rationale behind Eni's Congo LNG project?

Africa's growing energy demands make gas development crucial for regional and global energy security. It is Eni's longstanding commitment to prioritize supplying the energy produced to local markets, with approximately 80% of Eni's gas production in 2022 remaining within the producing country.

This overarching strategy perfectly fits with Eni's Congo LNG project. Indeed, gas volume is creating value for the country's energy needs, while surplus gas is fueling LNG production, marking the country's entry into the group of LNG exporting countries.

How is Eni fulfilling its commitments to sustainability in sub-Saharan Africa?

Our initiatives include concrete plans crafted with governments to bolster access to energy, education, and healthcare, alongside fostering economic diversification and meeting the countries' needs.

We are integrating African countries into the biofuel value chain, utilizing agri-feedstock from degraded land. Furthermore, we have established a research center in the Republic of Congo dedicated to developing energy transition technologies for regional implementation.

We are also supporting access to more modern cooking systems in Congo, Côte d'Ivoire, Mozambique, Rwanda, and Angola. Traditional methods, such as open fires or basic stoves, have a negative impact in terms of health and the environment and contribute to 3.7 million premature deaths annually, with women and children most at risk. We will distribute improved cookstoves to 10 million people in sub-Saharan Africa by 2027, reaching 20 million people with advanced cooking solutions by 2030.

What are Eni's commercial priorities and objectives in the region for 2024/2025?

In 2023, the exploration and production segment delivered outstanding growth, and we will continue to scale up our projects within the region.

We are making significant progress on our project in Côte d'Ivoire. All drilling and installation activities are advancing on schedule and are being conducted with the highest safety standards.

In the Republic of Congo, the project's second phase is being developed in parallel with the first to reach a total capacity of 4.5 billion cubic meters of gas annually by 2025.

Additionally, projects in Mozambique are progressing well. The Coral South project, the world's first example of floating LNG in ultra-deep waters, has reached its production plateau and LNG exports have been ongoing since November 2022. Building on this success, Eni and its Area 4 partners are progressing with the development of the Coral field through a second FLNG project, Coral Norte. Operations are thriving also in Angola through Azule Energy, our JV with bp. Currently, Azule Energy is the largest equity producer of oil and gas in the country and has recently signed an agreement for a 42.5% interest in an offshore block in the Orange Basin in Namibia. ■

<< 9

world will likely transition away from fossil fuels in the coming decades. We need to ensure the projects we develop now are not only financially viable but also have a clear exit strategy or future utility in a potentially low-carbon world," said David Ige, CEO, GasInvest.

African-led initiatives like the AEB are key to reducing Africa's dependence on the West for financing. However, the success of these initiatives hinges on stable government and strong relationships between nations. Nevertheless, tensions have been brewing, particularly in francophone western Africa which has seen six coups since 2020 – resulting in three nations leaving the ECOWAS bloc, which will undoubtedly set back efforts to promote inter-African energy trade and infrastructure projects. Austin Avuru, executive chairman of AA Holdings, sees a solution however: "By fostering willing buyer-seller relationships, commercial ventures can transcend governmental hindrances. For instance, the East African Crude Oil Pipeline project has faced challenges due to political disagreements among the involved governments, highlighting the need for private sector-driven initiatives."

The AEB has already raised US$5 billion in initial capital, but the International Energy Agency (IEA) estimates that delivering modern energy to the entire continent will require up to US$25 billion in annual spending until 2030. Signatories of the AEB are unlikely to be able to raise this gargantuan sum relying solely on government coffers – individuals and private firms across Africa will need to be convinced to risk investing their money closer to home: "Looking at sub-Saharan Africa, you will find pension funds with approximately 70% of their capital invested outside of Africa, demonstrating low confidence in local markets," shared Ejike Egbuagu, group chief executive, Moneda Invest Africa.

The rallying call is being sounded by government officials, CEOs and pan-African organizations like APPO and the African Energy Chamber. Now it remains to be seen if African governments and private institutions can unite to plug the financing gap and exploit the continent's vast hydrocarbon resources before the world starts losing its appetite for fossil fuels. "The problem is that Africa, unlike the Middle East, often does not have the funds to develop its resources and we always look to the West to raise the necessary funds. However, we are waking up and figuring out ways to help ourselves. I am also advocating for our capital markets across the continent to come together to invest in the oil and gas sector for the benefit of all Africans," said Heineken Lokpobiri, Nigeria's minister of state for petroleum resources (oil), during his interview with Global Business Reports.

The African Refiners and Distributors Association (ARDA) is an organization that is seeking to close this gap. As the first pan-African organization focused on the downstream oil sector in Africa, ARDA has been busy organizing workshops and events to connect their members with African DFIs such as Africa Finance Corporation as well as commercial banks such as Standard Bank. "Capital for fossil fuel projects is drying up, whether it is upstream, midstream, or downstream. ARDA's approach is to develop a unique, sustainable energy transition roadmap, with a corresponding finance plan," shared Anibor Kragha, ARDA's executive secretary.

Another organization seeking to link Africa's energy players is the Petroleum Technology Association of Nigeria (PETAN) – Nigeria's pre-eminent association of indigenous technical oilfield service companies. PETAN's chairman, Wole Ogunsanya, shared the association's ambitions to encourage collaboration and knowledge transfer across borders to create more value within the continent: "PETAN is involved in many initiatives across sub-Saharan Africa, and we have partnerships with many of our sub-Saharan brothers and are at a point where we want to create an African association of oil and gas service companies."

With Africa being responsible for less than 4% of global emissions, many energy leaders feel it is unfair for developed nations to point fingers and shun, or even punish the use of fossil fuels in Africa, especially when many continue to aggressively produce and consume fossil fuels. "After COP 26 in Glasgow, European countries and the US continued to pursue oil drilling, despite advocating for fossil fuel phase-outs. This hypocrisy undermines their credibility. Africans recognize the need to develop natural resources for industrialization and refuse to adhere to colonial structures that perpetuate poverty. It is our time to grow and industrialize, regardless of Western or wealthy nations' preferences," said NJ Ayuk, executive chairman of the African Energy Chamber.

The energy industry, particularly hydrocarbons, is a complex, and politically and socially charged sector. There is no clear solution to the problem of balancing energy security and the need to industrialize on the one hand with sustainability and climate concerns on the other. The term 'ESG' or 'environmental, social, and governance' is a broad term that is increasingly used in many business environments but, when it comes to extractive industries like oil and gas, it can be especially difficult to determine which elements to prioritize. "The term ESG has been used very freely globally, and one could argue that the meaning of ESG in the West is slightly different from the meaning of ESG on the African continent. In the West, the emphasis is on the 'E', whereas in Africa, the 'E' is important, but it is the 'social' and 'governance' part that really needs to be bolstered," said Osam Iyahen, senior director, natural resources, Africa Finance Corporation.

From the over one hundred energy industry executives interviewed for this report across the continent, the majority agreed that energy security is a concern of equal, or even greater, significance than climate change for Africans. "The geopolitics over the past two years have shown that energy security will remain, for the foreseeable future, a priority for most governments – more so in places like sub-Saharan Africa where there are approximately 700 million people without access to cheap, reliable energy. Energy is the basis of economic development, and thus, if we want to address some of the migration crises that we see in the developed world, then we need to create an industrial base in the countries where people are migrating from," said Ado Oseragbaje, CEO, Heritage Oil. ■

Executive Insights on Energy Security

"A major challenge for Africa is that most African utilities are technically bankrupt and dependent on overseas funders who have a strong preference for renewable energy technologies."

Martin Mkhabela, Director, Energy, **WSP in Africa**

"Energy security will be a derivative of the investments being made in areas like LPG facilities and refineries. Africa is at a time where it is less about the 'how' and more about 'who' is willing to invest in the roadmap that the continent is executing."

Peter Gaius-Obaseki, Partner, **McKinsey & Company**

"Energy transition can mean different things for different countries, and in a country such as Angola where energy security is being built, the transition can mean moving from not having energy to having energy, allowing for the further development of resources in a responsible way."

Katrina Fisher, Lead Country Manager, **ExxonMobil Angola**

"There is a delicate balance between maximizing the utilization of existing resources and embracing alternative energy sources. Accelerating the utilization of local resources, especially in the oil and gas sector, requires substantial capital and human resources, which may still be lacking domestically."

Foluso Aribisala, Managing Partner and CEO, **Workforce Group**

"We have observed a tension between sustainability and affordability. Notably, renewable energy projects returned between 6-8% in 2023, while traditional fossil energy projects returned between 12-15%. The energy transition can only be funded by big oil, as they are the only players who can balance the low returns of renewable projects with their high-earning fossil fuel projects."

Olumide Esan, Partner and Energy & Chemicals Leader, **Deloitte Nigeria**

"With current efforts to secure energy for the continent and the new areas of development in the energy space, there is more focus and companies are developing their projects faster."

Robert Hawkins, Commercial Director - Africa, **Fugro**

Eric Intong

Regional COO, Anglophone West Africa

AFREXIMBANK

Can you introduce Afreximbank and outline the company's role in the African energy sector?

Afreximbank (African Export-Import Bank) has formally been described as a Bank of necessity. The Bank operates on a five-year strategic plan that is hinged on four pillars: Intra-African trade and the implementation of the African Continental Free Trade Area (AfCFTA) agreement; industrialization and export development; leadership in global trade banking in Africa, which is the pillar through which we support financial institutions to strengthen the financial sectors in our member countries; and financial sustainability. Afreximbank supports its member countries to reposition their economies and take advantage of the opportunities to promote sustainable development and respond to global crises such as the commodity super-cycle in 2015/2016 and the Covid pandemic. Afreximbank has demonstrated its relevance over the years in line with its mandate to be seen as a systemically important financial institution for Africa, evidenced by the tremendous growth in its interventions on the continent and balance sheet in recent years.

Can you elaborate on the MOU signed between the African Petroleum Producers' Organisation (APPO) and Afreximbank to establish the Africa Energy Bank?

Being conscious of the need for sustainable development in Africa, Afreximbank is collaborating with APPO on the establishment of the Africa Energy Bank. The proposed Bank will support the implementation of an Africa-led energy transition and development strategy. The entity will accelerate Africa's economic development, promote the continent's transition to cleaner energy options in the long-term, and align with the core objectives of the African Union Agenda 2063 – the Africa We Want, and the Sustainable Development Goals (UN SDGs). It is evident that the continent is confronted with myriads of development challenges evidenced by the stifling social and economic conditions including the attendant costs of transitioning to cleaner sources of energy. Therefore, the Africa Energy Bank will play an important role in addressing the financing challenges to the realization of Africa's energy transition objectives and accelerate the quantum of investments in renewable projects across the continent. The Africa Energy Bank will operate as a pan-African developmental financial institution, and it is expected to be launched in 2024.

What are Afreximbank's key priorities for 2024 and beyond?

The implementation of our strategic plan is important to us as it is intended to catalyze intra-African trade and the implementation of the AfCFTA, industrialization and export development. Afreximbank is a stalwart supporter of the AfCFTA and launched the Pan-African Payment and Settlement System (PAPSS) that was adopted by the African Union as the payment and settlement platform to underpin the implementation of the AfCFTA. We will continue to promote and finance industrialization in Africa so that the continent's resources are beneficiated in the continent and the value benefitted here to improve and grow African economies. Afreximbank will also focus on financing energy projects, especially clean energy projects, to ensure power security and a smooth energy transition for African countries. ■

Osam Iyahen

Senior Director, Natural Resources

AFRICA FINANCE CORPORATION (AFC)

Can you provide an overview of the recent developments at the Africa Finance Corporation's Natural Resources division?

Africa continues to be recognized as a key contributor to the world achieving the energy transition, given its abundance of critical minerals and gas reserves. Africa Finance Corporation (AFC) has been following this trend closely to see how we can play a catalytic role in harnessing Africa's contributory role and fulfilling our mandate as a development finance institution. We are carefully assessing opportunities for participating in early-stage development of natural resources projects, as many projects in Africa have been unable to effectively tap into funding sources, due to a lack of access to capital for early-stage development.

What is AFC's approach to ESG when deciding where to invest?

The word ESG has been used very freely globally, and one could argue that the meaning of ESG in the West is slightly different from the meaning of ESG on the African continent. In the West, the emphasis is on the 'E', whereas in Africa, the 'E' is important, but it is the 'social' and 'governance' part that really needs to be bolstered. Africa has only contributed 3% of total GHG emissions globally, and while we should continue to be environmentally responsible and reduce emissions, we also have to put it in the context of our particular situation where we need energy security on the continent. We will have to continue to exploit our resources but do so responsibly.

We have to ensure that jobs, employment, and the livelihoods of people are maintained and respected by energy companies, ensuring that it is a win-win situation for all parties. There needs to be a strong governance mechanism where the government and the stakeholders take full accountability in terms of reporting, standards, enforcement, etc.

Can you elaborate on AFC's energy portfolio, and where the company is currently focused?

AFC has invested US$60 million in Etu Energias, the largest private Angolan oil E&P company, as part of a drive to boost indigenous participation in the continent's energy sector. This transaction was consistent with what we are seeing in the sector where the majors are looking to divest from non-core international oil and gas assets, and these assets are being taken over by indigenous companies. In Nigeria, we have seen the first wave of this with the Shell divestment and Seplat acquisition (Exxon Mobil Divestment) coming in, a transaction that AFC participated in significantly. AFC will continue to provide institutional support to indigenous companies looking to develop the core assets that have been left behind by the majors or looking to enter or expand in the oil and gas and energy sectors so that we can continue to grow capacity within these local sectors. Such support ensures that African exploration and production companies develop the required technical expertise to operate complex assets such as the Block 14 asset in which Etu Energias acquired a non-operated stake. ■

Anibor Kragha

Executive Secretary

AFRICAN REFINERS AND DISTRIBUTORS ASSOCIATION (ARDA)

Can you give an overview of ARDA and the objectives of the organization?

The African Refiners Association (ARA) was founded in 2006, but in 2017, we changed our name to the African Refiners and Distributors Association (ARDA) to reflect the full downstream value chain. We are the first pan-African organization focused on the downstream oil sector in Africa, and our approximately 80 members span the entire supply chain from oil refiners, importers, terminal operators, marketers, distributors, and industry regulators. ARDA has a platform for sharing industry best practices and ensuring improved interaction between African refiners and distributors, and international marketing, trading, engineering, and financial services companies. Our goal is to engage positively on key downstream sector issues and initiatives to promote investments on the continent.

Are you observing Western financiers shying away from financing downstream projects?

Capital for fossil fuel projects is drying up, whether it is upstream, midstream, or downstream. ARDA's approach is to develop a unique, sustainable energy transition roadmap, with a corresponding finance plan, named "A Tale of Three Decades", which outlines critical downstream energy projects its members and key stakeholders should be investing in on a decade-by-decade basis between now and 2050. ARDA is actively working with McKinsey & Company to establish a consolidated register of investable pan-African energy infrastructure projects that we can bring to the market and match African project developers with key financiers. During ARDA Week in April 2024, we held our first-ever ARDA Investment Forum during which ARDA members showcased their current projects and engaged with key DFIs like Africa Finance Corporation and Afreximbank.

In the near term, ARDA's goal is to raise funding for our members to upgrade existing African refineries to produce cleaner fuels and value-added petrochemicals, invest in strategic storage and distribution infrastructure to transport these clean fuels across the continent, and promote adoption of LPG as a cleaner cooking option to biomass/charcoal. ARDA and the Global LPG Partnership (GLPGP) are currently putting together a US$1 billion fund for ARDA members to invest in LPG and bio-LPG projects across Africa. In October 2024, ARDA plans to host its first-ever LPG Forum that will focus on delivering actionable frameworks to significantly increase LPG adoption across the continent, especially last-mile distribution in peri-urban and rural areas, in the lead-up to COP 29.

How can refiners across Africa balance the need to refine domestically and add value within the country with the need to export crude oil?

Africa's energy demand is going to grow 50-55% over the next two decades, but the question is, how do we support local refining in such a way that African countries can minimize imports and still maximize profitability from their crude oil production? Africa should work towards a position where we maximize refining and beneficiation on the continent and become world-class refiners that can then export refined products rather than crude oil. ■

Nigeria

» *Local entities have proven their competence and expertise, establishing themselves as strong competitors for onshore assets previously held by IOCs.* «

Ainojie Alexander Irune
Managing Director
OANDO ENERGY RESOURCES (OER)

Image courtesy of Heritage Oil

NIGERIA

LAND AREA
(1,000 sq km)
924

POPULATION SIZE
(million inhabitants)
222.18

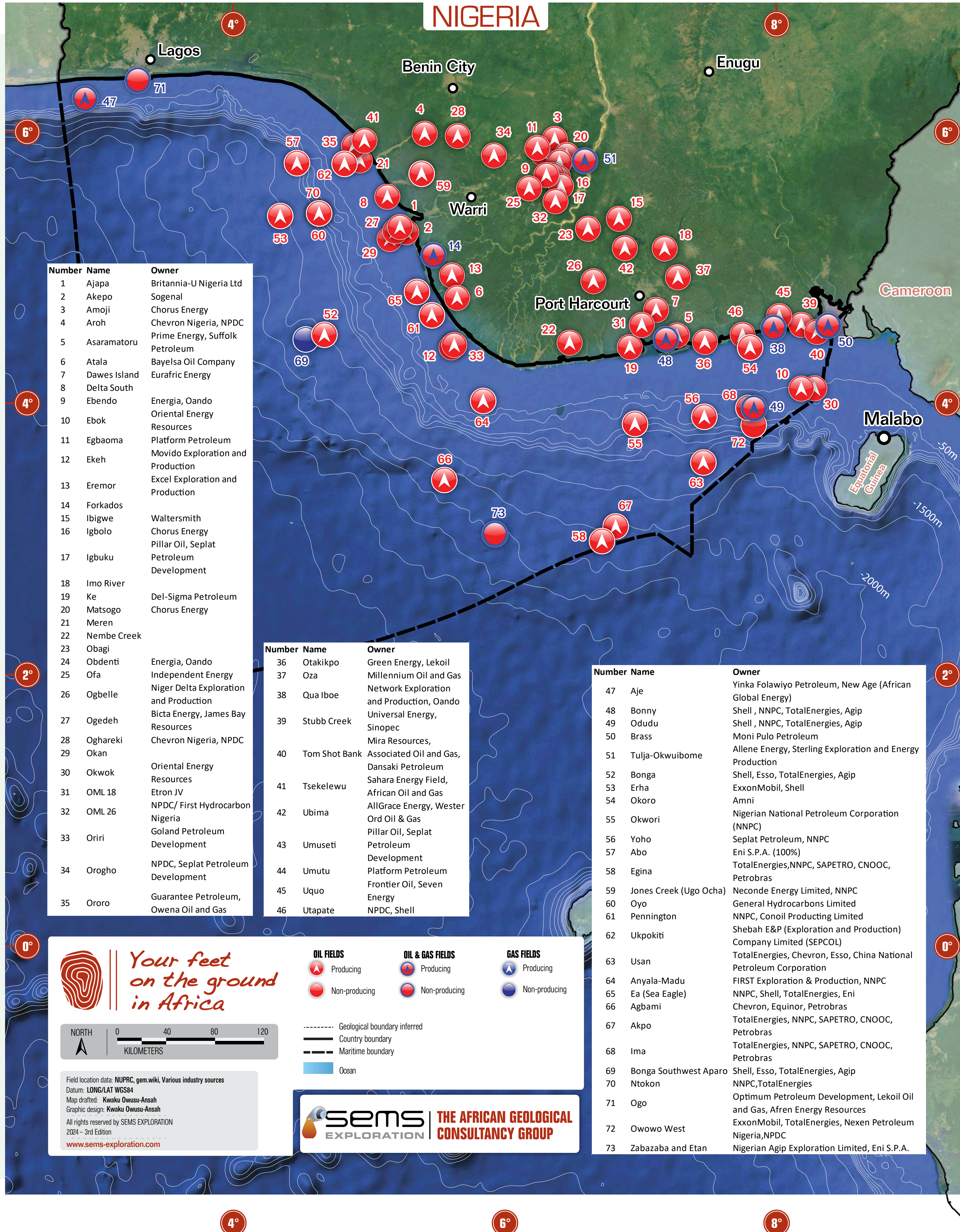
GDP
(US$ billion)
500.14

GDP PER CAPITA
(US$)
2,251

SOURCE:
OPEC 2023

Value of exports (million US$)	82,857
Value of petroleum exports (million US$)	46,298
Current account balance (million US$)	-806
Proven crude oil reserves (million barrels)	37,500
Proven natural gas reserves (billion cu. m.)	5,943
Crude oil production (1,000 b/d)	1,187
Marketed production of natural gas (million cubic metres)	42,403
Refinery capacity (1,000 b/cd)	1,122
Output of petroleum products (1,000 b/d)	17
Oil demand (1,000 b/d)	484
Crude oil exports (1,000 b/d)	1,476
Exports of petroleum products (1,000 b/d)	3
Natural gas exports (1,000 b/d)	29,650

SOURCE:
OPEC 2023



Number	Name	Owner
1	Ajapa	Britannia-U Nigeria Ltd
2	Akepo	Sogenal
3	Amoji	Chorus Energy
4	Aroh	Chevron Nigeria, NPDC
5	Asaramatoru	Prime Energy, Suffolk Petroleum
6	Atala	Bayelsa Oil Company
7	Dawes Island	Eurafric Energy
8	Delta South	
9	Ebendo	Energia, Oando
10	Ebok	Oriental Energy Resources
11	Egbaoma	Platform Petroleum
12	Ekeh	Movido Exploration and Production
13	Eremor	Excel Exploration and Production
14	Forkados	
15	Ibigwe	Waltersmith
16	Igbolo	Chorus Energy
17	Igbuku	Pillar Oil, Seplat Petroleum Development
18	Imo River	
19	Ke	Del-Sigma Petroleum
20	Matsogo	Chorus Energy
21	Meren	
22	Nembe Creek	
23	Obagi	
24	Obdenti	Energia, Oando
25	Ofa	Independent Energy
26	Ogbelle	Niger Delta Exploration and Production
27	Ogedeh	Bicta Energy, James Bay Resources
28	Oghareki	Chevron Nigeria, NPDC
29	Okan	
30	Okwok	Oriental Energy Resources
31	OML 18	Etron JV
32	OML 26	NPDC/ First Hydrocarbon Nigeria
33	Oriri	Goland Petroleum Development
34	Orogho	NPDC, Seplat Petroleum Development
35	Ororo	Guarantee Petroleum, Owena Oil and Gas

Number	Name	Owner
36	Otakikpo	Green Energy, Lekoil
37	Oza	Millennium Oil and Gas
38	Qua Iboe	Network Exploration and Production, Oando
39	Stubb Creek	Universal Energy, Sinopec
40	Tom Shot Bank	Mira Resources, Associated Oil and Gas, Dansaki Petroleum
41	Tsekelewu	Sahara Energy Field, African Oil and Gas
42	Ubima	AllGrace Energy, Wester Ord Oil & Gas
43	Umuseti	Pillar Oil, Seplat Petroleum Development
44	Umutu	Platform Petroleum
45	Uquo	Frontier Oil, Seven Energy
46	Utapate	NPDC, Shell

Number	Name	Owner
47	Aje	Yinka Folawiyo Petroleum, New Age (African Global Energy)
48	Bonny	Shell , NNPC, TotalEnergies, Agip
49	Odudu	Shell , NNPC, TotalEnergies, Agip
50	Brass	Moni Pulo Petroleum
51	Tulja-Okwuibome	Allene Energy, Sterling Exploration and Energy Production
52	Bonga	Shell, Esso, TotalEnergies, Agip
53	Erha	ExxonMobil, Shell
54	Okoro	Amni
55	Okwori	Nigerian National Petroleum Corporation (NNPC)
56	Yoho	Seplat Petroleum, NNPC
57	Abo	Eni S.P.A. (100%)
58	Egina	TotalEnergies,NNPC, SAPETRO, CNOOC, Petrobras
59	Jones Creek (Ugo Ocha)	Neconde Energy Limited, NNPC
60	Oyo	General Hydrocarbons Limited
61	Pennington	NNPC, Conoil Producting Limited
62	Ukpokiti	Shebah E&P (Exploration and Production) Company Limited (SEPCOL)
63	Usan	TotalEnergies, Chevron, Esso, China National Petroleum Corporation
64	Anyala-Madu	FIRST Exploration & Production, NNPC
65	Ea (Sea Eagle)	NNPC, Shell, TotalEnergies, Eni
66	Agbami	Chevron, Equinor, Petrobras
67	Akpo	TotalEnergies, NNPC, SAPETRO, CNOOC, Petrobras
68	Ima	TotalEnergies, NNPC, SAPETRO, CNOOC, Petrobras
69	Bonga Southwest Aparo	Shell, Esso, TotalEnergies, Agip
70	Ntokon	NNPC,TotalEnergies
71	Ogo	Optimum Petroleum Development, Lekoil Oil and Gas, Afren Energy Resources
72	Owowo West	ExxonMobil, TotalEnergies, Nexen Petroleum Nigeria,NPDC
73	Zabazaba and Etan	Nigerian Agip Exploration Limited, Eni S.P.A.

Unlocking Nigeria's Upstream

IOCs divest, indigenous companies invest

For the last decade, IOCs have been gradually divesting their onshore and shallow water assets in Nigeria, focusing instead on their deepwater and downstream assets. There are a number of reasons for this, ranging from environmental issues, technical challenges, oil theft and pipeline vandalism, but the process is well underway with billions of dollars worth of assets slated to come off the majors' books. A recent example was announced in late 2023, when Eni agreed to sell its Nigerian Agip Oil Company (NAOC) subsidiary to Oando PLC, a leading indigenous energy company, for an undisclosed sum. "This acquisition is significant as it nearly doubles our current production capacity, representing a monumental step forward for us," shared Ainojie Alexander Irune, executive director, Oando PLC and managing director, Oando Energy Resources.

This presents a historic opportunity for indigenous companies to snap up these assets, some of which have been under IOC ownership since the 1960s. "The IOCs shifting to deep water exploration and selling their onshore and swamp assets presents significant opportunities for indigenous companies. This transition allows local firms like Dovewell Oilfield Services to acquire and operate these assets, enhancing indigenous production capacity," said Tunde Ajala, founding executive director, Dovewell Oilfield Services.

The process has not always been easy, however, with deals marred by delays, bureaucracy and legal disputes. "This transition should have been smoother. Regulators needed to identify capable entities to take over and ensure a seamless transition, but that did not happen," said Austin Avuru, executive chairman, AA Holdings.

Many industry players feel like the opportunity presented by the IOC divestment has not been fully realized. The government is also aware of this, with minister of state for petroleum resources (oil), Heineken Lokpobiri, revealing that Nigeria lost US$34 billion in the last two and a half years due to the fall in production from the assets being divested by ExxonMobil to Seplat Energy, which are still awaiting regulatory approval as of writing. "No doubt, IOC divestments have created opportunities for local operators and service providers, however, weak governance eventually stifles everything. The government has a huge responsibility to catalyze things, drive efficiency, and sustain it so that the Nigerian oil and gas industry can thrive," said Dimeji Bassir, CEO, Ofserv.

Billion dollar transactions like these, however, require thorough due diligence and scrutiny to avoid potential economic or environmental fallout. "We were able to review examples of countries that were not afraid to divest and had very bad experiences. We looked at an example of Lebanon, Canada, Brazil, Australia, New Zealand, and the UK. As a country, and as a regulator, we do not want that to happen for our nation. While we recognize the right of investors to do their best, the security of the national interest must be guaranteed," said Gbenga Komolafe, commission chief executive, Nigerian Upstream Petroleum Regulatory Commission (NUPRC).

ND Western is an example of an indigenous company that has capitalized on the IOC divestments. The company was created in 2011 as a special purpose vehicle (SPV) to acquire Shell's OML 34. 15 years later, ND Western and its partners are now attempting to replicate the SPV model, this time through the Renaissance Consortium to acquire the remaining Shell assets in the Western Niger Delta. However, despite all the years that have passed, the acquisition process in Nigeria does not seem to have substantially improved. "The process could be smoother and quicker. While we understand the government's need for due diligence in asset transfers, delays hinder investment and negatively impact production. Both the seller and the buyer are unable to invest during these delays, causing production to decline. It benefits everyone to reduce the period of reduced investment attention," said Olanrewaju Kalejaiye, ND Western's CEO.

This limbo has created great uncertainty for many in the industry as stakeholders across the entire value chain wait to see which assets and projects will pause, resume or even stop operations altogether, and has been one of the factors leading to Nigeria's declining oil production and missed OPEC+ quotas. This dearth in production, coupled with the ongoing currency crisis, has a knock-on effect down the value chain, with refiners struggling to source crude and petrol stations running dry. "One would have thought that a country like Nigeria, which produces crude oil would be able to supply crude to our refinery, but we are still faced with a lack of supply. To mitigate this challenge, the government needs to create a solid platform for the supply of feedstock to refineries in Nigeria," said Momoh Oyarekhua, chairman, OPAC refineries.

These sentiments were echoed by Michael Osime, chairman of AIPCC Energy, which like OPAC Refineries, is a member of the Crude Oil Refinery Owners Association of Nigeria (CORAN). CORAN has been advocating for Nigeria's refinery owners with the hopes of influencing policies and addressing some of the challenges the domestic refining sector is facing. "Nigeria is a volatile country, and our oil and gas industry does not have a good reputation internationally, making it difficult to raise capital to develop greenfield projects. Refining is the newest of the different upstream, midstream, and downstream sectors in the country, and while dealing with being a pioneer, refineries in Nigeria have had great difficulties in securing feedstock," said Osime.

This in turn contributes to the ongoing currency crisis and upsets the trade balance. "By reducing the need for Forex allocations to import refined products, local production can alleviate pressure on public sector finances. This contributes to a more sustainable balance of trade and strengthens our economic resilience," said Abiola Lukman Lawal, managing director and CEO, Eterna Plc.

For the assets that have already been successfully divested by IOCs, such as OML 24 that was sold by Shell to NewcrossEP for US$600 million, the new indigenous asset owners will still have to contend with the issues that prompted the IOC owners to sell in the first place. "Our main challenge has been security, particularly regarding our pipeline network's integrity. We encountered issues with pipeline evacuation and experienced significant losses around 2022, reaching 100% at one point. To mitigate security risks, we have implemented alternative evacuation systems," said Victor Sodje, managing director of NewcrossEP.

Another indigenous upstream player, Heirs Energies, acquired the OML 17 lease from Shell (SPDC), TotalEnergies and Eni for US$1.1 billion in 2021. Like many operators, Heirs Energies faced challenges with insecurity, at one point losing 95% of its production to theft and vandalism. However, with new owner-

27 >>

Heineken Lokpobiri

Minister of State for Petroleum Resources (Oil)
GOVERNMENT OF NIGERIA

> *We want to tell the world that Nigeria is offering the best fiscal and regulatory terms and is willing to resolve all issues that may arise in the course of doing business.*

Can you introduce the Federal Ministry of Petroleum Resources and outline its current objectives?
The current administration came into power in 2023 with the objective of unlocking the energy sector for the benefit of Nigerians. The main agenda of the new government is to increase hydrocarbon production to enable the government to stabilize our Forex and generate the money we need to finance our budget. I would say Nigeria is more of a 'gas' country than an 'oil' country, as it is home to the largest volumes of natural gas deposits in Africa.

The first step to ramping up production is to ensure that the right fiscal framework is in place to attract foreign investment. Nigeria's inability to produce more is not due to a lack of production capacity, but rather due to issues with old pipelines that have outlived their lifespans. These aging pipelines have made it easy for vandals to damage pipelines and steal crude, harming the security and environment of the Niger Delta. The shortfall in production in March 2024 is primarily due to the Trans Niger Pipeline being shut down for repairs. Additionally, many producers had to shut down for routine maintenance. Nigeria currently produces over 2 million bpd, and within the next year, we should be producing 2.5-3 million bpd. We want to remove all bottlenecks that are preventing Nigeria from reaching its true production capacity.

The PIA took longer than expected to be passed. By the time the regulatory framework was eventually settled, many companies had already taken their CapEx to other jurisdictions. We are gradually drawing many of the companies back, some of which have been doing business in Nigeria for over 50 years. Major IOCS like Shell, ExxonMobil and TotalEnergies have recently committed billions of dollars to developing Nigerian assets like the Bonga North oil block.

Considering the increase in Nigeria's refining capacity, how will the government ensure that local refineries can secure enough feedstock?
On top of the upstream, we are also creating the best environment for investment into the midstream. Our refineries are being rehabilitated in Port Harcourt, Warri and other areas. This will enable Nigeria to meet a substantial part of our local demand. Refining our crude domestically will enable us to keep more money within the country.

Permits for modular refineries have been issued. However, refineries need feedstock, and with the new Dangote refinery and the ongoing rehabilitations, we will need to ensure that there is enough crude to satisfy the demand of local refineries.

Some modular refineries are unable to buy crude. This is sometimes because they want to pay for crude in naira in official exchange rates, while the sellers want the prevailing market rate, leading to never-ending negotiations. Many marginal field operators who want to sell to modular refineries have dollar debts they must pay back. The modular refineries and marginal field operators must come to the table and reach an agreement on the mode and amount of payment for crude.

How will the government's desire to increase oil and gas production fit into the global energy transition?
Africa only accounts for 3% of global total emissions and is therefore the real victim of climate change. Africa suffers from energy poverty and Nigeria, like many other African nations, should prioritize energy security. The world's largest oil producer, the USA, has reached record production levels, the UK is issuing new North Sea licenses, and Norway continues to invest billions into oil and gas. Every country with fossil fuels is seeking to use them. Thus, we should absolutely not stop fossil fuel production either.

Do you have a final message?
Nigeria is ready for business. From a policy standpoint, President Tinubu's government has a new way of doing things. We want to tell the world that Nigeria is offering the best fiscal and regulatory terms and is willing to resolve all issues that may arise in the course of doing business. We have an abundance of oil, gas and other energy resources. We are offering the best, at competitive terms, and invite the world's investors to come to Nigeria. ■

Jim Swartz

Chairman and Managing Director
CHEVRON NIGERIA

> *We are optimistic about the future of the energy industry in Nigeria, particularly recognizing gas as the transition fuel towards a lower-carbon environment.*

Can you provide a brief overview of Chevron's upstream presence and recent main developments at its key assets?
Chevron Nigeria Limited (CNL) started operations in Nigeria in 1961. CNL operates under a JV arrangement with the Nigerian National Petroleum Company Limited (NNPCL/CNL JV). CNL and its affiliates in Nigeria have assets onshore and in near-offshore regions of the Niger Delta, including interests in non-operated fields. We have extensive interests in deepwater operations in Nigeria, including the Agbami field, one of Nigeria's largest deepwater discoveries, operated by Star Deep Water Petroleum Limited, an affiliate of CNL. Chevron Petroleum Nigeria Limited, another CNL affiliate, has a non-operated interest in the Usan field.

CNL has made significant progress in the development of the Nigerian domestic gas market and continues to collaborate with NNPCL and the Federal Government of Nigeria to find mutually beneficial energy solutions for the country. We are proud to have operated in Nigeria for more than six decades, contributing to the growth and prosperity of the country.

Our recent efforts to position for a new phase of growth include the new JV lease agreements with the NNPCL and Agbami OML 127 deep water lease, under the Petroleum Industry Act (PIA), signaling our commitment to further exploration and development. We also recently acquired the OPL 215 block to boost deepwater development opportunities, signed a 20-year renewal of 3 deepwater leases and started seismic data acquisition in several of our deepwater leases, including the Agbami field.

Can you highlight the progress on the ongoing NNPCL/CNL JV infill drilling program?
CNL and its joint venture partner, NNPCL, recently secured a US$1.4 billion facility to fund its NNPCL/CNL JV infill drilling program. The facility recognizes the strategic imperative to supplement funding to enable high-impact projects that can deliver near-term production. The project includes 37 wells in the Escravos shallow-water offshore area. It is also in alignment with the NNPCL/CNL JV's lower-carbon objectives with all the wells connected to facilities which do not flare.

This program is the third externally financed project by the NNPCL/CNL JV. Since 2015, over US$2 billion has been generated by these three externally financed projects, which will deliver a total of over 80 wells at the end of the current drilling program.

How is CNL working towards reducing routine gas flaring?
We have a wide variety of projects underway to reduce emissions, from improving methane detection to rethinking facilities design, optimizing equipment, and deploying new operational practices. We have reduced routine gas flaring by 97% in the past 10 years.

CNL has been successful in leading and investing in major initiatives through partnership with NNPCL and others. These include the development of the Escravos Gas Plant (EGP) facilities to enable reduction of gas flaring and position CNL as one of the largest suppliers of domestic gas in Nigeria. As of 2023, CNL contributes about 26% of gas to the domestic market in Nigeria. In partnership with the ECOWAS, CNL led the development of the ~700 km WAGP project through which Nigeria supplies gas to Benin, Togo, and Ghana, helping to power the region and boost economic development.

What are the main challenges facing oil producers in Nigeria and how do you think the authorities could make Nigeria more competitive among other jurisdictions in Chevron's global portfolio?
CNL requires the continued partnership of all stakeholders towards reducing the cost of doing business and instilling confidence in our investors to enable our investment and growth strategy to be successful and competitive for capital across a global portfolio.

We are supportive of the government's efforts to address high costs, security and protracted contracting issues in the industry.

What are CNL's priorities for the coming years?
CNL remains committed to ensuring safe, reliable, and efficient operations in Nigeria and delivering affordable, reliable, and ever cleaner energy for Nigeria, the West African region, and the world at large.

We are optimistic about the future of the energy industry in Nigeria, particularly recognizing gas as the transition fuel towards a lower-carbon environment, with the right policies, laws and regulations that will stimulate growth in the industry. ■

Gbenga Komolafe

Commission Chief Executive

NIGERIAN UPSTREAM PETROLEUM REGULATORY COMMISSION (NUPRC)

What is the role of the NUPRC?
The Nigeria Upstream Petroleum Regulatory Commission (NUPRC) was established to address critical challenges in the Nigerian petroleum industry. Its key objectives include improving public governance, clarifying roles among policy, regulatory, and commercial functions, and enhancing industry competitiveness for investment. The NUPRC's primary responsibilities involve regulating, monitoring, and enabling activities in the upstream sector. It ensures compliance with technical and commercial rules, environmental standards, and safety practices.

Can you share more on ongoing and recent IOC divestments the NUPRC has approved?
We were able to review examples of countries that were not afraid to divest and had very bad experiences. We looked at examples of Lebanon, Canada, Brazil, Australia, New Zealand and the UK.

As a country, and as a regulator, we do not want that to happen for our nation. The objective is that the seller will ensure that the buyer is able to demonstrate financial capacity, technical capability, and no legal encumbrances. Issues of decommissioning and abandonment will be well situated so that the nation does not end up carrying an unintended burden.

As for the four topical transactions, I'm happy to announce two have been completed: the Nigerian Agip Oil Company (NAOC) to Oando and Equinor to Project Odinmim. As regards the direction of SPDC to Renaissance Consortium, the status is that the regulator has received the documentation and is currently undergoing the necessary due diligence. On the MPN to Seplat transaction, the regulator is yet to receive the documentation for due diligence.

What can frontier African markets learn from mature oil and gas markets like Nigeria?
We are looking at how we can act as a 'big brother' and make available our experiences to other African nations so they can learn from our mistakes. ■

Wole Ogunsanya

Chairman

PETROLEUM TECHNOLOGY ASSOCIATION OF NIGERIA (PETAN)

What have been the main developments at PETAN over the past few years?
One of Nigeria's biggest challenges is the decline in oil and gas production, and although reserves in the ground have increased compared to five years ago, we are producing less and less crude. Over the past five years, PETAN has doubled its membership, and we are aligned with the Presidential directive on how we can better support and increase oil and gas production in Nigeria. With this focus, we will also help our members exploit the available equipment capacity which is not currently being utilized to its full potential. Our members are ready to collaborate, for example, if a client only has US$50 million for a project with a budget of US$100 million, revenue 'waterfalls' can be put in place where they start doing the work and as the oil and gas starts coming out of the ground they get paid. Collaboration between our members, industry, and government will be critical in increasing Nigeria's oil and gas production, and we are willing to also work with multinationals who can assist us in these efforts.

What are the main challenges PETAN's members are facing in 2024?
PETAN advocates that authorities should look more into oil and gas evacuation on land and in swamp environments as the cost of production in these environments is approximately 20% of the production costs offshore. The onshore assets in Nigeria are nearly 100% owned by Nigerians - 55% by the government and 45% by indigenous exploration and production companies – and as onshore production is less expensive, margins are higher, and it is here where there will be the largest profits for the country. An issue that needs to be addressed by authorities and which PETAN can support is the upgrading of old and damaged pipeline infrastructure, as we are losing too much product during evacuation. ■

Inexperienced operators acquiring assets previously held by IOCs have faced difficulties in optimizing production and effectively managing resources. Consequently, there has been an increased demand for specialized services, such as subsurface analysis and production optimization.

Kayode Thomas, CEO,
Substrata Oil and Gas

Local production allows us to optimize our distribution network. By having modern refining facilities closer to home, we can reduce transportation costs and improve efficiency in delivering products to our customers.

Abiola Lukman Lawal, Managing Director and CEO,
Eterna PLc

<< 23

ship comes new perspectives and like NewcrossEP, Heirs Energies had to take drastic new measures to tackle the challenges the IOCs were unable to overcome. "We decided to temporarily suspend production to address the underlying issues comprehensively. During this hiatus, we collaborated with stakeholders, including the government, to implement robust security measures and repair infrastructure, including the pipeline," said Osa Igiehon, CEO, Heirs Energies.

For indigenous service providers like Telmek Global Resources (TGR), the IOCs' shift in focus to deepwater operations has been a double-edged sword. "The challenge arose as investments dwindled in onshore activities, impacting on our workload. However, this situation also spurred opportunities. We recognized the offshore market and sought partnerships to capitalize on it," said TGR's managing director Thelma Chukwu.

With increased IOC focus on the offshore, the expectation is that investment and operations will increase. There have already been signs of this, with Shell Nigeria recently announcing plans to prolong the life of the Bonga FPSO by 15 years. Offshore, particularly deepwater, operations are known to be more technically complex and capital intensive than onshore operations, meaning that there might be more work and more capital to allocate to offshore service providers as the divestment process unfolds. "While some may perceive this as a decline in investment, it signifies a continued flow of foreign direct investment (FDI) into the country. This shift creates long-term opportunities for us, as offshore projects typically involve substantial investment and require comprehensive TIC services," said Jean-Michel Perret, district chief executive and managing director, Bureau Veritas Nigeria.

The shift also presents local content opportunities, as more assets will now be owned by Nigerians, and hopefully, this will result in even more local participation in the industry. "Historically, energy development in Nigeria has been driven by IOCs focusing on their global portfolios and moving primary energy resources. However, this approach neglected local market development," shared Christopher Nwokolo, group CEO, Ace Energy Group.

In addition, it is hoped that new indigenous ownership will be better suited to overcome sensitive community issues around the onshore and shallow water fields that lead to conflict, theft and vandalism – problems that the foreign majors were unable to solve in over 60 years of onshore operations. "African companies are best placed to bear the operational and commercial risk of investments in Africa, as they are better able to respond to situations and have the relationships to sort out issues as they arise," said Dipo Salimonu, CEO, Moteriba Group.

By disbursing the highly consolidated onshore IOC assets to a greater number of diverse, smaller companies, new processes can be implemented and there is more room for experimentation. "The gradual shift in focus to offshore assets and operations by the IOCs offers advantages such as reduced community-related challenges and greater control over production processes. This shift has resulted in increased business opportunities as onshore assets are sold to smaller companies, creating a more diversified market landscape," said Kenneth Okeiyi, CEO, Eunisell.

Regulation and the PIA
Nigeria's President Bola Tinubu has pledged to provide interventions in the country's oil and gas investments in accordance with the Petroleum Industry Act, 2021 (PIA). The PIA resulted in a significant restructuring of the regulatory framework around oil and gas, with the NNPC becoming a private entity and the establishment of regulatory bodies like the Nigerian Upstream Petroleum Regulatory Commission (NUPRC), and the Nigerian Midstream and Downstream Petroleum Regulatory Authority (NMDPRA). The PIA has been welcomed by many in the industry and it is hoped it can reduce community tensions, boost local content, improve infrastructure and promote oil and gas investment. "Overall, the PIA has brought positive changes and addressed industry challenges by improving the regulatory approval process, facilitating smoother operations, and providing clearer guidelines for investors," said Nicholas Okafor, partner and head of energy & infrastructure practice, Udo Udoma & Belo-Osagie.

Some service providers are already feeling the benefits: "The government is supporting the oil and gas sector with the new PIA allowing for longer contract periods, and therefore, more stability for companies which then increases investor confidence. The permitting process has also become easier and faster, which is a great benefit for the development of oil and gas projects," said Tony Osuagwu, managing director, Calaya Engineering Services.

However, the PIA has also introduced uncertainty for E&P companies, with stakeholders asking for clearer guidelines in some areas to ensure compliance. "In response to these challenges, industry stakeholders, including ourselves, have actively engaged in dialogue and advocacy for amendments and clarifications to address these discrepancies and ensure regulatory coherence. The PIA has a strong focus on the upstream, with many provisions being 'cut and pasted' for the mid and downstream, which has posed some problems," said Iyunola Adekanye, partner, Dentons ACAS-Law.

The subsidy removal reflects the government's recognition of the need for structural reforms to foster economic resilience and growth. While the short-term consequences are undeniable, we must assess this decision within the context of our long-term development trajectory.

Taiwo Afonja, Managing Partner,
Dentons ACAS-Law

The Nigerian Climate Change Act and the establishment of the National Council on Climate Change (NCCC) to implement the Act, is expected to catalyze ESG reporting in Nigeria, if enforced.

Ayo Salami, Partner and Head,
Energy & Natural Resources Group,
KPMG West Africa

One of the measures the PIA introduced is the Host Communities Development Trust, which aims to help host communities impacted by oil production by promoting economic growth, environmental sustainability and social equity by providing a framework for managing funds to support community development. The fund is a step in the right direction, and it is hoped that empowering and supporting host communities will address the root causes of insecurity, vandalism and theft. "The implementation of the Host Community Development Trust Fund represents a significant milestone in enhancing security and promoting sustainable development and is a positive step forward for the industry," said Steven Fadeyi, group managing director, Pan Ocean Oil Corporation (Nigeria) Limited.

Many indigenous operators have already begun to implement measures to address community issues: "In line with the PIA, we and our JV partner have recently inaugurated four OML-42 communities' Board of Trustees to manage the Host Communities Development Trust Funds as stipulated in the Act," shared Chichi Emenike, acting managing director of Neconde Energy, which, like many other companies, has had to create an alternative crude evacuation to reduce reliance on the outdated Trans-Forcados pipeline that is plagued by vandalism and theft.

Trust funds for host communities are not a particularly new phenomenon, with many asset owners engaging in outreach programs to appease local communities for years. The new framework will bring more formality and transparency to the process. "The main change this regulation has resulted in is that there is a more formal process for engaging with the community, but the reality is that many companies have been following comparable processes for a long time. The first time I ever heard of an oil company having a trust set up with the host community was in 1997," said Gbolahan Elias, partner at G. Elias.

Some would say that instead of developing entirely new laws and policies, the authorities' efforts could be better spent implementing and enforcing Nigeria's existing laws. This is especially true when it comes to local content regulation, as evidenced by the recent failed proposal of an expatriate employment levy. "The introduction of an employment levy in the oil and gas industry, particularly amidst a push for revenue generation, raises concerns about its potential impact on investor sentiment. While there may be intentions to promote local participation, the levy could deter FDI, which is crucial for industry growth," said Taiwo Afonja, managing partner, Dentons ACAS-Law.

The unpopularity of the proposed levy and the subsequent backlash led to its rapid suspension, indicating the government's responsiveness to industry feedback. "There is already an almost natural transition happening from IOCs to indigenous companies and we do not want to see external factors, like the levy, impact this. It is important to not scare away foreign investors," said Josephine Udonsak, partner, Dentons ACAS-Law.

The PIA also introduced a new tax regime that companies can opt into, including differentiated tax rates for petroleum mining leases and prospecting leases, alongside provisions such as the Hydrocarbon Tax (HCT). "Operators in deep offshore fields have notably benefited from the PIA regime, experiencing a reduction in corporate tax burdens from about 50% to 30%, while onshore, shallow water and marginal field players have faced difficulties in determining the fiscal advantages of transitioning to the new regime," observed Ayo Salami, partner and head, energy & natural resources group, KPMG West Africa.

What is clear is that the new government has not been shy to introduce new laws. The PIA, the end of the fuel subsidy, and creation of new institutions like the NUPRC all indicate that the Nigerian government is serious about reforming the oil and gas sector and achieving its production targets. With a tumultuous macroeconomic environment characterized by a wildly fluctuating currency and the highest headline inflation rate since 1996, Nigeria needs its oil and gas revenues more than ever. "The main agenda of the new government is to increase hydrocarbon production to enable the government to stabilize our Forex and get the money we need to finance our budget," said Heineken Lokpobiri, minister of state for petroleum resources (oil).

Talent

Although Nigeria is renowned for its pioneering local content policies, the country struggles to fill skilled roles, an issue that will likely become more pronounced as operations expand and new projects come online to meet government production targets. Although Nigeria has the largest population of any African country at 223 million, certain skilled oil and gas positions require years of training and are becoming increasingly difficult to fill, particularly as IOCs pull their skilled employees away from the onshore. "We are currently witnessing a massive exodus of executives in the industry. More and more experienced talent is being lured away by higher salaries and safer working conditions in places like the Middle East. This detrimental combination of millenni-

30 >>

> *Increasing female participation is not only essential for achieving gender equality but also for maximizing the industry's potential and fostering inclusive growth.*

Eyono Fatayi-Williams, President, **Women in Energy Network (WIEN)**

<< 28

als' unique work style preferences and the unabating 'brain drain' creates a talent shortage and a disruption in knowledge transfer for organizations in the industry," said Foluso Aribisala, managing partner and CEO, Workforce Group.

There is, however, an opportunity for the industry to tap into an overlooked half of the talent pool – women. Women in Energy Network (WIEN) is an initiative dedicated to fostering a gender-balanced and inclusive energy sector in Nigeria. Current estimates suggest that female representation in the energy industry is below 20%, so there is a long way to go to achieve a more equitable gender balance. "While there are currently no specific regulations targeting female participation in the energy sector in Nigeria, WIEN is actively engaged in advocating for gender-inclusive policies and initiatives. We collaborate with government agencies and regulators to highlight the importance of promoting women's participation in the industry and to advocate for the development of gender-specific policies and programs," said Eyono Fatayi-Williams, WIEN's president.

Higher education and research can also be bolstered to retain skilled labor within the country. Given enough support and opportunities, postgraduates and researchers are likely be more inclined to pursue their research within the country – rather than in universities abroad. Nigeria is already home to several universities that have run courses in hydrocarbon related courses for many years. In some cases, these institutions can churn out organizations and companies that continue to participate directly in the private sector. One such example is Laser Engineering and Resources Consultants – a petroleum engineering consultancy specializing in surface and subsurface studies that spun out of the University of Port Harcourt in the early 1990s. "More investment in research is crucial. While international firms conduct extensive research in their countries , Nigerian entities are yet to fully commit to research. This gap presents an opportunity for growth, aligning local capabilities with global standards and I am confident this gap will eventually be closed," said Mike Onyekonwu, managing consultant, Laser Engineering and Resources Consultants.

Boosting Nigeria's higher education and research capacity is unlikely to be accomplished solely by the government – the private sector can also contribute by sharing its resources and expertise with Nigeria's youth. Initiatives are underway from both indigenous companies and large multinationals such as SLB who have been active in Nigeria since the company logged Nigeria's first commercial oil well in 1952. "Our focus on capacity development is something we are proud of as a company. We are particularly involved in community engagement around STEM education to boost the growth of future science pioneers and recently launched a STEM café in Port Harcourt," said Sopiribo Ideriah, group managing director - West Africa, SLB.

Service providers represent a key fountain of wealth creation, knowledge creation and employment opportunities for the country, and Nigeria's service industry is a pioneer in pushing the boundaries of local content forward, aided by the PIA, which established the Nigerian Content Development and Monitoring Board (NCDMB) to promote and foster local content and indigenous participation within the country's energy industry. Encouraging local content is critical given the country's massive untapped labor pool, as Bolutife Odusanya, managing director and CEO of TREXM Holdings explained: "Nigeria boasts of a young population, with an average age of 18 and around a million graduates a year, and it has a high unemployment rate."

Currency

2023 and 2024 have been challenging and transformative years for Nigeria's oil and gas service providers. A challenging economic climate, featuring rampant inflation and wild currency fluctuations, has put many companies in a financially challenging position. Elections in 2023, which ushered in a new government led by President Tinubu, contributed to the uncertainty. "Nigeria had a political transition period between 2022 and 2023, which shifted focus away from industries like oil and gas, and the good global market dynamics we saw, such as high commodity prices, did not immediately translate to the Nigerian environment," commented Akeem Ariyo, managing director and CEO of AOS Orwell.

The currency fluctuations have been a particular concern. Since Tinubu's government floated the naira on global markets by removing currency controls, inflation and borrowing costs have skyrocketed. For service providers who rely on imports of high value, dollar-priced equipment, there has been much concern. "A falling domestic currency can create uncertainty regard-

36 >>

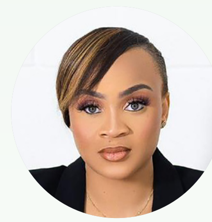
Service Demand Trends

"We are witnessing a surge in domestic gas-related projects such as the Anoh Gas plant, AKK project and Brass Methanol plant. The government is actively addressing issues surrounding gas supply agreements to facilitate the progress of such projects."

Bolaji Ososami, Managing Director, **Triumph Power and Gas Systems**

"Renewables, particularly solar energy, are emerging as a significant market. We are keen on leveraging this trend and expanding our reach beyond Nigeria to other African countries like Angola, Kenya and Mozambique."

Chinwe Uchendu, Executive Director and Chair, Board of Directors, **Poseidon Energy Services**



"The landscape has witnessed a proliferation of private security companies catering to the growing demand for maritime security services, indicating a shift towards a more collaborative security framework. Overall, this shift emphasizes a shared commitment by stakeholders to strengthening security in the Gulf of Guinea."

Bassey Alorye Adie, Managing Director, **Loyz Marine Services Limited**

"We see significant opportunities in the gas sector, especially with the current administration promoting CNG investments and development. We are focusing on domestic gas improvements and building gas facilities, including hydrogen units."

Tunde Ajala, Founding Executive Director, **Dovewell Oilfield Services**

Steven Fadeyi

Group Managing Director
PAN OCEAN OIL CORPORATION (NIGERIA) LIMITED

Can you introduce Pan Ocean Oil Corporation?

Pan Ocean Oil Corporation (Pan Ocean) traces its roots back to a meeting between Nigeria's first representative to the UN (who held the license for OML 98) and the New York-based Pan Ocean Oil Corporation. This led to the incorporation of Pan Ocean Oil Corporation (Nigeria) in 1972. This was followed by the discovery of commercial quantities of hydrocarbons in 1976.

During the 2007 bid round we acquired additional assets, further bolstering our portfolio. However, the transformative period for Pan Ocean occurred between 2006 and 2010. This period was marked by challenges, particularly the shutdown of the Trans Forcados Pipeline (TFP) in Nigeria. Faced with this adversity, our leadership was tasked with finding innovative solutions to sustain our operations and address emerging issues such as militancy and aging infrastructure. The solution was to diversify into natural gas, which at the time was treated almost like a waste product. This led to the inception of our gas facility project, which positioned Pan Ocean as a pioneer in gas compression and commercialization.

By 2010, we had achieved a significant milestone by becoming the first indigenous oil company to successfully commercialize gas and sign a Gas Sales Agreement (GSA) with the Nigerian government, marking the genesis of the gas-to-power initiative. Moreover, our efforts were recognized on a global scale as we qualified for the Clean Development Mechanism (CDM) under the Kyoto Protocol, further underscoring our dedication to sustainability. Additionally, we embarked on infrastructure projects such as the Amukpe-Escravos pipeline (AEP), which would alleviate the issues caused by the aging TFP. This project not only enhanced operational efficiency but also fostered community engagement through transparent collaboration and shared benefits.

What role will gas play in Nigeria's energy transition and Pan Ocean's future?

Gas plays a pivotal role in Nigeria's energy transition, presenting significant opportunities for both economic growth and environmental sustainability. Pan Ocean fully embraces the 'Decade of Gas' vision and views gas as a catalyst for economic revitalization and energy security.

What steps does Pan Ocean propose for the Nigerian government to bolster the oil and gas sector?

Aaddressing security challenges is paramount. A stable operating environment is essential for attracting investment and ensuring uninterrupted operations. We emphasize the need for collaborative security frameworks involving government agencies, local communities, and industry stakeholders to mitigate risks effectively.

Can you outline Pan Ocean's priorities for the coming years?

Energy diversity is something that excites us. We remain committed to expanding our presence in renewable energy, exploring opportunities in hydrogen, and investing in R&D to drive advancements. Overall, we will always go back to what is a fundamental principle for us, which is having sustainable relationships with our partners and with our communities, ensuring that their situation is continuously enhanced. This symbiotic relationship that we have will always be the gold standard for us. ■

Osa Igiehon

CEO
HEIRS ENERGIES

Can you provide an overview of Heirs Energies and its operations?

Heirs Energies' journey into the energy sector commenced with the acquisition of the OML 17 lease in early 2021 for US$1.2 billion. With over a billion barrels of oil and 2.4 trillion cubic feet of gas, OML 17 holds immense potential.

After the takeover of OML-17, we faced challenges with evacuating crude oil from the site, resulting in over 95% of production being lost or stolen at one point. Faced with these challenges, we decided to temporarily suspend production to address the underlying issues comprehensively. During this hiatus, we collaborated with stakeholders, including the government, to implement robust security measures and repair infrastructure, including the pipeline. This collaborative effort helped us navigate these challenges.

By late October 2022, we successfully resumed production, and throughout 2023 we focused on stabilizing operations and enhancing efficiency. We have made considerable progress, with production levels steadily increasing, reaching 45,000 bpd, and with oil losses and theft being reduced to under 15%.

Moreover, our focus extends beyond oil production. We recognize the importance of gas supply in driving economic growth and powering industries. As such, we have expanded our gas supply to support power generation and industrial activities, particularly in Eastern Nigeria.

Can you share Heirs Energies' approach to ESG and the reduction of routine gas flaring?

We understand that our operations impact not just our company but also the communities and ecosystems in which we operate. Therefore, we prioritize building strong, collaborative relationships with our host communities based on principles of mutual respect and appreciation. Initially, this involved a shift from historical 'pay for peace' agreements to the more inclusive Host Community Development Trust (HCDT) model, that is supported by the new petroleum law. This transition was not without challenges, given historical mistrust. However, through consistent efforts, we are resetting these relationships, with a focus on long-term partnerships rather than short-term gains.

Our commitment to reducing gas flaring goes hand in hand with our broader ESG goals. We have set ambitious targets to eliminate flaring ahead of the government's timeline. Currently, we are implementing solutions across five flaring hotspots, leveraging both governmental programs and proprietary initiatives.

How do other companies within Heirs Holdings, such as Transcorp, complement Heirs Energies?

The complementary relationship is mainly with the power companies within the Heirs Holdings portfolio. Specifically, Transcorp Power and the TransAfam Power Plant. With these two entities, Heirs Holdings owns approximately 15.5% of Nigeria's installed power generation capacity. Notably, we also provide feed gas to Transcorp Group. This alignment supports our overarching goal of empowering Africa with energy. Heirs Holdings' investment in the energy sector spans primary energy sources, power generation, and distribution. While the government oversees transmission, our focus is on distribution, as exemplified by our parent company, Heirs Holdings investment in the Abuja Electricity Distribution Company. ■

Ainojie Alexander Irune

Executive Director, **OANDO PLC** and Managing Director, **OANDO ENERGY RESOURCES (OER)**

Can you update us on the recent developments at Oando Energy Resources (OER)?

Over the past few years, we have focused on enhancing production from our core assets while boosting production from our marginal assets. Concurrently, we have committed to transitioning towards cleaner energy sources. This strategic shift led to the establishment of Oando Clean Energy Limited (OCEL), our clean energy division, dedicated solely to developing bankable, climate friendly energy solutions. OCEL's projects are across six themes, including sustainable transport, waste-to-value, geothermal, biofuels, solar and wind. These initiatives show our commitment to facilitating the energy transition and significantly reducing emissions in Africa.

One noteworthy project within our clean energy portfolio is the conversion of public buses in Lagos from internal combustion engines to electric motors, in collaboration with the Lagos State government. This endeavour involved a proof of concept, in collaboration with the Lagos State government, where we successfully demonstrated commercial viability and addressed crucial customer concerns about technology reliability and energy efficiency. Building on this success, we are now deploying an additional 50 electric buses, targeting road transport emissions, the largest source of GHG emissions in the country.

As we expand our interests in joint ventures and increase our acreages, our commitment to lowering carbon emissions remains unwavering, underscoring our dedication to a sustainable future.

What are your thoughts on Nigeria's 'Decade of Gas' initiative?

I certainly believe that Nigeria's concerted effort to position itself as a significant global contributor to gas production and the energy transition is commendable. Key to this effort to commercialize our gas resources is clear and equitable pricing strategies for both domestic use and exports, including LNG. Aligning local consumption with gas-to-power tariffs is essential to creating a balanced and fair value chain. Recent initiatives such as adjustments to domestic electricity rates, revisions to gas pricing and executive orders incentivizing investments in the gas sector and streamlining procurement processes reflect positive strides in this area.

Could you outline OER's priorities for the coming years?

In the near term, our main priority is to finalize the acquisition of NAOC (Nigeria Agip Oil Company) from Eni. This acquisition is significant as it nearly doubles our current production capacity, representing a monumental step forward for us. We are committed to ensuring that this transition not only boosts our capabilities as an oil company but also propels our aspirations in the gas sector. Our focus on cleaner energy is unwavering, and we are dedicated to shaping the future of energy in Africa by championing policies and initiatives that promote sustainability.

We recognize the importance of establishing a robust national energy framework and are actively engaged in discussions to ensure the implementation of suitable policies and ecosystems to support the energy sector's expansion. We firmly believe that indigenous companies like ours play a crucial role in securing Africa's energy future and spearheading the shift toward more sustainable energy sources. ■

John Anim

Managing Director
PLATFORM PETROLEUM LIMITED

Can you provide an overview of Platform Petroleum's assets and operations?
In 2002-2003, Platform Petroleum successfully secured a bid during a marginal field bidding round initiated by the Federal Government of Nigeria, which led to the award and subsequent development of the Egbaoma marginal field (formerly Asuokpu/Umutu marginal fields). The field had been discovered by Shell as far back as 1977 but remained undeveloped due to various challenges, including their small size and remote location without nearby facilities. However, with our collaborative efforts and financial backing from shareholders and a partner, we were able to overcome these challenges, develop the field and commence production in 2007. Since then, we have consistently managed and operated the field, exceeding our initial production estimates through a 60/40 JV partnership with Newcross Petroleum. Our cumulative production has surpassed 12 million barrels of oil and 100 billion standard cubic feet of gas, surpassing the initial reserve estimates. The successful drilling of new wells and workover of existing wells have contributed greatly to increased production and optimum field development over the years, thereby creating value for all stakeholders.

What challenges have you faced in commercializing gas in Nigeria?
Firstly, there is a lack of adequate gas infrastructure, including pipelines, which makes transporting gas to consumers challenging and costly. Additionally, the terrain in which our fields are located presents logistical difficulties, further complicating the development and transportation of gas. Despite these challenges, recent developments in the gas market offer promising opportunities for growth and investment. For example, the completion of a major trunk line reduced the distance to transport gas from our fields, making it more economically viable.

Have you seen any positive developments or legislative changes regarding gas commercialization?
There have been significant positive developments in the gas sector, including legislative changes aimed at promoting gas utilization and investment. These changes have created a more favorable environment for gas commercialization, with increasing demand for gas in both domestic and international markets.

What are Platform Petroleum's priorities for future growth?
Platform Petroleum has played a significant role in Nigeria's local content ecosystem, particularly in terms of acquiring and developing divested assets from major international oil companies. Moving forward, our priority is to continue expanding our portfolio. We are actively pursuing opportunities for investment and collaboration with other companies to further develop our assets and maximize value. We have several asset development projects in the pipeline with plans to start production by 2025, further solidifying our presence in the market.

We see bigger opportunities on the horizon and, as a small company, we cannot fully leverage our position to take advantage of them. Therefore, we are actively seeking partnerships with local and international investors, so that Platform Petroleum can transition from a successful but relatively small independent to the higher leagues of large indigenous independent producers. ■

Samuel Alabi

Chairman and CEO
SEVEN OCEANS OIL AND GAS

Can you introduce Seven Oceans Oil and Gas and give an overview of how the company fits into the Nigerian oil and gas ecosystem?
Seven Oceans Oil and Gas (SOOG) was incorporated in 2009 with the vision to be a leading provider of affordable, reliable and sustainable energy and related services in West Africa in the medium term, and globally in the long term. The company started by providing logistical support to IOCs and then expanded its portfolio to also include energy infrastructure security services. We then developed our downstream trading and retail expertise and started to operate retail stations under the NNPC franchise, such as the mega gas station in Yenagoa, Bayelsa State. In 2020, our E&P arm together with our strategic partners participated in the competitive bidding round for the marginal fields where we were successful. We are currently developing our asset with first oil due in 2025. Today, we cover the energy value chain through upstream activities, such as the production of crude oil and natural gas, midstream activities such as refining and petrochemicals, downstream activities such as trading and retail of refined petroleum products and natural gas, as well as logistics and services activities such as vessel operation and management. We are a growth stage and forward-looking energy company, eager to take on challenges and leverage opportunities in Nigeria and beyond to drive inclusive economic growth, shared prosperity, and sustainable development.

What opportunities and challenges lie in the downstream gas sector?
SOOG's downstream engagement will be focused on transition energy products such as CNG and LPG. The company's strategy is to take on the 'Decade of Gas' challenge, and we are actively participating in infrastructure development and deploy mobile stations for CNG and LPG to enable gas utilization across Nigeria.

The main challenge in the downstream gas sector is that there is an infrastructure deficit as the pipelines do not cover the entire country. SOOG is working closely with foreign and local partners to design technologies and ways that will enable us to move products to last mile places where it is most needed.

A second challenge is public perception as gas is not widely accepted and is not completely understood by society. The government and the private sector need to work together to promote the adoption of gas by educating society on the benefits of gas and removing unfounded fears that exist around this product.

What are SOOG's objectives for 2024 and beyond?
SOOG is currently focused on playing our part in contributing to improving Nigeria's crude oil and gas production capacities by bringing on-stream our gas asset, expanding our downstream network of stations, and improving our midstream service capabilities such as by adding aerial surveillance to our security offerings. ■

Austin Avuru

Executive Chairman
AA HOLDINGS

Can you give us an overview of AA Holdings and its purpose?
AA Holdings is a proprietary investment company that oversees the assets of my family, which include investments in oil and gas, real estate, agriculture and selected equity investments. In the oil and gas sector, our focus remains primarily on upstream activities, with an eye on midstream ventures, particularly gas processing and domestic distribution to power plants and industries. We foresee significant growth in Compressed Natural Gas (CNG) demand locally and currently, one of our portfolio companies, Platform Petroleum, is looking to expand into that space.

What is your analysis of the current state of Nigeria's upstream sector?
The upstream sector in Nigeria is currently undergoing a challenging transition. 10 years ago, there were clear signs that multinational companies, which had been operating in the country for 60 years, were gradually withdrawing from onshore and shallow water operations. This transition should have been smoother. Regulators needed to identify capable entities to take over and ensure a seamless transition, but that did not happen. As a result, we have witnessed a period of 5 to 8 years where multinational companies have been withdrawing, and independents have been gradually taking over. If we examine the production figures, with about 1.3 million bpd, excluding 600,000 bpd from deepwater, we are left with only 700,000 bpd from onshore operations. This is a significant decline from the previous level of 2 million bpd. As these transactions settle and independents take charge, I anticipate a surge in new investments by these independent companies. It is conceivable that onshore and shallow water production could reach 4.5 million bpd, possibly in the near term.

Are marginal field producers pivotal to Nigeria's future oil production?
Marginal field producers play an essential role in capacity development for independents to evolve into major players. While their individual contributions may be modest, the experience gained contributes to the growth of indigenous companies, as seen in the transition from marginal to significant operators like Platform Petroleum.

What obstacles exist in achieving regional inter-African energy supply chains?
The primary obstacles lie in governmental involvement, as seen in previous infrastructural projects hampered by political issues. However, the private sector is poised to drive such initiatives. By fostering willing buyer-seller relationships, commercial ventures can transcend governmental hindrances. For instance, the West African Gas Pipeline project has faced challenges due to political disagreements among the governments involved, highlighting the need for private sector-driven initiatives. Nonetheless, the potential benefits of regional energy supply chains and inter-African energy trading far outweigh the challenges, making them worthwhile endeavors for sustainable energy development in Africa.

What are AA Holdings' priorities in the coming years?
AA Holdings will continue investing in the energy sector, particularly in partnership with our portfolio companies. Additionally, we will expand our agricultural ventures within Nigeria. Overall, AA Holdings remains dedicated to pursuing opportunities that drive sustainable growth and create value for stakeholders. ■

> *Despite attempts at amnesty programs, the proliferation of arms and the lure of profits from illegal activities have sustained the cycle of violence and insecurity, further complicating efforts to restore stability and security in the region.*

Cheta Nwanze, Lead Partner,
SBM Intelligence

<< 31

ing future raw material import costs, which makes financial planning and budgeting more complex," said Walter Ojimba, CEO of Craigwal Petroshore Limited.

This sentiment was echoed by many in the industry, though there is also a sense that it has been a great equalizer, as nobody has been spared. "Currency fluctuations have indeed affected everyone. Initially, we thought that having income primarily in dollars would shield us, but it has had knock-on effects and increased OpEx and the cost of doing business," said Thelma Chukwu, managing director of Telmek Global Resources.

For the companies that manage to reduce their currency exposure, they may still struggle to raise capital from financiers who themselves are struggling with currency fluctuations and the fuel subsidy removal, evidenced by prominent credit ratings agencies downgrading the rating of several Nigerian banks in 2024. "Securing funding remains a significant challenge. Banks are hesitant due to past bad loans in the oil sector, which creates sectoral limits and complicates financing for oil and gas service companies like ours," said Henry Okolie-Aboh, managing director, Westfield Energy Resources.

Security

Nigeria's service providers are largely based in the Niger Delta, a prolific, oil-rich geological area that has been the center of Nigeria's oil and gas industry since Shell first pumped oil there in the 1950s. Despite the vast fortunes that have been made in the region, this wealth has not been distributed equitably, and the ecological destruction that was part and parcel of the oil and gas industry in its early days has sown the seeds for historic mistrust, resentment, and armed conflict between locals and producers. As Ikenna Oranye, CEO of GCA Energy explained: "Insecurity in the Niger Delta, crude oil theft, and the attendant oil spills have caused a significant reduction in production volumes for our clients, a key underlying cause for Nigeria not meeting its OPEC+ production targets in recent years."

Insecurity is a problem faced by operators across the value chain, from producers to service providers. Chike Uchendu, managing director of Future Oilfield Services Limited, an oilfield services company with a footprint in Port Harcourt, Warri and Lagos, said: "A particular challenge for our industry in Nigeria has been security concerns; the cost burden of security measures can sometimes account for 40% of total project costs."

Though the IOCs have decided that offshore production mitigates risk, security issues remain, and for some offshore service providers, it has resulted in a boom in demand as IOCs ramp up their deepwater activities. "The Gulf of Guinea has recently experienced a significant shift towards maritime security, characterized by increased awareness and proactive measures to combat ever-evolving maritime security risks plaguing the region," said Bassey Alorye Adie, managing director of Loyz Marine Services Limited.

Piracy in the Gulf of Guinea has been a longstanding concern for operators, impacting the entire West African littoral. The International Maritime Bureau Piracy Reporting Centre reports that between January and March of 2024, six ships were boarded in the Gulf. "Key industry players have responded by deploying security personnel strategically and implementing dedicated security measures, resulting in a notable reduction in operational risks within the maritime domain," continued Adie.

Despite increased operator efforts to reduce pipeline theft, there are still significant challenges to overcome to make a dent in the estimated 400,000 barrels of crude oil lost to theft and vandalism in Nigeria daily. According to Maxwell Oko, Eraskorp's group CEO, simply increasing patrols and security personnel is unlikely to solve the root cause of the issue: "I believe in implementing contracts that hold security contractors accountable through financial penalties for any breaches. This approach aims to prevent compromises involving operators, government entities, and security contractors. It is essential because Nigeria faces significant challenges, including non-OPEC quota theft facilitated by collusion along supply chains."

Ultimately, for Nigeria's indigenous operators to reap the full benefits of their newly acquired assets, the security challenges that have plagued Nigeria's oil-producing states for decades will have to be finally solved. "The Petroleum Technology Association of Nigeria (PETAN) advocates that authorities should look more into oil and gas evacuation on land and in swamp environments as the cost of production in these environments is approximately 20% of the production costs offshore. The onshore assets in Nigeria are nearly 100% owned by Nigerians - 55% by the government and 45% by indigenous exploration and production companies – and as onshore production is less expensive, margins are higher, and it is here where there will be the largest profits for the country," said Wole Ogunsanya, chairman, PETAN.

Service providers

Beyond increased offshore security services, others in the industry have witnessed an uptick in demand for various offshore services. Anamelechi Onwuegbu, country director in Nigeria for Kavod Offshore, a company that supplies DNV-certified offshore containers, baskets, racks, and tanks for the transportation of equipment offshore, said: "As offshore activities intensify, our role becomes increasingly crucial in facilitating the movement of tools and equipment while mitigating associated risks."

A flurry of sales of IOC assets to homegrown companies has resulted in a proliferation of marginal field operators and new, Nigerian independent E&P companies. Saddled with aging pipeline and well infrastructure built by the IOCs decades ago, onshore oilfield service providers are also experiencing heightened demand. "We envision playing a pivotal role in supporting the growth and development of marginal field operators, as they are the future of Nigeria's energy landscape," said Nelson Kosile, managing director of Ikosh Nigeria.

One of Nigeria's most important geological attributes is the abundance of relatively small but easily accessible hydrocarbon reserves, allowing for marginal field operators to proliferate. There are also challenges associated with the transition, however. According to Kayode Thomas, CEO of Substrata Oil and Gas: "While the empowerment of local players is commendable and fosters indigenous participation in the sector, the transition has presented challenges in terms of operational efficiency and asset management."

As sub-Saharan Africa's most mature energy industry, decades-old infrastructure presents a unique opportunity for oilfield service providers. Future Oilfield Services Limited's Uchendu said: "We have built our business around overcoming Nigeria's onshore/offshore technical challenges. Aging infrastructure in many oilfields presents significant technical hurdles, as these facilities were designed decades ago and are not equipped to handle current production demands."

Another source of demand in the industry has been for green-proofing services, as legislation and global pressure have caught up with the oil and gas industry in Nigeria. Once a prolific gas-flaring country, the government launched its Nigerian Gas Flare Commercialization Programme to combat this ecologically and economically wasteful practice. Spearheaded by the IOCs that operate in the country, including TotalEnergies, which in February 2024 became the first IOC in Nigeria to eliminate routine flaring, others in the industry have followed suit, across the value chain. The rush to eliminate flaring by the 2030 government deadline has also created opportunities for Nigeria's service providers. "One of the areas we are particularly enthusiastic about is our sustainable energies division, which focuses on converting flared gas into environmentally friendly products, specifically gas to methanol solutions," shared Kayode Adeleke, CEO of RusselSmith, a technology and oilfield services provider.

The embrace of sustainable practices and principles is being replicated across the industry. Chinwe Uchendu, executive director and chair of the board of directors at Poseidon Energy Services, said: "The need for filtration services has grown as operators prioritize environmental sustainability and regulatory compliance." ■

Olanrewaju Kalejaiye

CEO
ND WESTERN

Can you introduce ND Western and outline its assets?

ND Western was created in 2011 as a special purpose vehicle (SPV) to acquire some of Shell's assets in Nigeria, specifically in OML 34. The company was formed by a consortium including Aradel Holdings, First E&P, Waltersmith and Petrolin Group. The asset has five different fields: two gas fields, Utorogu West and Utorogu East, and the Warri River oil fields. Despite their age, they still have substantial value, with about 360 million barrels of crude reserves and two trillion cubic feet of gas reserves. However, the maturity of the fields brings challenges such as increased water, sand breakout, and aging facilities, requiring extensive maintenance to ensure safe and reliable operation.

Can you share more on ND Western's involvement in the Renaissance Consortium?

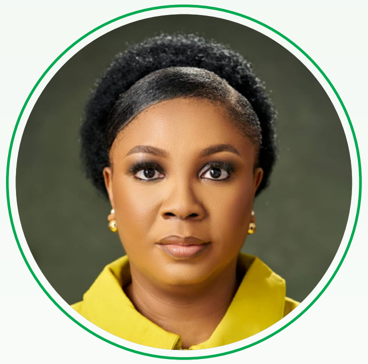
ND Western is the lead on the Renaissance opportunity. Since we successfully used the SPV model to acquire OML 34, we replicated this model with Renaissance, involving the same partners, to acquire the remaining Shell assets in the Western Niger Delta. We are at the final stages of technical and commercial evaluations, seeking government approval to finalize the acquisition.

Could the IOC onshore and shallow water divestment process could be smoother?

Absolutely, the process could be smoother and quicker. While we understand the government's need for due diligence in asset transfers, delays hinder investment and negatively impact production. Both the seller and the buyer are unable to invest during these delays, causing production to decline.

What opportunities do you see in the gas space?

ND Western is fundamentally a gas company, focused on getting gas to market to power the economy. We are the second-largest gas supplier in Nigeria and aim to double our gas production. We have embarked on facility maintenance and infield drilling to increase gas flow to the market. ■



Chichi Emenike

Acting Managing Director
NECONDE ENERGY

Can you give an overview of Neconde Energy and the company's operations in Nigeria?

Neconde Energy (Neconde) is a leading independent oil and gas company in Nigeria and is the JV owner of the OML 42 asset. This asset was acquired from Shell approximately 12 years ago and significant resources and capital were deployed into a rehabilitation program. We have been working on increasing production to about 35,000 bpd. In addition to oil, OML-42 has approximately 3.8 Tcf of gas resources that are planned to be developed towards delivering about 500 mmscf/d to domestic and international gas markets. In a joint venture with NEPL, Neconde is also rehabilitating and investing capital in gas infrastructure. The OML-42 asset has been supporting the domestic market since 2018 through the Escravos-Lagos Pipeline System (ELPS) with plans to put in more volumes by the end of 2024.

Today, Neconde has four producing fields and as an indigenous company, our operations offer a viable option through which the currently under-developed reserves of the Niger Delta could be brought into exploration with attendant potential economic and social benefits for the region and country at large. There is also the opportunity to utilize the associated and non-associated gas produced for more domestic use, resulting in significant socio-economic benefits.

What are the challenges and opportunities of operating in Nigeria?

The main challenges are hinged in the area of the ease of doing business for the private sector. We need to look at the policy issues, forex exchange mismatch, multiplicity of agencies and the plethora of fees that hound the business environment.

In summary, we have to invest in infrastructure, we have to ensure there is a bankable market, and we have to create an enabling regulatory environment that gives comfort to investors so that local integrated businesses can start to thrive and we can grow the oil and gas industry to its full potential. ■

Victor Sodje

Managing Director
NEWCROSS EP

Can you tell us more about NewcrossEP's OML 24 asset?

NewcrossEP is a wholly indigenous-owned entity, established in 2013 specifically for the acquisition of OML 24. We emerged as the successful bidder for this asset in 2014.

OML 24 is a prolific, producing asset with significant oil and gas reserves. Located in the Eastern Niger Delta, Rivers State, it covers approximately 162 km² of onshore terrain. The asset comprises three producing fields (Ekulama, Awoba Main, and Awoba North West), and boasts three flow stations with a production capacity of 130,000 bpd and 80 MMSCFD of gas processing.

What have been the main challenges for NewcrossEP as the operator of OML 24?

Our main challenge has been security, particularly regarding our pipeline network's integrity. We encountered issues with pipeline evacuation and experienced significant losses around 2022, reaching 100% at one point. To mitigate security risks, we have implemented alternative evacuation systems. Additionally, vandalism in the area poses environmental concerns, prompting us to focus on cleanup and restoration efforts. Furthermore, multiple taxation and overregulation burden our operations. These challenges, compounded by difficulties in securing funding, hinder our ability to run OML 24. Despite these obstacles, we remain committed to our mission of delivering sustainable energy solutions.

Can you discuss the potential opportunities in the gas sector and elaborate on any initiatives NewcrossEP is undertaking in this realm?

Currently, we operate a gas plant in our Awoba field location. This facility handles various gas processing activities. In alignment with Nigeria's 'Decade of Gas' vision we are actively engaged in initiatives like carbon capture. Our collaboration with experts is instrumental in this regard as it provides us the opportunity to monetize every molecule of gas we produce while ensuring minimal environmental impact. We are committed to achieving zero gas flaring ahead of the 2030 government deadline. ■

Ado Oseragbaje

CEO
HERITAGE OIL

Can you introduce Heritage Oil and highlight its assets and operations in West Africa?

Today, Heritage Oil's primary operating asset is the world-class OML 30 located in the Niger Delta region. OML 30 is owned by SNRL (45%) and NNPC Exploration and Production Limited (NEPL) (55%) with a subsidiary of Heritage Oil operating the asset on behalf of the JV partners. We also have an exploration license in Ghana where we hope to do exploration drilling in the next couple of quarters, and we have prospective exploration blocks in Papua New Guinea.

What are the challenges Heritage Oil has had to overcome with its OML 30 asset?

OML 30 is the anchor of the Western Delta of the Nigerian onshore oil and gas industry and is a collection of three main assets - eight oil and gas fields, the Ughelli Pumping Station (UPS), and the Trans Forcados Pipeline (TFP), which delivers all the hydrocarbons from the Western corridor to the Forcados Oil Terminal (FOT) for export. There is a series of approximately 14 assets that transport their crude via the TFP, which is part of the OML 30 asset infrastructure. Since we took over the operatorship of OML 30 in 2017, we have embarked on aggressive rehabilitation and upgrade of facility equipment, resulting in additional wells being opened and optimized for production.

What are Heritage Oil's priorities and strategy moving forward?

Heritage Oil will continue to be opportunistic as to new investments that we want to make. We have a five-year plan to double our production from current levels. In terms of our ESG strategy, we also aspire to eliminate flaring in our OML 30 operations over the next 12 to 18 months. We will drill our exploration well in Ghana, and hopefully with the success of that well, open a new chapter in the journey of the company. ■

Executive Insights on Nigerian Gas

"The removal of fuel subsidies by the government has had a noticeable impact on demand for LPG. Initially, there was hope that the subsidy would boost LPG usage, but that has not materialized. Gasoline prices are often lower than or equal to LPG prices, which does not incentivize a shift towards LPG."

Felix Ekundayo, Managing Director, **Asiko Energy**

"Natural gas is the future of this country. Unfortunately, government initiatives to promote the gas industry have not had the proper impact. The biggest obstacle to Nigeria's development is the lack of on-site production."

Joseph Ezigbo, Founder and Managing Director, **Falcon Corporation**

"NLNG has started to make more volumes available locally at a price index made just for the Nigerian market, but that price is still pinned against the dollar. Thus, even though LNG is produced and sold in the country, it is still being sold at a price that importers would have sold it at, and we are not seeing any value and arbitrage between what NLNG is offering and what the importers are offering."

Abisoye Adebayo, COO, **Gasland Nigeria**

"With global gas demand soaring, particularly evident in recent European supply disruptions, Nigeria is emerging as a pivotal supplier."

Julius Rone, Group Managing Director and CEO, **UTM Offshore**

"There is a pressing need for proactive measures to stimulate demand, underscored by the implementation of robust training and awareness programs. These initiatives are pivotal in fostering widespread acceptance and utilization of gas-based solutions across diverse sectors, ultimately propelling Nigeria towards its envisioned gas-centric future."

Tosin Thompson, Founder and CEO, **Mezovest**

"Nigeria is a volatile country, and our oil and gas industry does not have a good reputation internationally, making it difficult to raise capital to develop greenfield projects."

Michael Osime, Chairman, **AIPCC Energy**

Image courtesy of Tetracore Energy Group

Nigeria's Crossroad

The 'Decade of Gas' approaches its mid-way point

With over 200 Tcf of proven natural gas reserves, Nigeria is a natural gas giant, among the top 10 countries in proven reserves globally, and the top in Africa. For much of its hydrocarbon-producing history, gas has been a sideshow; while Nigeria's oil was pumped for export markets, the associated gas that was produced from the Niger Delta's prolific oil wells was flared off, at a great social and ecological cost. In recent years, the narrative and conversation around natural gas, its uses and advantages has changed. Global political debates on climate change, energy insecurity brought about by regional conflicts, and in Africa widespread energy poverty, have changed the commercial calculus on natural gas. Countries from the UAE to the United States are pouring enormous resources into expanding natural gas capacity and are reaping the benefits.

There are 600 million people lacking access to electricity in Africa according to the International Energy Agency, and 900 million without clean cooking facilities. Natural gas presents a historic opportunity for the continent. Nigeria's energy industry, spearheaded by government initiatives, has been at the forefront of warming up to gas and its economic potential. In 2021, the government of then President Buhari declared the 2020s as the 'Decade of Gas', signaling the Nigerian government's open embrace of natural gas production and exploitation.

Now approaching the mid-way point in Nigeria's 'Decade of Gas', the results have been mixed. On the one hand, federal and state governments have been slow to develop accommodating legislative frameworks, ineffective in improving the country's physical infrastructure, and have, at times, been paralyzed by internal and social conflict. There is also a dearth of natural gas exploration. The current administration, led by President Tinubu, has introduced reforms with very immediate and impactful consequences, including the removal of fuel subsidies and floating the naira on global currency markets. As IOCs have withdrawn from Nigeria's onshore, the federal government's slow approval of these sales has been extremely cumbersome, damaging the country's foreign investment climate.

> *We have found that people are eager to use LPG once it is available. Initially, there were concerns about safety and explosions, but the government has done a great job in raising awareness.*
>
> Oladimeji Edwards, Chief Executive, **Hyde Energy**

Despite these challenges, there is a palpable feeling among industry players that natural gas is Nigeria's fuel of the future. Throughout Global Business Reports' round of interviews across Nigeria's energy industry's value chain, natural gas was a hot topic, and many players have made significant forays into this sector. Nigerian companies are recognizing the role natural gas will play not just to boost export earnings, but also to materialize the country's longstanding desire to industrialize and provide access to energy for all of its population.

Despite the lofty ambitions of the Nigerian state, an assessment of the natural gas landscape in Nigeria mid-way through the 'Decade of Gas' is far more sobering than one would expect. Budgetary constraints and bureaucratic quagmire have resulted in lackluster state support for gas projects. "Nigeria has historically grappled with lengthy contracting cycles, averaging around 24 months, leading to cost discrepancies due to fluctuating prices," said Olumide Esan, partner and energy & chemicals Leader at Deloitte Nigeria.

In Nigeria alone, 100 million people lack access to reliable energy. Given the scale of energy poverty in West Africa and Nigeria, gas provides an intriguing opportunity. According to Joseph Ezigbo, founder and managing director of Falcon Corporation, a gas distributor currently constructing West Africa's largest LPG storage facility: "West Africa is generally starved of LPG and desperately needs more capacity. In our country there is still a rampant use of firewood for domestic use. Our LPG storage facility is part of a national effort to transition Nigeria's energy consumption towards gas."

Despite its abundant gas resources, of the four main cooking fuels—firewood, kerosene, charcoal, and LPG—LPG is the least used in Nigeria. Despite a five-fold increase in Nigeria's per-capita LPG consumption, Nigeria still lags far behind other West African nations like Ghana and Senegal, and significantly behind that of other developing nations like Egypt. "With a population of around 210 million and current consumption at 1.8 million metric tons, we see a huge gap compared to Morocco's 5.5 million tons of consumption with just 60 million people. The key is infrastructure. The use of more terminals and filling plants is increasing consumption, and as we deploy more infrastructure, we expect even higher usage," said Oladimeji Edwards, chief executive, Hyde Energy.

Despite the slow progress, some advancements in infrastructure improvement have been made, with the Nigerian National Petroleum Corporation (NNPC) expecting to complete the US$2.8 billion Ajaokuta–Kaduna–Kano (AKK) gas pipeline project in July 2024. The 614 km connection is expected to advance domestic and regional gas utilization for power generation and industrial use. "Despite the challenges, recent developments in the gas market offer promising opportunities for growth and investment. For example, the completion of a major trunk line reduced the distance to transport gas from our fields, making it more economically viable," said John Anim, managing director, Platform Petroleum Limited.

Emeka Okwuosa, the group CEO of Oilserv – the EPCIC company responsible for segment 1 of the AKK project – shared some of the challenges of the project: "Security is one of the main challenges we have to navigate as it can be dangerous to access certain areas without armed security personnel. We have had security challenges at the AKK project, but the federal government and the NNPC have fully supported Oilserv to provide security to allow the construction of the pipeline to continue safely."

The advantages of adopting gas in homes and businesses across the

Sopiribo Ideriah

Group Managing Director - West Africa
SLB

Can you outline SLB's presence in West Africa and provide an overview of its product and service portfolio?

SLB has been in West Africa for over 80 years, piloting many significant projects, including logging the first commercial oil well in Oloibiri, Nigeria. We have established ourselves as a cornerstone of the region's oil and gas industry, delivering value for our stakeholders across several key markets in West Africa. We have consistently adapted and enhanced our products and services. Our comprehensive range of solutions to the industry includes Digital & Integration, Reservoir Performance, Production Systems, Well Construction, and others.

Can you share some notable projects SLB is involved in and outline any recent trends in demand for SLB's services in West Africa?

One of our notable projects in West Africa was installing a special liner for Eni in the Baleine Field in offshore Côte d'Ivoire. This unique technology helped improve oil production in the area. The project was crucial and complex, but we successfully executed it using three of our cutting-edge products: Drill Plan, Advanced Liner Installation Planning Analysis, and Connect BHA.

As for recent trends, there is a growing demand for our services, particularly in the realm of digital solutions and performance optimization. In Nigeria, oil production companies are focusing on reviving the dormant shallow water fields. Recently, we installed a customized Production Express Facility on an offshore vessel for a customer, which enabled the safe restart of production after 22 years. This Facility is designed to process expected crude specifications and has been successfully installed and commissioned in several geographies, successfully achieving a full capacity of 10,000 bpd of production over the years.

What are the main challenges SLB faces when operating in West African markets?

One of the most prominent issues in West Africa is security. Certain regions face political instability and security threats, which can significantly impact our operations and the safety of our employees.

Logistics and supply chain could also pose a challenge, but with that, we are innovating and building local capacity to support our operations.

What are the most promising energy market opportunities in West Africa that SLB has identified?

The West African market has a huge untapped potential for gas. For many years, countries like Nigeria, Mauritania and Equatorial Guinea have continually flared gas resources that could have been harnessed in so many ways. With the current situation in Europe and the huge global demand for gas, it has become the next frontier for the West African market. Opportunities such as domestic gas and power supply, LNG, CNG, fertilizer plants, etc., present a huge untapped market that could sustain our presence in these regions for many years.

What are SLB's immediate priorities and objectives in West Africa?

Our focus on capacity development is also something we are proud of as a company. We are particularly involved in community engagement around STEM education to boost the growth of future science pioneers. ■

> *The energy sector tends to be cautious in adopting new technologies due to the critical nature of its assets. It requires extensive testing and validation before mainstream adoption to avoid any production downtime.*

Kayode Adeleke, CEO,
RusselSmith

> *As a refiner, you are also a gas producer. If the business environment was good, we would capture that gas for local use. This opportunity is currently not viable as we are today struggling to get feedstock for our 10,000 bpd refinery.*

Momoh Oyarekhua, Chairman,
OPAC Refineries

country are becoming increasingly hard to ignore, as Peter Gaius-Obaseki, partner at McKinsey & Company, explained: "For Nigeria specifically, the development of the gas industry kills two birds with one stone, as you are transitioning your fuel consumption to a cleaner source while also creating a viable pipeline for energy security as most of the power demand in Africa will be for gas power."

The shift towards gas as a transition fuel has been seen not just in Nigeria, but across the whole continent, with many IOCs prioritizing gas projects in their portfolios. "Natural gas plays a vital role in Africa's energy transition, with increasing prominence in our production mix. Africa's growing energy demands make gas development crucial for regional and global energy security," said Mario Bello, head of sub-Saharan Africa region, Eni.

Chevron Nigeria is another IOC that is looking to capitalize on the infrastructure it has built over the years, notably the ~700 km West African Gas Pipeline (WAGP) it developed in partnership with ECOWAS to supply gas from Nigeria to Benin, Togo, and Ghana. "CNL's gas strategy is to continue the journey we already started with Escravos Gas Plant, Escravos Gas-to-Liquids facility, and WAGP. CNL is looking to end routine gas flaring while building a profitable gas business through a portfolio of projects that fulfill the NNPCL JV's Domestic Gas Delivery Obligation, support the Decade of Gas and provide gas to the region via the WAGP," said Jim Swartz, chairman and managing director, Chevron Nigeria.

For the few energy industry stakeholders who are hesitant to jump on the gas bandwagon, the choice might be made for them, as the pressure from foreign investors and environmentalists mounts. "There is a trend of countries transitioning away from oil-fired engines or what is called 'Heavy Fuel Oil', especially considering global financial institutions sanctioning thermal power plants that are not gas-fired," shared Gaby Hanna, SVP - head of region Middle East and Africa, MAN Energy Solutions.

Though boosting natural gas production and consumption seems the obvious remedy, challenges abound. Falcon Corporation, like many companies in the energy sector that have undertaken large capital-intensive projects, has had to contend with extreme currency fluctuations in 2023/2024. Nigeria's reliance on imports for critical materials and equipment makes it particularly vulnerable to changes in the value of its currency. The country's reliance on imports reflects a lack of indigenous infrastructure. Samuel Alabi, chairman and CEO of Seven Oceans Oil and Gas, an Abuja based company with operations across up, mid and downstream, echoes the sentiments by many leaders across the private sector, that despite the government's statements, there are very serious physical impediments to developing Nigeria's gas sector: "The main challenge in the downstream gas sector is that there is an infrastructure deficit as the pipelines do not cover the entire country. To effectively enable gas utilization across the country, pipelines will have to be extended and there will be a necessity for gas stations every 200 km, which will require significant investment."

On a continent hampered by financing constraints, the answer to some is private-public partnerships, not only to unlock capital but also combat public perceptions on gas, as according to Alabi: "The government and the private sector need to work together to promote the adoption of gas by educating society on the benefits of gas and removing unfounded fears that exist around this product."

To overcome the high financial barriers to gas infrastructure during times of economic turmoil, some have taken a modular approach, which involves building out smaller, cheaper and dispersed infrastructure. One such example is the Kwale Gas Gathering (KGG) facility in OML, spearheaded by Nedogas in partnership with the Nigerian Content Development and Monitoring Board (NCDMB). "Modular approaches to gas monetization are becoming more prevalent due to the inefficiency of large-scale projects in regions with limited industrial infrastructure. For example, there are about 140 flare sites in the Niger Delta alone, and modular systems like the KGG help gather gas efficiently. This trend is likely to continue as modular solutions provide practical, sustainable methods to manage these scattered sites," said Emeka Ene, the CEO of the Oida Group –the parent company of Nedogas.

Ene and his partners take inspiration from regions like the Henry Hub in the USA, where gas infrastructure is well developed largely thanks to open access and network codes that allow for the integration of new infrastructure into existing networks. "To make further progress, it is essential to agree on standards and address bottlenecks in accessing major in-

50 >>

Olakunle Williams

CEO
TETRACORE ENERGY GROUP

Can you introduce Tetracore Energy Group?

We are an integrated energy company that has made significant strides in Nigeria over the past three years across the downstream and midstream sectors. Our focus has been on developing distribution infrastructure within the natural gas sector and supplying natural gas. We are proud to be one of the few companies actively trading natural gas to different industries, including power generation companies. Recently, we commissioned our small-scale LNG Atakabo project, which includes two phases of 5 mmscf/d each to deliver gas to industrial and power customers within Nigeria. We have expanded our operations to other countries such as Ghana and Equatorial Guinea. In Ghana, we hold the first virtual pipeline license and have signed an agreement to deliver up to 50 mmscf/d of natural gas from our portfolio through the West African Gas Pipeline to support power generating companies. In Equatorial Guinea, we are involved in small-scale domestic LNG supply projects aimed at serving local industries. Our goal is to expand the natural gas footprint not only in Nigeria but also in selected markets across the African landscape.

What are the obstacles to unlocking gas reserves in the upstream sector?

The cost of financing for African projects tends to be high and accessing capital can be challenging. Innovative solutions are necessary to address this issue and attract investment, particularly for initiatives focused on gas for industrialization. Finally, technology plays a crucial role. Improving production efficiency through technological advancements can help reduce costs and make projects more economically viable, particularly in regions like Ghana and Equatorial Guinea where our operations are expanding. Secondly, there is a significant need to develop human capacity. Despite Africa's vast natural resources, translating these reserves into economic growth requires skilled personnel.

How does Tetracore develop human capacity within the company?

The launch of Tetracore's graduate management training program is designed to engage young individuals throughout the entire gas and power value chain, renewables energy, innovative energy technology, behavioral and soft skills, and business management skills. Tetracore's training program will consist of intensive in-class sessions, fieldwork to power plants, midstream processing facility and behavioral and soft skills development exercises.

Where do you see the greatest demand for gas within Nigeria?

Currently, only about 7% of our gas production is utilized for manufacturing purposes, which underscores the urgent need for industrialization. Transforming Nigeria's economy to an industrialized powerhouse requires access to energy, which we possess abundantly. Developing industrial parks, like in Edo State, have shown promising results by attracting multiple industries and enhancing power generation capacity. Projects like the Ajaokuta-Kaduna-Kano (AKK) pipeline have the potential to stimulate industrial growth and drive demand for natural gas.

What are Tetracore Energy Group's priorities for the next year?

In the coming years, we anticipate achieving significant milestones, including the completion of critical CNG projects and the expansion of gas supply to industry. Our collaboration with upstream suppliers and producers will enable us to unlock gas assets and support our downstream operations in Nigeria and other African markets. ■

EO

CE

Emeka Okwuosa and Chuka Eze

EO: Chairman and Group CEO
OILSERV
CE: Managing Director
FRAZIMEX ENGINEERING

What have been the main developments for Oilserv over the past few years?

EO: Oilserv was founded in 1992 and is a leading oil and gas EPCIC company providing innovative solutions to the Nigerian energy industry. Our project portfolio includes NNPC's AKK Gas Pipeline Project, the longest gas pipeline in Nigeria at 614 km. Oilserv has the responsibility to deliver segment 1 of this project which comprises a 40-inch x 303.4 km main line, a 24-inch x 15 km spur line, 12 block valve stations, an intermediate pigging station, and two terminal gas stations. Oilserv was also the EPC contractor on the Assa North-Ohaji South 36-inch x 23.3 km gas pipeline project; the EPCIC contractor on the 12-inch x 27 km gas transmission pipeline system and gas treatment plant to efficiently supply metered gas to the GPAL Independent Power Plant at Osisioma, Abia State; and the 18 inch x 128 km South-South gas transmission pipeline system for Ukanafun in Akwa Ibom State to Unicem plant at Calabar, Cross River State.

Can you give an overview of Frazimex Engineering and how it fits into the Oilserv Group?

CE: Frazimex Engineering Limited is a strategic business unit specializing in engineering services ranging from concept design, basic design, front-end engineering design, and detailed engineering. Frazimex has performed these services for many Oilserv projects, and is strategically positioned to provide engineering services for other companies.

What are the main challenges Oilserv has faced in Nigeria in 2024?

EO: Security is one of the main challenges we have to navigate as it can be dangerous to access certain areas without armed security personnel. Transmission line construction projects require significant funding and access to capital can be a great challenge. Regulatory uncertainties are also a challenge.

How can the government and industry players ensure that Nigeria's pipeline infrastructure is robust?

EO: To ensure the sustainability of gas infrastructure, the introduction of new technologies is critical, and we are deploying solutions such as fiber optic monitoring technologies to monitor lines and report any intrusions to the nearest control station. A quick response time to infringements is also critical to minimize losses. We are also deploying Horizontal Directional Drilling (HDD) technology to increase the depth of the pipeline to make it more difficult and less attractive for people to vandalize it. It is also critically important to foster good relationships with the communities, take care of their needs, and engage them in the projects so that they see themselves as contributing to the national development, and in return, will help to safeguard the facilities and infrastructure.

What are Oilserv's priorities and growth strategy for the coming years?

EO: Oilserv is aggressively developing our gas business under our subsidiary FrazEnergy, which specializes in gas-to-energy, gas-as-a-service, and flare capture and utilization. We are also expanding our operations with our subsidiary Crown Energy, which specializes in inspection services and non-destructive testing utilizing AUT (automated ultrasonic testing) technologies. ■

Emeka Ene

CEO
THE OIDA GROUP

Can you introduce the Oida Group and outline your operations in Nigeria?

Previously known as Oildata Wireline Services, Oida Energy pioneered Oil and Gas well-intervention in the upstream service sector in Nigeria. Over the years, we diversified into natural gas processing with our subsidiary Xenergi, focusing on modular energy solutions to efficiently flare-out and monetize gas flares. We successfully flared out gas, produced marginal fields and implemented remote well intervention projects in various locations both in Nigeria and in places like offshore Ghana and the Mumbai High offshore basin in India. We have supported marginal fields, providing technical services and solutions to bring these fields to production, particularly by introducing modular Early Production Facilities.

Additionally, we have contributed to infrastructure development in special economic zones, which is crucial in Africa where infrastructure deficits limit trade.

Can you elaborate on the Kwale Gas Gathering (KGG) facility and its significance?

The KGG project, led by Nedogas (a subsidiary of Oida), is a unique partnership with the Nigerian Content Development and Monitoring Board (NCDMB). This project helps monetize stranded gas resources by creating an open-access hub, allowing operators to avoid replicating infrastructure. This approach significantly reduces the time to market.

Modular approaches to gas monetization are becoming more prevalent due to the inefficiency of large-scale projects in regions with limited industrial infrastructure. For example, there are about 140 flare sites in the Niger Delta alone, and modular systems like the KGG help gather gas efficiently.

How do you assess Nigeria's progress in exploiting and monetizing its gas resources?

I think there are many positive developments. There is a stronger will from the government and operators, including the NNPC, to pursue and unlock gas resources. Gas is seen as the energy of the future. While oil will still be present, gas is cleaner and has a more diverse economic impact, affecting sectors like petrochemicals, power, manufacturing, and agriculture.

The PIA was introduced to create separate fiscal regimes for gas, encouraging investment. The PIA is still being understood in terms of its practical application. However, the NNPC has been proactive in unlocking gas resources, as evidenced by the proposed FLNG projects.

To make further progress, it is essential to agree on standards and address bottlenecks in accessing major infrastructure, such as trunk lines. There is a tendency to duplicate infrastructure like pipelines unnecessarily instead of tieing into existing infrastructure. This approach is inefficient both from an engineering and economic perspective because we are dealing with one market, one country, one industry, and one industrial sector that should be coordinated.

What is Oida's vision?

Collaborating across borders is central to our strategy, and we will continue to engage with key players in frontier African markets. Partnerships with entities like the NCDMB and private investment banks have bolstered our credibility. Looking ahead, we aim to expand such partnerships and explore innovative financing models to support future projects. ■

Owuze Nwuche

CEO
MONTEGO ENERGY

Can you introduce Montego Energy?
Montego Energy (Montego) started in 2011, primarily focusing on energy solutions in sub-Saharan Africa. Initially, we specialized in well servicing and later expanded into EPC. Currently, our focus lies in engineering, designing, building, operating, and maintaining energy facilities across West and sub-Saharan Africa, with plans to own these infrastructures.

What are Montego's opportunities and expansion plans across Africa?
For Africa's western coast, the markets that are interesting include Côte d'Ivoire and Senegal with new gas developments. We are also seeing interesting opportunities in Namibia as well.

What are the main challenges currently faced by companies like Montego in Nigeria?
The main challenges facing indigenous companies in Nigeria revolve around investment and deal flow. Investment is crucial, and the lack of prompt approval for certain investments significantly affects deal flow. This unpredictability makes it difficult for service providers to forecast and invest in R&D and their assets. Additionally, currency fluctuations and economic volatility in Nigeria further complicate the situation. The market's current state, with limited growth and fewer development opportunities, exacerbates these challenges. Competition is fierce, and the market is not growing much, which limits exploration and development opportunities. The contracting process is also lengthy and requires patience.

Do you expect recent policy changes to reverse declining investments in Nigeria's energy sector?
Competing globally, particularly against renewables for funding, poses a significant challenge. Securing investment to increase production amidst varying tax and production regimes further complicates Nigeria's competitiveness. While I cannot predict the future, I remain cautiously optimistic about gradual improvements rather than quick fixes.

What ESG initiatives is Montego implementing?
We have focused on initiatives like investing in STEM education and other community programs. We are committed to sustainable development by developing and investing in renewable energy projects such as solar. We implement efficient resource management practices to minimize waste and reduce our environmental footprint. Partnering with local communities allows us to understand their needs and concerns, ensuring our projects provide tangible benefits. We foster a safe and inclusive work environment that promotes diversity and equal opportunity, adhering to the highest health and safety standards to protect our employees, contractors, and local communities. Our strong ethical framework and governance structure ensure transparency, accountability, and integrity in all our operations.

What are Montego's next steps and priorities?
Our next steps involve expanding our operational footprint across Africa, focusing on infrastructure ownership as a sustainable model. We aim to enhance our project capabilities and contribute significantly to the energy sector's development in the region. ■

Walter Ojimba

CEO
CRAIGWAL PETROSHORE LIMITED (CPL)

What services does Craigwal Petroshore Limited offer?
I founded Craigwal Petroshore Limited (CPL) in 2016. Recognizing the industry-wide struggle with alternative evacuation, storage systems and custody transfer due to transport line disruptions, CPL seized the opportunity to innovate and provide companies with a technologically advanced method of alternative evacuation and storage system. With a background spanning drilling, production, facility/asset management, and crude oil sales, CPL aims to excel in various segments of the value chain. -

Can you describe how you overcame challenges in entering the industry?
One of the most notable challenges was the scarcity and poor quality of essential equipment, such as LACT units, metering skids, flowmeters, hoses, etc. This hindered our initial efforts to implement alternative evacuation solutions effectively. To overcome this obstacle, we leveraged our engineering expertise to innovate and develop solutions that circumvented the limitations posed by inadequate equipment. Additionally, we forged strategic partnerships with reliable suppliers to ensure a steady and reliable supply chain.

How are you managing the current currency fluctuations?
Diversifying suppliers by sourcing raw materials, products, and spares from countries with more stable currencies reduced the exposure of our business to exchange rate fluctuations.

What steps can the Nigerian government take to support indigenous service providers?
Collaboration between the government and major industry players is crucial in enhancing competitiveness in Nigeria's oil and gas sector. Measures such as ensuring stable pricing mechanisms and currency stability can significantly support service providers like us by providing a conducive business environment for planning and investment. Additionally, initiatives aimed at promoting local content development, technological advancement, and infrastructure improvement can further bolster the industry's competitiveness and support service providers in delivering efficient and reliable services.

Additionally, the government should step up the implementation of the Nigerian Upstream Petroleum Measurement Regulations, 2023, in line with the Petroleum Industry Act, 2021, which amongst other objectives, seeks to ensure accurate measurement of hydrocarbons as a basis of the calculation of petroleum revenue accruable to the Government.

The new focus on gas has increased interest in flare gas reduction, benefiting industries like electricity production and fertilizer manufacturing.

The challenge lies in the existing pipeline infrastructure, which was built long ago. Implementing a clamp-off system introduces a margin of error. Companies are now incorporating bypass lines for alternative evacuation and offshore storage before expanding their metering units to mitigate this. New locations will necessitate new technology, and that is where we are focusing our efforts.

Do you have a final message?
The Nigeria Extractive Industries Transparency Initiative (NEITI) report revealed that Nigeria lost 42.25 million barrels of crude oil valued at US$2.77 billion to oil theft in 2019. We emphasize the importance of crude oil measurement and accounting, while ensuring oil is efficiently transferred. This ensures shareholder value and maintains environmental sustainability and market stability. ■

Nelson Kosile

Managing Director
IKOSH NIGERIA

Can you introduce Ikosh Nigeria?
Ikosh Nigeria was initially founded in 2013 with construction as our focus, but we relaunched in 2016 with a renewed focus on oil and gas. We have experienced substantial growth, evolving from a small team of four to a team of 39 professionals. We continue to expand our operations and seek to attract top-tier talent to propel our growth trajectory further.

Over time, we recognized the immense potential within oil and gas, shifting our focus to cater specifically to the oil and gas sector. This transition allowed the company to leverage its expertise and resources effectively, positioning itself as a formidable player in the energy market. We offer a comprehensive range of services tailored to meet the need of clients in the oil and gas sector, including a partnership with Emerson, which allows us to offer world class products. Our services include procurement, engineering consulting, and innovative solutions aimed at enhancing operational efficiency and reliability. The demand for our services remains consistently high, driven by the evolving landscape of the industry. Clients depend on our expertise to navigate complex challenges, optimize processes, and achieve growth in a competitive environment.

How do you cater to both major oil companies and marginal field operators?
Ikosh Nigeria adopts a versatile approach to cater to the needs of both major oil companies and marginal field operators. The company recognizes the importance of fostering strong partnerships with industry stakeholders, regardless of their scale or prominence. We envision playing a pivotal role in supporting the growth and development of marginal field operators, as they are the future of Nigeria's energy landscape. Addressing these operational challenges is crucial for unlocking the full potential of these operators and driving sustainable growth in the energy sector. The company aims to align its vision with the objectives of its clients, offering tailored solutions and services to facilitate their success and contribute to the overall advancement of the sector.

What are some of the challenges faced by businesses operating in Nigeria?
Businesses in Nigeria grapple with various hurdles, particularly in procurement and currency fluctuations, which significantly impact their operations. Additionally, taxes are burdensome to the industry, affecting profitability and hindering growth opportunities.

What are Ikosh Nigeria's ambitions for the future?
We want to expand our footprint in the energy sector and are actively pursuing licensing opportunities that align with our strategy. Additionally, it is important to optimize our existing operations, streamline processes, and leverage technology to drive productivity and profitability. The company's growth strategy encompasses diversification of services, strategic partnerships, and investment in talent and technology. Ikosh Nigeria harbors ambitious goals for the future, envisioning itself as a comprehensive solution provider in the energy sector. The company aims to expand its operations into production and refining, leveraging cutting-edge technology and strategic partnerships to enhance its capabilities. By positioning the company as a one-stop shop for energy-related services, we seek to capitalize on emerging opportunities, drive innovation, and solidify its position as a market leader. ■

Henry Okolie-Aboh

Managing Director
WESTFIELD ENERGY RESOURCES

Can you outline Westfield and tell us how you serve the local oil and gas sector?
Westfield Energy Resources is an integrated energy services and solutions provider operating across the entire upstream oil and gas value chain. Our primary focus is on offshore and onshore pipeline projects.

What are the main projects you are currently undertaking?
Currently, our flagship project is the engineering, procurement, construction and installation of subsea umbilicals, risers, and flowlines (SURF) for the OML 83 (Anyala Field) and OML 85 (Madu Field) development project, where we successfully completed a 21 km 10" production pipeline, 21 km 10" associated gas pipeline and a 6.1 km 8" water discharge pipeline for FIRST E&P. Additionally, our 290-man accommodation and pipelay barge with a 120-ton tensioner, 300 ton Huisman pedestal crane and 1,400 sqm free deck area is currently engaged in green energy projects with West African Ventures.

What opportunities do you see for Westfield Energy Resources?
There are substantial opportunities within Nigeria, particularly with tenders such as Chevron's pipeline and HES projects. Internationally, we have successfully secured a project in India and are also exploring opportunities in other African countries like Côte d'Ivoire and Mozambique. ■

<< 44

frastructure, such as trunk lines. There is a tendency to duplicate infrastructure like pipelines unnecessarily instead of developing existing successful infrastructure. This approach is inefficient from both an engineering and economic perspective because we are dealing with one market, one country, one industry, and one industrial sector that should be coordinated," continued Ene.

The benefits of exploiting Nigeria's vast gas reserves are multi-faceted, and private players across the industry are pursuing domestic, regional and global market demand for their product. UTM Offshore is one of these companies and is currently developing Nigeria's and Africa's first indigenous-owned FLNG project. Julius Rone, UTM Offshore's group managing director and CEO said: "With global gas demand soaring, particularly evident in recent European supply disruptions, Nigeria is emerging as a pivotal supplier."

The development of gas assets has become so attractive in the industry precisely because of the pent-up demand that exists for natural gas across different markets. In addition to the high value export market for LNG to resource hungry markets like Europe, there are other incentives closer to home. Rone continued: "Once we achieve self-sufficiency in LPG, we can explore opportunities to export surpluses to neighboring countries."

Before gas players look to export their surpluses across West Africa, they should look to the enormous pent up demand within Nigeria. Abisoye Adebayo, COO of Gasland Nigeria, a prominent indigenous LPG distributor, said: "There has been exponential growth in the use of LPG in Nigeria, and over the past 10 years we have seen country's usage increase from approximately 200,000 metric tons annually to about 1.4 million metric tons in 2023."

Despite this observable trend, Adebayo added that in addition to the sub-par pipeline infrastructure, other obstacles limit the country's gas sector: "A challenge limiting the adoption of LPG in Nigeria is poor road infrastructure making it hard to transport products."

The scale of Nigeria's domestic market for gas, and the demand that exists for gas, is underestimated by official figures. According to Savannah Energy's managing director Pade Durotoye: "A significant portion of this demand is met by decentralized, off-grid sources, primarily diesel and petrol generators. This reliance on inefficient and polluting energy sources underscores the need for a transition to cleaner alternatives, such as gas."

Industry players are leveraging their experience in natural gas to engage with the authorities and implement their gas dreams. Tosin Thompson, founder and CEO of Mezovest, a Nigerian LPG and CNG player, shared his company's approach: "Partnering with the government, we aim to drive CNG adoption for vehicle and electricity generation through infrastructure development and demand stimulation."

Executive orders introduced by Tinubu's administration in March, including tax credits for gas greenfield developments and other measures to promote the commercialization of gas, have been welcomed by the industry. "The recent introduction of executive orders aimed at facilitating negotiations for commercial terms in gas development is a positive step forward," said Abiola Ajayi, managing director of Energy and Mineral Resources (EMR).

This comes on top of the provision of the Petroleum Industry Act (PIA) that sought to incentivize gas utilization and infrastructure construction. "Our subsidiary company, FrazEnergy Limited, is collaborating with the sponsors of Riverside LNG on a Build, Own, Operate model to develop the pipeline that will transport gas from the producers to the LNG plant. This initiative aligns with the new provisions of the PIA, which grants a Gas Transport Licensee rights to establish and operate natural gas transportation pipelines along a defined route, based on a tariff system," said Chuka Eze, managing director, Frazimex Engineering.

These recent orders come at a crucial time for the industry. Despite Nigeria's abundant proven gas reserves, and speculation of even larger, unproven deposits, there has been a dearth of exploration and production activity in the country. This inactivity is directly related to a regulatory framework that, so far, has not gone far enough to encourage production. According to Ajayi: "Clarifying fiscal terms and providing a conducive regulatory environment could significantly stimulate investment and

unlock the vast potential of Nigeria's gas reserves."

The share of Nigerian gas being exported to global markets has dropped significantly in recent years, despite government intentions. "Despite the increasing focus on gas, there remains a significant need for exploration to unlock new gas reserves and identify untapped potential," said Kayode Thomas, CEO of Substrata Oil and Gas, a geophysical service provider based in Port Harcourt.

Nevertheless, on the domestic front at least, there is welcome news in the proliferation of projects focused on the domestic market. As Bolaji Ososami, managing director of Triumph Power and Gas Systems said: "We are witnessing a surge in domestic gas-related projects such as the Anoh Gas plant, AKK project and Brass Methanol Plant. The government is actively addressing issues surrounding gas supply agreements to facilitate the progress of such projects."

This comes on top of the state-owned Nigeria-LNG's flagship Train 7 project, an expansion of non-associated gas supply to NLNG's Bonny Island Terminal, generating demand for private service providers across the country. "Looking ahead, we see opportunities in multiple projects, which are meant to provide gas to NLNG's Train 7 project," said Jude Abalaka, managing director of Tranos, a Nigerian engineering and manufacturing company currently contracted on the Train 7 project.

Felix Ekundayo, managing director of Asiko Energy, a downstream gas distributor that is constructing a large tri-fuel gas storage facility in Lagos, is clear about the upsides of gas exploitation: "Looking ahead, the data suggests that natural gas will remain a significant part of the energy mix. Nigeria's abundance of gas resources positions us well to align with or even exceed this trend."

Perhaps most importantly, natural gas could be the missing puzzle piece to unlocking Nigeria's nascent manufacturing sector. According to the United Nations, Nigeria could be the planet's third most populous nation by 2050. This demographic explosion could trigger an unprecedented economic boom for the country, or precipitate a political and social crisis if Nigeria's youth cannot be gainfully employed. To Olakunle Williams, CEO of Tetracore Energy Group, a natural gas and power delivery company, industrialization will be a critical factor, and the seeds of this future industrial base are being sown with natural gas: "Demand for gas is particularly pronounced in regions with nascent industrialization efforts. Currently, only about 7% of our gas production is utilized for manufacturing purposes, which underscores the urgent need for industrialization."

Despite Nigeria's colossal natural gas reserves, the country still faces the battle of convincing IOCs and international financiers that Nigeria is the best place to invest. Nigeria is not the only country with natural gas – the nation will have to make itself competitive and stand out against other jurisdictions in IOCs' vast international portfolios of projects. "Competing globally, particularly against renewables, for funding poses a significant challenge. Securing investment to increase production amidst varying tax and production regimes further complicates Nigeria's competitiveness," said Owuze Nwuche, CEO, Montego Energy. ■

David Ige

CEO
GASINVEST

Can you introduce GasInvest?
GasInvest was founded in 2016. We saw a gap in the Nigerian gas market for bespoke consulting and project development specifically tailored to investors. We have also established sister companies to participate in different segments of the gas value chain. GasHub, for example, is our gas distribution and marketing arm. We are also building our presence in LPG distribution with an LPG Bottling Plant in Oyo State, which is nearing completion.

The latest and probably most exciting venture for us is Riverside LNG. This is a joint venture we formed with AA Holdings and Oilserv. It is a 1.2-1.6 million t/y mini-LNG and open-access terminal project targeting export to Germany, with the possibility of reaching a broader European market. GasInvest is evolving into an investment holding company overseeing these ventures while still maintaining its core focus on consulting and project development. We work with various IOCs and NOCs, and extend our services across borders, such as through the Nigeria-Equatorial Guinea gas project where we are the lead developer.

What is your perspective on cross-country collaboration within Africa for gas development?
Collaboration is key. West Africa, for example, presents a great opportunity with existing pipelines and projects like the Nigeria-Equatorial Guinea gas project. This project shows what can be achieved when countries work together. It utilizes existing infrastructure and expands access to gas resources for both nations.

However, there are challenges to overcome. Political instability is a concern in some West African countries. We need to ensure that any major infrastructure development is anchored to larger markets to achieve financial viability.

Do you have a final message?
Our primary focus over the next year is to achieve FID with our partners on Riverside LNG and reach first gas by 2027. I see GasInvest evolving into a comprehensive gas solutions provider, playing a key role in the exciting future of the Nigerian gas sector. ■

Thelma Chukwu

Managing Director
TELMEK GLOBAL RESOURCES

What are the main services that are driving growth for TGR in 2024?
In 2024 our focus has shifted towards operation and maintenance services. We are constantly enhancing our technical competence by undertaking new service opportunities. Also, with the divestments taking place, we are looking at offshore opportunities.

How do you think the Nigerian government can support indigenous service providers like TGR?
I believe the government is already taking steps in the right direction. For instance, the recent directive on fiscal incentives for gas companies and investments in non-associated gas is encouraging. This will hopefully attract more investments into the gas sector, leading to more projects that benefit indigenous service providers like TGR. Additionally, initiatives like the 'Decade of Gas' and local content requirements are positive steps in the right direction. However, it is crucial for the government to focus not only on introducing policies but also on effective implementation. This ensures that benefits trickle down to companies like ours. Also worth noting is the bold step this new government has been taking to increase oil and gas production, which will benefit service providers like ourselves. ■

Bolutife Odusanya

Managing Director and CEO
TREXM HOLDINGS

Can you provide an overview of TREXM Energy?
Firstly, many US firms in the oil and gas sector faced challenges, particularly with issues like FCPA (Foreign Corrupt Practices Act) compliance and other regulatory hurdles. Secondly, Nigeria was actively promoting local content participation. Recognizing the opportunity to bridge this gap, we positioned ourselves as local partners for US companies, leveraging our understanding of American business practices and the nuances of the Nigerian market.

Can you summarize the services offered by TREXM Energy?
We specialize in above-ground engineering solutions, from wellheads to export terminals. Our EPCI projects include pipeline installation, rotating equipment management, platform construction, and early production facilities. We also offer electrical solutions in partnership with Schneider Electric. Metering solutions are a core service crucial for accurate production monitoring in Nigeria's oil industry. By implementing comprehensive systems, we optimize operations and enhance revenue transparency for the government and stakeholders.

We assist clients in automating manual processes, reducing costs, and integrating predictive analytics to drive industry standards forward. With fabrication yards in Port Harcourt and Warri, we deliver prompt service for offshore and onshore operations. ■

Akeem Ariyo

Managing Director and CEO
AOS ORWELL

How does AOS Orwell serve the oil and gas industry in Nigeria?
The company covers the upstream, midstream, and the downstream side of the business, and is divided into three divisions – Well Construction, Process Management, and New Services. We also have a workshop facility where we can assist with basic fabrication. In partnership with some OEMs, we extend our offerings to other well construction-related services such as directional drilling and LWDMWD services.

We are a proudly indigenous company, with many of our team having held leadership positions at the best oil field services companies in the world. AOS Orwell will remain focused on investing in the country, developing local capacity, bringing advanced technologies to the country.

What are some recent demand trends for AOS Orwell's various services?
Since the second half of 2023, Nigeria again started to behave like the rest of the world's oil and gas sector, and every part of AOS Orwell's business saw an improvement in demand. There is a slightly stronger uptick in the upstream business, which is expected as that is where the investments usually start. ■

Executive Insights on Nigeria's Challenges

"A particular challenge for our industry in Nigeria has been security concerns; the cost burden of security measures can sometimes account for 40% of total project costs."

Chike Uchendu, Managing Director, **Future Oilfield Services Limited (FOSL)**

"This trend of currency instability is not new; it has been a persistent challenge dating back to the 1980s. To address this, we have strategically diversified our revenue streams to cover areas where the IOCs are predominant and 60-100% of payments are in dollars."

Kenneth Okeiyi, CEO, **Eunisell**

"Historically, energy development in Nigeria has been driven by IOCs, focusing on their global portfolios and moving primary energy resources. However, this approach neglected local market development."

Christopher Nwokolo, Group CEO, **Ace Energy Group**

"The provision of petrol has always been a social issue for Nigeria, and the government did what is now looking like a double whammy – removing fuel subsidies and floating the Naira at the same time. The act of removing subsidies would have been great by itself as it allowed the NNPC to save hundreds of billions of Naira monthly."

Dimeji Bassir, CEO, **Ofserv**

"The vertical challenge is that there are three or four major European languages spoken in the region, and each language cluster deals only within itself. This bifurcation of language makes it extremely difficult to achieve economies of scale across West Africa that guarantee efficiencies in price and logistics."

Dipo Salimonu, CEO, **Moteriba Group**

"Introducing legislation requiring operators above 10,000 bpd to list on the stock exchange would allow Nigerians to participate more directly in these assets. This approach not only enhances community involvement but also safeguards shareholder interests, crucial for sustainable development and security in our sector."

Maxwell Oko, Group CEO, **Eraskorp**

Angola

We must improve our capabilities and processes to make banks more comfortable lending to local companies. Enhancing skills and reducing bureaucracy are key to advancing local content.

Edson Dos Santos
CEO
ETU ENERGIAS

Image courtesy of Sonangol

ANGOLA

LAND AREA
(1,000 sq km)
1,274

POPULATION SIZE
(million inhabitants)
36.68

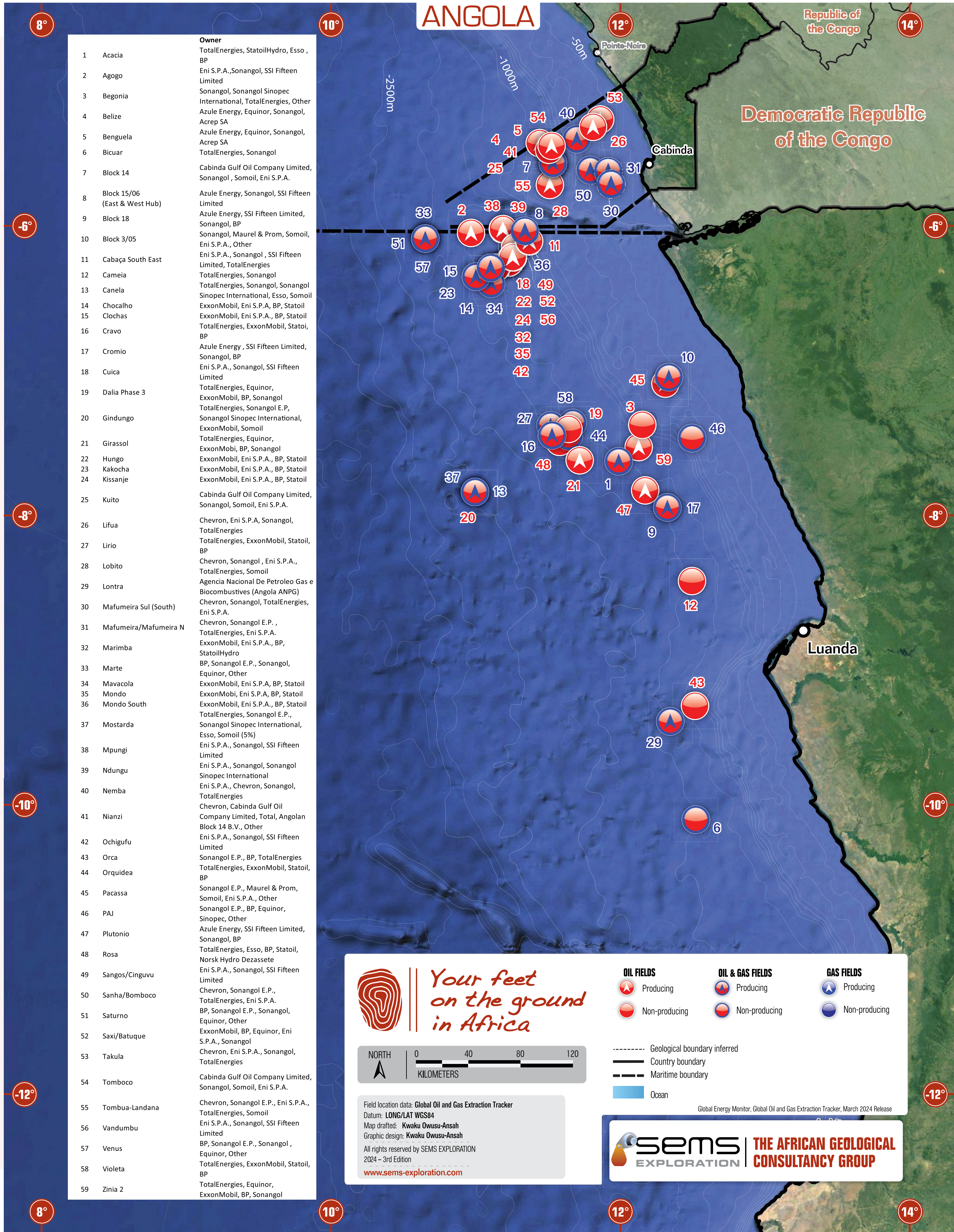
GDP
(US$ billion)
84.72

GDP PER CAPITA
(US$)
2,310

SOURCE:
World Bank 2023

Value of exports (million US$)	38,350
Value of petroleum exports (million US$)	31,400
Current account balance (million US$)	440
Proven crude oil reserves (million barrels)	2,550
Proven natural gas reserves (billion cu. m.)	55
Crude oil production (1,000 b/d)	1,098
Marketed production of natural gas (million cubic metres)	5,591
Refinery capacity (1,000 b/cd)	80
Output of petroleum products (1,000 b/d)	50
Oil demand (1,000 b/d)	172
Crude oil exports (1,000 b/d)	1,064
Exports of petroleum products (1,000 b/d)	25
Natural gas exports (1,000 b/d)	5,090

SOURCE:
OPEC 2023



		Owner
1	Acacia	TotalEnergies, StatoilHydro, Esso , BP
2	Agogo	Eni S.P.A.,Sonangol, SSI Fifteen Limited
3	Begonia	Sonangol, Sonangol Sinopec International, TotalEnergies, Other
4	Belize	Azule Energy, Equinor, Sonangol, Acrep SA
5	Benguela	Azule Energy, Equinor, Sonangol, Acrep SA
6	Bicuar	TotalEnergies, Sonangol
7	Block 14	Cabinda Gulf Oil Company Limited, Sonangol , Somoil, Eni S.P.A.
8	Block 15/06 (East & West Hub)	Azule Energy, Sonangol, SSI Fifteen Limited
9	Block 18	Azule Energy, SSI Fifteen Limited, Sonangol, BP
10	Block 3/05	Sonangol, Maurel & Prom, Somoil, Eni S.P.A., Other
11	Cabaça South East	Eni S.P.A., Sonangol , SSI Fifteen Limited, TotalEnergies
12	Cameia	TotalEnergies, Sonangol
13	Canela	TotalEnergies, Sonangol, Sonangol Sinopec International, Esso, Somoil
14	Chocalho	ExxonMobil, Eni S.P.A, BP, Statoil
15	Clochas	ExxonMobil, Eni S.P.A., BP, Statoil
16	Cravo	TotalEnergies, ExxonMobil, Statoi, BP
17	Cromio	Azule Energy , SSI Fifteen Limited, Sonangol, BP
18	Cuica	Eni S.P.A., Sonangol, SSI Fifteen Limited
19	Dalia Phase 3	TotalEnergies, Equinor, ExxonMobil, BP, Sonangol
20	Gindungo	TotalEnergies, Sonangol E.P, Sonangol Sinopec International, ExxonMobil, Somoil
21	Girassol	TotalEnergies, Equinor, ExxonMobi, BP, Sonangol
22	Hungo	ExxonMobil, Eni S.P.A., BP, Statoil
23	Kakocha	ExxonMobil, Eni S.P.A., BP, Statoil
24	Kissanje	ExxonMobil, Eni S.P.A., BP, Statoil
25	Kuito	Cabinda Gulf Oil Company Limited, Sonangol, Somoil, Eni S.P.A.
26	Lifua	Chevron, Eni S.P.A, Sonangol, TotalEnergies
27	Lirio	TotalEnergies, ExxonMobil, Statoil, BP
28	Lobito	Chevron, Sonangol , Eni S.P.A., TotalEnergies, Somoil
29	Lontra	Agencia Nacional De Petroleo Gas e Biocombustives (Angola ANPG)
30	Mafumeira Sul (South)	Chevron, Sonangol, TotalEnergies, Eni S.P.A.
31	Mafumeira/Mafumeira N	Chevron, Sonangol E.P. , TotalEnergies, Eni S.P.A.
32	Marimba	ExxonMobil, Eni S.P.A., BP, StatoilHydro
33	Marte	BP, Sonangol E.P., Sonangol, Equinor, Other
34	Mavacola	ExxonMobil, Eni S.P.A, BP, Statoil
35	Mondo	ExxonMobi, Eni S.P.A, BP, Statoil
36	Mondo South	ExxonMobil, Eni S.P.A., BP, Statoil
37	Mostarda	TotalEnergies, Sonangol E.P., Sonangol Sinopec International, Esso, Somoil (5%)
38	Mpungi	Eni S.P.A., Sonangol, SSI Fifteen Limited
39	Ndungu	Eni S.P.A., Sonangol, Sonangol Sinopec International
40	Nemba	Eni S.P.A., Chevron, Sonangol, TotalEnergies
41	Nianzi	Chevron, Cabinda Gulf Oil Company Limited, Total, Angolan Block 14 B.V., Other
42	Ochigufu	Eni S.P.A., Sonangol, SSI Fifteen Limited
43	Orca	Sonangol E.P., BP, TotalEnergies
44	Orquidea	TotalEnergies, ExxonMobil, Statoil, BP
45	Pacassa	Sonangol E.P., Maurel & Prom, Somoil, Eni S.P.A., Other
46	PAJ	Sonangol E.P., BP, Equinor, Sinopec, Other
47	Plutonio	Azule Energy, SSI Fifteen Limited, Sonangol, BP
48	Rosa	TotalEnergies, Esso, BP, Statoil, Norsk Hydro Dezassete
49	Sangos/Cinguvu	Eni S.P.A., Sonangol, SSI Fifteen Limited
50	Sanha/Bomboco	Chevron, Sonangol E.P., TotalEnergies, Eni S.P.A.
51	Saturno	BP, Sonangol E.P., Sonangol, Equinor, Other
52	Saxi/Batuque	ExxonMobil, BP, Equinor, Eni S.P.A., Sonangol
53	Takula	Chevron, Eni S.P.A., Sonangol, TotalEnergies
54	Tomboco	Cabinda Gulf Oil Company Limited, Sonangol, Somoil, Eni S.P.A.
55	Tombua-Landana	Chevron, Sonangol E.P., Eni S.P.A., TotalEnergies, Somoil
56	Vandumbu	Eni S.P.A., Sonangol, SSI Fifteen Limited
57	Venus	BP, Sonangol E.P., Sonangol , Equinor, Other
58	Violeta	TotalEnergies, ExxonMobil, Statoil, BP
59	Zinia 2	TotalEnergies, Equinor, ExxonMobil, BP, Sonangol

Angola

Crude ambitions: A deep dive into oil & gas

Angola boasts a rich history in the oil and gas industry as Africa's third largest oil producer. The country's oil production journey began with a boom in oil production in the early 2000s, spurred by the end of a brutal 27-year civil war and fueled by prolific deepwater fields. Diamond and crude oil exports shot Angola's economy forward to the point that the country had the world's highest annual average GDP growth between 2001–2010.

Today, Angola stands as a major player, with Nigeria and Libya being the only African nations to outproduce Angola in 2023. However, beneath this 21st-century success story lies a complex landscape of challenges and opportunities.

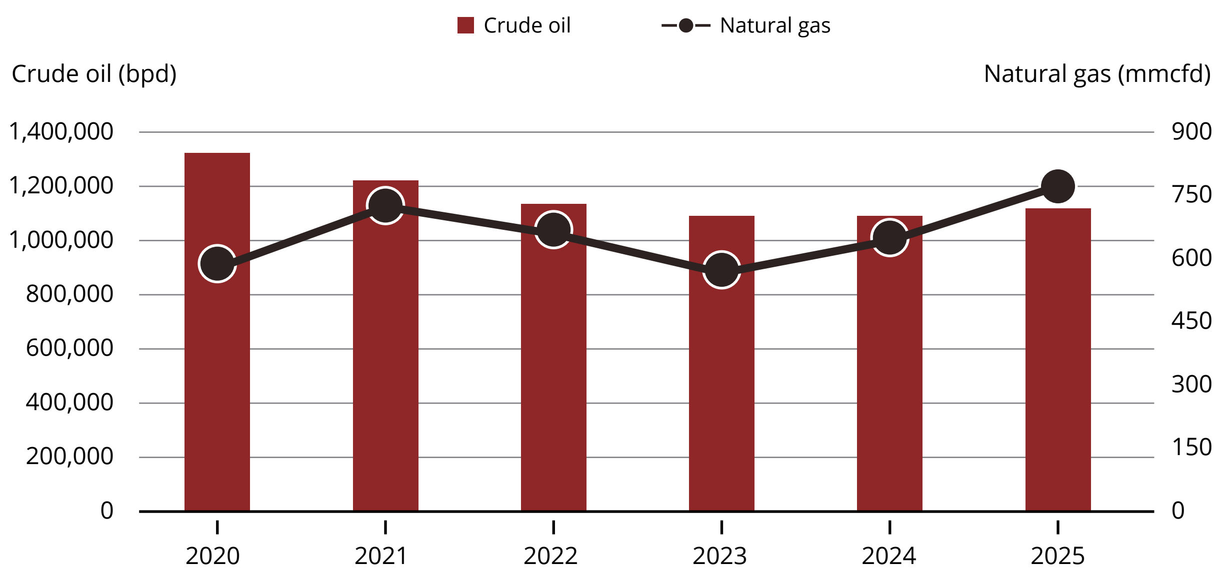
New projects ramp up

As the shock of the Covid pandemic becomes a distant memory to Angola's oil and gas sector, new opportunities are arising as pre-pandemic projects that were paused are brought back online. Opportunities are arising across the entire energy space and the industry sentiment is largely bullish. "Angola's potential is huge. Looking at customers' investment in upstream deepwater, potential success down in the southern part of Angola (Namibe), midstream developments with Angola's refining goals and onshore developments, ChampionX Químicos sees great opportunities ahead," said Frecissimo Sarmento, district manager of ChampionX Químicos – a petrochemical solutions provider to the oil and gas industry.

Much like Nigeria, Angolan players are also looking to diversify away from oil, forming the New Gas Consortium (NGC) composed of Azule Energy, Sonangol, CABGOC (Chevron) and TotalEnergies to develop the Quiluma and Maboqueiro fields. With first gas planned in

64 >>

Angola crude oil and natural gas production 2020-2025



Source: GlobalData, Oil & Gas Intelligence Center

Image courtesy of Carlos César at Pexels

Katrina Fisher

Lead Country Manager
EXXONMOBIL ANGOLA

Oil production in Angola has been declining over the past few years, but our discoveries have bucked this trend with the company's production increasing by 30% from 2022 to 2024.

Can you give an overview of ExxonMobil and the company's presence in Angola?

ExxonMobil has a proud history in Angola and will celebrate 30 years of the Block 15 production-sharing contract in August 2024. We have six facilities in Block 15 and delivered five FPSOs in six years when we brought the development online, one of the fastest timelines in West Africa and the industry. In addition to Block 15, we are partners in Block 17 and Block 32 operated by TotalEnergies. In 2020, ExxonMobil was awarded operatorship of three frontier blocks in the Namibe Basin: Block 30, Block 44, and Block 45. In the 30 years ExxonMobil has operated in Angola, we have invested approximately US$30 billion towards these developments, built a strong foundation, cemented by our commitment to safety, and a capable workforce that delivers value to all stakeholders. ExxonMobil continues to be a significant contributor to the Angolan economy, and we are proud to operate a diverse set of assets and will continue to work with the Angolan government on increasing our footprint.

Can you elaborate on ExxonMobil's exploration strategy and the opportunities you see in Angola?

In March 2024, ExxonMobil made our 19th commercial discovery in Block 15 with the Likembe-01 prospect, the second discovery in an ongoing redevelopment program that started in 2022 following an extension of the Block 15 PSC in 2019. We continue to explore in and around Block 15 to further add value to those assets and have been focused on our existing infrastructure as we look for opportunities to grow our production. We are preparing to start exploration in the Namibe Basin and will drill the first exploration well, Arcturus 1, within the next few months.

What has been ExxonMobil's production performance in Angola of late?

In November 2023, ExxonMobil celebrated its 20th year of production from Block 15 where we have produced over 2.5 billion barrels to date. We are now moving towards the tail end of the 18 well, 2 rig redevelopment program that we have been executing since 2022 and have seen the Bavuca South and Likembe discoveries made amid that program. Oil production in Angola has been on a declining trend over the past few years, but our discoveries have bucked this trend with the company's production increasing by 30% from 2022 to 2024. We continue to grow capability with our redevelopment program and look to further expand that as we follow up on the successes in exploration we have had. We are focused on ensuring the safety and integrity of our assets, and we are investing in our infrastructure to ensure that we have that reliability to continue to deliver and meet our targets.

What are some of the challenges operators face that contribute to Angola's declining oil production?

The oil and gas industry in general is a competitive environment, and majors such as ExxonMobil that have a global portfolio of opportunities, have to stack them against each other and choose the more competitive opportunities. In recent years, the Angolan government has been focused on the competitiveness of the country's opportunities in the global oil and gas marketplace and is putting in the effort to increase investor confidence. ExxonMobil has the benefit of existing infrastructure in Angola, and we want to ensure that we make the most of this infrastructure and leverage it to the advantage of stakeholders, and to continue to develop opportunities.

How does ExxonMobil fit into Angola's energy transition strategy?

Energy transition can mean different things for different countries, and in a country such as Angola where energy security is being built, the transition can mean moving from not having energy to having energy, allowing for the further development of resources in a responsible way. Angola is trying to meet both challenges of having the lowest carbon footprint that it can, but also ensuring energy security for Angolans.

How can the energy industry be more inclusive to women, particularly in senior positions?

We have come a long way in supporting women in the industry, but we still need to ensure that we have supportive networks and programs that help women balance all the things happening in their lives and allow them to succeed. ■

Joaquim Kiteculo

CEO
SONANGOL REFINING & PETROCHEMICAL COMPANY (SONAREF)

Sonaref is spearheading three major refining projects: the Cabinda Oil Refinery, the Soyo Refinery, and the Lobito Refinery, which aim to increase our total refining capacity to 425,000 bpd.

Can you introduce Sonangol Refining & Petrochemical Company?

Sonangol Refining & Petrochemical Company (Sonaref) is a major value asset, integral to Angola's energy matrix. As the only refining company in Angola, Sonaref currently supplies 30% of the market demand with a refining capacity of 65,000 bpd. To further enhance our value, Sonaref is spearheading three major refining projects: the Cabinda Oil Refinery, the Soyo Refinery, and the Lobito Refinery, which will have the highest processing capacity.

These projects aim to increase our total refining capacity to 425,000 bpd. The Cabinda Refinery will have a capacity of 60,000 bpd, the Soyo Refinery 100,000 bpd, and the Lobito Refinery 200,000 bpd. Currently, the first phase of the Cabinda Refinery is nearing completion, and the Luanda Refinery is processing 65,000 bpd. Our team consists of approximately 340 employees, and we generate an annual turnover of about US$1.5 billion from the Luanda Refinery.

Can you elaborate on Sonaref's progress on the Lobito Refinery project?

The Lobito Refinery aims to significantly enhance Angola's refining capacity. This project holds tremendous potential, enabling Sonaref to fully supply the domestic market and export within the region, thereby eradicating the need for oil derivative imports. Additionally, the Lobito Refinery will create substantial economic benefits for the province by generating jobs, fostering new businesses, and improving the quality of life for the local population.

Within Sonaref's growth strategy of increasing supply through enhanced capacity, the project was resumed in 2023 as mandated by the Angolan Government. Early works on the project have already commenced, demonstrating our commitment to meeting the nation's energy needs and achieving self-sufficiency. In late 2023, we signed an EPC contract with China National Chemical Engineering Co. (CNCEC), and have Kellogg Brown & Root as our PMC, as well as Dar Al-Handasah as our Technical Consultants. We are working closely with CNCEC to secure funds from Chinese financial institutions. This collaboration is part of Sonaref's growth strategy to meet the projected deadlines and ensure the successful implementation of the project. We anticipate securing the required US$4.2 billion CapEx by the end of 2024, with production targeted for Q2 2027.

How do you view Angola's current refining capacity, and what are the government's goals and long-term vision for the country?

The government's vision is to fully supply the domestic market and provide neighboring countries within the Southern African Development Community (SADC) region with refined products. This strategy aims to foster new businesses and relationships with these countries, significantly enhancing Angola's energy matrix and eliminating the need to spend foreign currency on imports. Key to this vision is the development of the Cabinda, Soyo, and Lobito projects, which will collectively add 360,000 bpd to the existing 65,000 bpd from the Luanda Refinery, which is also undergoing expansion.

Angola's energy mix primarily consists of hydropower (70%) and fossil fuels (30%). As a major oil producer, it is inefficient for Angola to import 80% of its refined product needs. The government's strategy aims to reverse this by producing 100% of the domestic demand locally by 2027. Excess production from the new refineries will cater to regional markets, including the DRC, Zambia, Botswana, South Africa, and Namibia, leveraging the expansion of the Lobito Corridor railway.

Additionally, the government is liberalizing the downstream market to make it more attractive for business. The Ministry of Mineral Resources, Oil, and Gas (MIREMPET) has established investor-friendly policies, offering incentives for 10-15 years and creating favorable conditions for investment in refining and petrochemicals. Specific incentives are in place for the expansion of the Luanda Refinery and the new refineries in Lobito, Cabinda, and Soyo. These efforts are part of the strategic endeavors to attract further investment and advance these critical projects, ultimately transforming Angola's energy landscape. ■

Edson Dos Santos

CEO
ETU ENERGIAS

Can you outline Etu Energias' main assets and activites?
This year, we celebrated our 24th anniversary. Etu Energias is today the largest private Angolan energy company. We are a product of local content, starting off in 2000 as a small consulting company. In 2005, we entered a position in an onshore asset as a non-operating partner. By 2009, we became operators of that asset. In 2015, we became operators of offshore Block 205. New management joined in 2020, right in the middle of the pandemic, and we changed our vision to become an integrated energy company and not focus solely on oil. We decided to focus more on renewables, and this change in vision was reflected by a name change from 'Somoil' to 'Etu Energias'. We have around 270 employees, mainly in Soyo. On the upstream side, we operate Blocks such as FSST, 205FS/FST, 2/05, and have other assets under exploration like CON1 and CON6. We are partners in several blocks, such as Block 3053/05, 4/05, and 3/05A operated by Sonangol, and others operated by majors like CABGOC (Chevron) and TotalEnergies. Recently, the Galp acquisition further expanded our portfolio.

On the downstream side, we have four petrol stations and aim to have 40 in the next four years. We have launched our lubricant brand, currently produced outside Angola, but we plan to move production to Angola in the next 2-3 years. We are also incorporating solar energy into our operations, aiming to power most of our operations with solar panels before year-end, and pursuing commercial renewable projects within Angola.

Can you discuss the recent Galp acquisitions?
The deal with Galp is transformational and changes the company significantly. The trend of IOCs divesting non-core assets, seen today in Nigeria and previously in other regions like the Gulf of Mexico and the North Sea, is common. Our role as a 100% Angolan company is to be ready for such opportunities. We need IOCs to stay in Angola, nevertheless, we are preparing to take on more roles and operate assets.

Can you elaborate on your financing strategy?
We secured two financing projects with Afreximbank. For the Galp acquisition, Shell Trading and Bank of America were also involved. Compliance was a major focus for us to meet international standards.

What are your goals and strategy for the next few years?
We are focusing on exploration in newly awarded onshore blocks, planning seismic drilling and exploration wells within the next 2-3 years. We aim to go from exploration to production quickly to address Angola's production decline. Revamping aging assets to mitigate production decline is part of our strategy, always keeping environmental impact in mind. We plan to expand our petrol stations from 4 to 40 in the next four years and have a presence in all 18 provinces of Angola. Renewables will see the fastest growth in CapEx. We aim to produce 40,000 bpd by 2025 and 100,000 bpd by 2030. ■

Paul McDade

CEO
AFENTRA

Can you introduce us to Afentra?
Afentra was founded in May 2021 by ex- Tullow Oil executives. Afentra, which stands for African energy transition, embodies our vision to replicate the industrial shift witnessed in the North Sea within the African context. In essence, it entails producing assets transitioning from major oil companies to smaller independents, with a view to extending the productive life and, where possible, reducing emissions profile. Our aim is to merge technical oil and gas proficiency with African business acumen, a synergy we believe is pivotal for success in the region. We focus on sub-Saharan Africa, which is where we see the most potential, and prioritize assets geared towards production and smaller-scale development, seeking opportunities in both operated and non-operated capacities. It is crucial to emphasize that we are not merely interested in being financial backers. Rather, we actively seek to become strategic JV partners, contributing technical expertise and exerting a positive influence on asset development or redevelopment.

This active involvement ensures alignment with our objectives and clear direction in asset selection. Our ambition is to build a sizeable independent oil and gas company with a diversified portfolio across different jurisdictions. We saw a big opportunity in Angola, with around 15 billion barrels of untapped reserves held by IOCs and Sonangol. Angola is a multi-decade opportunity, similar to what the North Sea presented in the late nineties. Our journey in Angola began with the acquisition of interests in Block 3/05 and 3/05A. We identified these assets as mature but with significant upside potential that can be realized if managed actively. Over time, we have increased our equity by buying out three partners, including Sonangol and Azule Energy.

Why is Angola of such interest to Afentra?
The country possesses diverse resources, with onshore, shallow water and deep-water basins, which are indicative of its potential for significant energy development.

What is particularly striking is the scarcity of independent operators in Angola's market, so we definitely wanted to secure a first mover advantage. Unlike other regions, where smaller entities thrive, Angola is dominated by major players and Sonangol. Over the past few years, Angola has undergone a remarkable transformation in this regard. There is a concerted effort to attract new investors, which has significantly altered the investment landscape. This shift in approach has not only sustained the availability of assets but has also enhanced their attractiveness. The government's proactive measures have instilled confidence among industry players, facilitating smoother engagements and transactions. In essence, Angola's evolving investment climate has transformed it into an appealing destination for oil and gas ventures.

Can you outline the future trajectory of Afentra over the next two years?
Our primary focus remains on optimizing the value of our existing assets. We aim to leverage these assets to drive increased production, reserve growth, resource optimization and reduced emmisions, setting the stage for substantial value creation for our investors and stakeholders. We see significant opportunities for expansion within Angola, where we have established strong relationships and a proven track record of success. ■

Edilson Bartolomeu

CEO
ACREP ANGOLAN E&P COMPANY

Can you provide an overview of recent developments at ACREP Angolan E&P Company?
Over the past four years, ACREP has undergone a significant transformation. In 2023, we strategically shifted to becoming an operator, a goal we had set since our inception 20 years ago. This transition was marked by our successful acquisition of a 55% interest in Cabinda South Block, enabling us to attain operator status in that field. This move was pivotal as it positioned us to engage more proactively with international companies operating in Angola.

ACREP has strengthened its asset portfolio through strategic acquisitions, efficient management, and a results-driven approach. Key milestones include acquiring a 10% stake in Block 1-14, fully consolidating Dinge Sondagens, a drilling services company wholly owned by ACREP, and the recent acquisition of Block KON 19 as the operator.

We are committed to becoming a major independent energy producer. This goal drives us to explore new opportunities and monetize the existing gas reserves in the Cabinda South Block.

Could you elaborate on your plans for Cabinda South Block and other blocks?
Our immediate focus in the Cabinda South Block centers on stabilizing and increasing production, monetizing the gas reserves in the Noz field, and leveraging our existing infrastructure and operational expertise to expand our operations in other blocks in Cabinda.

Can you tell us about your role in the 2023 Angola bidding round?
In the 2023 Angola bidding round, ACREP actively participated by submitting bids for two blocks: KON 19 and KON 15, and we were successful in being selected as operators for KON 19.

What are ACREP's next steps?
Our primary focus is to expand our operational presence by becoming operators in at least two additional blocks, both onshore and potentially in the Cabinda North Block. Diversifying our portfolio is crucial to our strategy. In this regard, ACREP has already achieved one of its milestones through our subsidiary, Dinge Sondagens, which provides essential drilling and well repair services, with our rig being one of the only onshore rigs available in the country. Additionally, we are enhancing our service capabilities by offering seismic services.

Taking advantage of our actual associated flared gas installed powered generation sets, in early 2024, we launched an off-grid pilot test rural power distribution system around our oil production facilities.

The exploration program being conducted on Block 1/14, where ACREP has a 10% equity participation, will drill the first wildcat well in April 2025, whose studies indicated quite attractive reserves, of light oil to condensates and gas.

In the immediate future, we are focused on ramping up operations in these new blocks and enhancing our production capabilities. As part of our strategy, we are divesting assets to finance these expansions while also seeking to invest in mature fields to bolster our reserves. By 2028, we aim to reach a production capacity of 10,000 bpd. ■

<< 58

2026, the NGC project will become Angola's first non-associated gas project. For Petromar, a pre-eminent fabricator of subsea structures formed as a JV between Sonangol and Saipem, this has meant finally being able to put their newly expanded yard in Ambriz to use. "We entered an agreement with Azule Energy to fabricate a full platform (Quiluma) for their NGC development project. This is the first time our Ambriz yard has undertaken the fabrication of a jacket and deck simultaneously, which required us to bring in particular crawler cranes from another Saipem yard," shared Frédéric Heintz, Petromar's general manager.

Crude oil, however, has certainly not been forgotten in Angola and will remain the bread and butter of its energy industry for some time yet. In 2022, TotalEnergies announced a final investment decision of US$850 million for the launch of the CLOV Phase 3 development in offshore Block 17, further adding to the workload of Angola's fabricators and giving them the opportunity to expand their footprint and capacity. "Sonamet identified a gap in the market and invested US$12 million into establishing a spool base facility, the only one of its kind in West Africa, which will facilitate more work onshore. TotalEnergies' CLOV project will require approximately 20 km of pipeline, which will be manufactured at our construction yard by around 300 Angolan workers," said Sandro Ferreira, sales and marketing manager, Sonamet.

Image courtesy of Afentra

With projects restarting and new ones being announced, the resulting boom in fabrication demand will allow Angola's fabricators to expand their capacity and justify investments into facilities like Sonamet's new Lobito Bay spool base. This increased capacity should provide Angola's fabricators a springboard to venture into new markets abroad. "Our focus is currently on expanding to Namibia, and because Angola has a more mature oil and gas industry than Namibia, we believe our expertise, knowledge and training capabilities can be a great benefit to the country and the growth of its industry," said Sonamet's CEO Domingos Augusto.

In May 2018, the Angolan government published a decree with new incentives for the development of marginal fields. While billion-dollar mega-projects like the NGC continue to draw headlines, behind the scenes, Angola's oil and gas players have been hard at work bidding for, exploring and developing these fields. Effimax Energy, a renewables and oil and gas E&P company, recently successfully bid for a stake in the onshore KON 13 block and has plans for a seismic acquisition by year-end, with drilling commencing by early 2026. "Complex geological formations pose exploration challenges that will require innovative approaches and new technology. Moreover, while offshore infrastructure in Angola is robust, inland areas lack support for transportation and storage, possibly necessitating state assistance," shared Domingos Freitas, board member of Effimax Energy.

The dearth of infrastructure outside of Luanda will have to be addressed for many of these onshore projects to become commercially viable. Infrastructure gaps extend beyond the oil and gas sector, but also to telecommunications, aviation and other supporting industries. "Angola is still developing and infrastructures supporting aviation, such as communication repeaters, radar coverage and others are lacking in some regions. Bureaucracy and the availability of fuel in certain areas are also challenges we face in this developing country. For example, there is no fuel available at the Catoca base and we have to transport extra fuel for the airplane to get back to Luanda, which then limits the passengers or cargo we can accommodate," said Vasco Cardoso, general manager of Heli Malongo.

Internet Technologies Angola (Paratus Group), a telecommunications services company present in seven African countries, has been investing heavily in fiber infrastructure in northern Angola and is currently the only operator that provides fiber to Cabinda. Francisco Leite, general manager of Internet Technologies Angola (Paratus Group), shared his thoughts on how telecommunications infrastructure can be improved: "Angola still needs significant investment in telecommunication infrastructure across the country. Most of Angola's population is concentrated along the coast. It is challenging to invest in places where the population is small and there are only a few companies requiring our services. In my opinion, the government should implement tax benefits and incentives that will make it more viable for service providers to invest in the country's rural areas where there is limited business."

As developments ramp up in the coming years, demand for onshore infrastructure services will undoubtedly increase. In the meantime, however, exploration is underway in many blocks and is spurring demand for other services. "Recent regulatory efforts to increase production and foster new exploration ventures, particularly offshore, have created new opportunities in well intervention and gas development services. Geoscience services are emerging as pivotal in Angola's onshore landscape due to recent acreage developments and assignments," observed Ola Adebowale, CEO, Victory Oil & Energy.

Domingos Freitas

Board Member
EFFIMAX ENERGY

Can you introduce Effimax Energy and give an overview of your company and assets?

Effimax Energy has a rich history of innovation making waves in exploration and production, focusing on oil and renewable energy. We aim to innovate and make an impact in the African energy sector. Our model is empowering Africa's energy resources, and our vision is to be a world-class energy company and a strong player in Angola, Namibia and Nigeria. We are committed to sustainability, ensuring we preserve the environment while conducting our activities. Our footprint includes the Congo and Kwanza Basins in Angola, with plans for marginal fields in advanced discussions. We are also looking at a farm-in into a prolific basin in Namibia.

Can you tell us about winning the KON 13 bid?

Angola has strategic plans in place extending to 2027 to increase the acreage explored and boost production. This involves putting more blocks into the market to attract investors. Despite the global shift away from fossil fuels, Angola offered attractive terms to incentivize investment. The process was smooth and transparent, with ANPG ensuring investor-friendly terms. We attended roadshow events in various markets and reviewed the data.

The strategy behind our stake in KON 13 is multifaceted, aiming to capitalize on the block's potential reserves, optimize operational efficiency, and foster strategic partnerships to drive sustainable growth.

What is Effimax Energy's approach towards renewables?

Internally, we prioritize an energy mix. While oil and gas production is crucial, we also plan to invest capital into renewables. This approach aligns with our commitment to sustainability. We see significant opportunities in renewables, especially in regions like the south and east of Angola where there is a high demand for power. We aim to be a major player in the renewable energy sector.

We regularly assess the current energy use of the company and identify areas where renewable energy solutions can be integrated effectively. Examples include solar or electrical power generators. We also favor renewable energy technologies for operations and participate in carbon offset programs where possible.

These initiatives are part of our employees' training to educate the workforce and stakeholders about the benefits of renewables. We see ample opportunities in renewables and aim to lead in developing these projects.

What are your immediate priorities for the next couple of years, including goals and targets?

Our immediate priorities involve completing a seismic acquisition in Angola by year-end, processing, and interpreting data in 2025, with drilling commencing by early 2026. Similarly, in Namibia, we aim to finalize entry and secure our farm-in agreements in Nigeria. Addressing infrastructure challenges and collaborating with regulators and the state are also key focuses. Overall, the goal is to manage oil and gas projects effectively while investing in renewable energy for sustainability. ■

As oil fields mature and financiers shy away from hydrocarbon investments, Angola will have to tap into its vast renewable energy potential – estimated at 16.3 GW for solar and 3.9 GW for wind power. The country's current energy mix consists of 61.8% hydropower and 37.6% fossil fuels. The challenge, however, is expanding grid infrastructure to reach remote rural communities that often lack access to electricity. The Angolan government aims to expand electricity access to 60% of the population by 2025, and private companies are stepping in to help meet these goals. Portuguese MCA Group is one such company, having recently completed the fourth out of seven planned solar parks. Elisabete Alves, MCA Group's COO for international infrastructure, told us about their ongoing rural electrification project, which aims to provide 60 communities with solar panels, batteries, and corresponding infrastructure while building out mini-grids: "Extending the national grid to such a large territory would not be economical, and this mini-grid solution allows us to bring power to more communities in Angola in a cost-efficient manner."

This shift is already slowly starting, with several oil and gas E&P companies announcing renewable projects and service providers opening new renewables-focused business units. "From the projects we are involved in, we can see a clear shift towards gas, renewables, and cleaner energies. The Angolan government has implemented new laws and regulations on the subject in order to support and boost the development of these sectors, in efforts to be aligned with the worldwide energy transition. We were involved in the construction of Angola's first big solar power plant by MCA Group, which was the biggest public solar energy project in sub-Saharan Africa at the time," said Patricia Lopes, country manager, Mecwide Angola.

Liberalization

Since Lourenço's government came into power in 2017, Angola has undergone a transformation as the government undertakes its 'PROPRIV' program in Angola, which aims to reduce the state's intervention in the economy, promote entrepreneurship, and facilitate the privatization of state-owned assets and enterprises, including the national oil company, Sonangol. "The government is liberalizing the downstream market to make it more attractive for business. The Ministry of Mineral Resources, Oil, and Gas (MIREMPET) has established investor-friendly policies, offering incentives for 10-15 years and creating favorable conditions for investment in refining and petrochemicals," said Joaquim Kiteculo, CEO, Sonangol Refining & Petrochemical Company (Sonaref).

The changes have permeated through many sectors, not just energy, in a concerted effort to boost foreign investment. Improving the country's ESG credentials – an increasingly important consideration for investors – is one example of this. "Angola's regulatory landscape has evolved considerably, placing greater emphasis on environmental compliance compared to earlier years," said Matuzalem Sukete, general manager, Angola Environmental Serviços.

This has been welcomed by many businesses and investors, both indigenous and foreign. However, regulatory hurdles still remain for some foreign-owned companies: "There have been challenges, particularly with regards to changes in regulations related to local content policies, which have created difficulties for companies with foreign ownership structures, such as ours," said Ognen Andreevski, operations director at ISQapave, a testing and inspection provider founded in 2005 as a partnership between ISQ Portugal and APAVE France.

The recent changes have caught the attention of foreign independents such as Afentra, a UK-headquartered upstream company that is seizing the opportunity to develop Angolan assets and compete in a jurisdiction that has always been dominated by the supermajors and Sonangol. "There is a concerted effort to attract new investors, which has significantly altered the investment landscape. The government's proactive measures have instilled confidence among industry players, facilitating smoother engagements and transactions. In essence, Angola's evolving investment climate has transformed it into an appealing destination for oil and gas ventures," said Afentra's CEO Paul McDade.

Passing laws to incentivize indigenous participation in E&P activities will hopefully retain more value within the country and see the benefits of Angola's natural resources trickle down to service providers and the wider population. For now, it is difficult to ascertain if Angola will mirror Nigeria's path, wherein indigenous operators have been gradually taking over onshore IOC assets over the past 15 years to the point that they are almost all entirely indigenous-owned today. "We lack local operators who can manage the full cycle of an oilfield, and service companies that can provide basic services to design and build wells. To reverse the decline [in production], we need to increase production through more exploration, which requires attracting more operators, both international and local. The legal framework for exploration in Angola is not designed for medium or small local operators, making it a tough and expensive environment for them to survive," said Jorge de Morais, general manager, KAESO Energy Services.

Although Angola still lags Nigeria in terms of indigenous participation in E&P activities, a few companies have already taken the plunge and successfully taken a shot at operatorship. Etu Energias, the largest private Angolan energy company, is one such company. Etu Energias has been on a streak of acquisitions over the past years, most recently snapping up Galp's stakes in several blocks. "The trend of IOCs divesting non-core assets, seen today in Nigeria and previously in other regions like the Gulf of Mexico and the North Sea, is common. We need IOCs to stay in Angola, they will have an important role to play in Angola for some time yet. Nevertheless, we are preparing to take on more roles and operate assets. Being close to IOCs allows us to learn from their extensive experience, which is invaluable for a relatively young operator like us," said Edson Dos Santos, Etu Energias' CEO.

With support from African DFIs, there is great potential for indigenous E&P companies to take on a more dominant position in Angola's upstream space. "Africa Finance Corporation has invested US$60 million in Etu Energias, the largest private Angolan oil E&P company, as part of a drive to boost indigenous participation in the continent's energy sector. This transaction was consistent with what we are seeing in the sector where the majors are looking to divest from non-core international oil and gas assets, and these assets are being taken over by indigenous companies," said Osam Iyahen, senior director, natural resources, Africa Finance Corporation.

ACREP Angolan E&P Company is another Angolan E&P player that has recently strengthened its asset portfolio having successfully bid for the KON 19 Block, becoming its operator. "Our strategic vision is to solidify our reputation as a leading oil production company, not only in Angola but across the continent. Becoming an operator has allowed us to engage more directly with industry peers and stakeholders, positioning ACREP as a reference company," shared Edilson Bartolomeu, CEO of ACREP Angolan E&P Company.

74 >>

Bráulio de Brito

Founder and Executive Chairman, **TRADINTER** and Chairman, **AECIPA**

Can you give an overview of AECIPA?

AECIPA has been advocating for Angola's O&G service providers for over 10 years and strives to promote the role and importance of the country's services sector. The association has approximately 200 members and serves as a platform to connect and discuss common issues pertaining to the industry, and for networking, workshops, and meetings over different pertinent issues.

AECIPA is also one of the biggest advocates for the development and implementation of Local Content, by promoting employment, training and professional development of young Angolans, technology advancement and the search for financial funding opportunities for the whole sector. The oil and gas service sector is one of the largest employers in Angola, employing approximately 13,000 Angolans.

What are the main challenges Angolan service providers are facing in 2024?

The nature of this sector, particularly as far as its financial and technology requirements, brings a challenge in itself. Doing business in Angola requires a great deal of imported goods and equipment, which challenges both the companies and the central bank to make foreign currency available. Angola's main income of foreign currency is from the oil and gas industry. As such, a balance needs to be achieved by the government to create an environment where the country's financial needs are met. The foreign currency issues have made it difficult to make payments overseas in a timely manner.

However, when these issues arise, they are promptly dealt with by the rightful institutions, such as the commercial banks, with whom AECIPA has been working more and more closely.

AECIPA is also working closely with the major stakeholders - the Ministry, the Concessionaire and the tax authorities - to create awareness, mitigate financial challenges, and encourage the necessary regulatory agents to promote a more amenable business environment.

Can you comment on AECIPA's objective to support Namibia in its oil and gas development?

In 2023, AECIPA signed an agreement with the Namibian Association for Offshore Oil and Gas Service Providers (NAOGSP) intending to promote and facilitate bilateral collaboration between Angolan and Namibian service companies, fostering productive relationships within the oil and gas sector, and encouraging knowledge exchange. AECIPA and NAOGSP are establishing channels for sharing industry information such as best practices, technical advancements, regulatory updates, and local content development and implementation strategies so that this developing industry can bypass some of the mistakes we made during our development. If we have a stronger Namibia, we have a stronger African oil and gas industry which will benefit all of us.

Can you share some recent developments at Tradinter?

Tradinter was founded in 2001 and is a well-established service provider to Angola's oil and gas industry. Our experienced team has a strong understanding of the Angolan oil and gas business and its regulatory framework, which enables Tradinter to provide high-quality, technically sound, and commercially astute advice and services. We provide services in the areas of drone inspections, logistics and freight forwarding, industrial cleaning and business consulting. ■

Paula Dantas

Managing Partner **PROMETIM**

Can you give an overview of Prometim, and the main milestones achieved in the past few years?

Founded in 2015, Prometim has swiftly ascended as a prominent entity in Angola, boasting an annual revenue turnover of US$35 million and providing employment to approximately 300 individuals. Our inception contract, stemming from our extensive expertise in refinery maintenance management in Portugal, was a comprehensive maintenance agreement with a refinery—a partnership that remains strong to this day.

Subsequently, we ventured into the offshore sector, engaging with leading industry players such as TotalEnergies, BP, and Eni. Our inaugural engagement with TotalEnergies in 2017 marked a significant milestone, securing a dual contract encompassing valve maintenance and mechanical workshop services. This initial success paved the way for further contracts in areas including flexible hose and diesel engine maintenance. Our expertise spans a broad spectrum of maintenance services, both preventive and corrective, encompassing mechanical and engine maintenance, electrical and instrumentation services, as well as the upkeep of industrial facilities, supplemented by comprehensive support services for onshore and offshore operations. Prometim is committed to furthering our growth in Angola, recognizing the abundant opportunities presented by the continuous influx of new projects.

In addition to our Angolan operations, Prometim has established a strategic foothold in the Republic of Congo (Congo Brazzaville) and through our investment in AMC (Atelier Mécanique du Congo), a company specializing in rotating mechanics, including pumps, compressors, and turbines. This step has already fostered relationships with key players in the Congolese market, such as TotalEnergies and Eni. The Congo office/workshop, staffed by 65 professionals specializing in rotating mechanical equipment, is poised for expansion.

How can the Angolan authorities better support indigenous companies?

Firstly, the government's commitment to local content development could be strengthened by providing indigenous firms with access to financing from local banks at competitive interest rates. This would empower these companies to fund their operations effectively.

Additionally, it would be prudent to establish a policy that exempts local companies from the obligation to present substantial bank guarantees when bidding on contracts, or support them on the obtention of such guarantees. This change would level the playing field.

The National Agency for Petroleum, Gas, and Biofuels (ANPG) has made strides in supporting local businesses through preferential tenders. However, a more impactful strategy might involve the ANPG actively participating in the tender selection process to afford local companies greater opportunities. For instance, dividing large tenders into smaller segments could allow local enterprises to showcase their capabilities on a portion of the contract.

Finally, it is essential for local companies to have the opportunity to demonstrate their competence through contracts within Angola. Such experience is crucial for their growth and potential expansion into other markets. The ANPG could advocate for major industry players to allocate portions of large contracts to local companies, thereby fostering their development and integration into the broader industry ecosystem. ■

Raul Costa

Managing Director
TUBOSTRANS

Can you introduce Tubostrans and outline the company's services?
In mid-2019, TotalEnergies saw our potential to provide filtration services on one well in a five-well project. We had a two-month timeframe to deliver, so it was quite challenging to mobilize equipment within that short period of time, but we gracefully accepted the challenge head-on as it was an opportunity to demonstrate our capabilities, to not only the client but the overall market. Tubostrans performed exceptionally well, and it was then we were awarded the complete five-well project. We then won the tender for filtration services on their Block 17. We are a steadfast and innovative service provider to Angola's thriving oil and gas sector, with the mission of being a trusted partner in advancing the nation's oil and gas endeavors.

What are the main challenges facing local service providers in Angola?
Our biggest challenge as a local company is that, by law, we must receive payments in local currency. Contract payment terms can vary between 1-3 months, but the exchange rate stays fixed on what it was the day of invoicing. Unfortunately, currency fluctuations and devaluation can have a great impact on payments, making it difficult for local companies to operate and survive only on local currency. In Angola, materials and products need to be imported and paid for in foreign currency, but local banks take a significant time to transfer these payments, which then affects our ability to deliver high quality and timely services to our clients.

In addition to the currency challenge, access to capital in order to grow your business is also a challenge in Angola. Interest rates on loans are extremely high, making it almost impossible to attain financing from the banks as we would then not be able to deliver our services at competitive prices. For small businesses such as Tubostrans, fostering strong partnerships is critical. We have a solid partnership with KAESO Energy Services to accelerate the introduction of wellbore cleaning services performed by 100% local companies. In my opinion, these partnerships will motivate companies to take advantage of KAESO's and Tubostrans' strong capabilities.

Where does Tubostrans see the opportunity for growth outside of Angola?
The industry is vastly growing and with my curiosity also expanding, I have come to find that Namibia is rapidly developing in the oil & gas sector. Namibia is a virgin market, and the country is very open to foreign investors. With much thought, in 2023, Tubostrans established an entity in Namibia and we are thrilled to grow in this region.

What are Tubostrans' main priorities and growth strategy for 2024 and beyond?
Tubostrans aims to remain a leading service provider to the Angolan oil and gas market. We will continue to deliver high-quality services on international standards. We will focus our growth on the Namibian region, whereafter we will also look to expand into other African countries. ■

Ricardo do Amaral

General Manager
OCTOMAR

Can you share some recent developments at Octomar?
Our first fast crew vessel was acquired in 2018 from the Netherlands to support diving operations on one of our long-term contracts. It has since then been placed on spot contracts for other clients in Angola, supporting diving operations and offshore intra-field transfer of personnel. We are committed to expanding our fast crew vessel fleet, provided we have the long-term contracts in place to justify the investment.

The oil and gas industry in Angola is trending towards a boom in the next 3-5 years, in line with the government's strategy to increase production. This has resulted in an increase in exploration activity. Octomar continues to work for IOCs like TotalEnergies as well as Angolan independent oil producing companies like Etu Energias.

In 2023, we executed our first international project, which involved providing 24-hour diving services to support the installation of the first FPSO in Côte d'Ivoire. Working in a new country poses challenges, but our thorough planning resulted in a smooth and successful operation. We want to build on this success and consolidate our position in Côte d'Ivoire. We will use this experience to internationalize the company and hopefully expand our operations in places like Namibia.

Do Angolan companies like Octomar get enough government support and how is local content promoted?
Unfortunately, being a 100% Angolan company has not resulted in much support or benefits. We often find that foreign companies are easily able to enter the Angolan oil and gas sector without much investment in the country. Many Angolan companies like Octomar, which have been around for over 25 years and have invested significantly in infrastructure within the country and in the recruitment, training and development of Angolan nationals, have still not received any significant support. This is one reason behind our decision to internationalize the company.

What opportunities do you see in Angola's gas sector?
In 2023, we were involved in Angola's largest gas project which involves installing new sea lines to block 15 and exporting gas through the Angola LNG plant. We were involved in the shallow water geotechnical studies for this project. This project is still ongoing and we are participating in tenders for additional work to support its development. The Angolan gas industry has a lot of potential for growth.

What are your priorities for the coming years?
Despite branching off into new business lines, diving and subsea services remain a key part of our business. The majority of Angola's oil and gas activity takes place in deep water. Thus, we want to grow our subsea maintenance, inspection and repair services business using new technologies like remotely operated vehicles (ROVs). We are already investing and partnering with international players who have the assets and expertise to facilitate this. In five years, we would like to be structured and equipped with ROVs in Angola to carry out subsea deepwater inspections and repairs. ■

Jorge de Morais

General Manager
KAESO ENERGY SERVICES

Can you introduce KAESO Energy Services?
When I arrived in Angola in 2008 with SLB, I noticed that the local content companies in the oil and gas sector lacked technical services; they offered only basic services like cleaning, transportation and catering.

In 2013, we launched KAESO Energy Services (KAESO). We focused on niche products that did not compete directly with major service companies like SLB, Halliburton and Baker Hughes. Our mission was to demonstrate that local companies could also provide technical services. Our first client was TotalEnergies, starting with supplying retrievable bridge plugs.

Over time, we expanded our service portfolio to include four main product lines: downhole tools, asset management, maintenance services, and consulting. In downhole tools, we offer barrier, wellbore cleaning, intervention and conveyance services. Our asset management primarily involves cargo container units, with over 1,500 units in the region (Angola and Namibia), serving major clients like Azule Energy, SLB, Halliburton, Baker Hughes and others. Maintenance services include refurbishing equipment such as drill bits (KAESO is the first and only company refurbishing drill bits in Angola), and other metal structures, which positively impact CO2 footprints. Our consultancy services focus on manpower. Since 2013, we have grown from a seven-person company to a 75-person company, successfully navigating several crises in 2015, 2018, and 2020.

Which business lines are currently driving the most growth for KAESO?
The main growth drivers are the operators and international service companies. Downhole tools are mainly for operators as they involve working directly in the wells.

What are the main challenges Angola's oil and gas sector is facing and how can they be overcome?
Angolan oil production has been declining drastically, from 1.8 million bpd in 2015 to 1.1 million bpd today, and it is still declining. We lack local operators who can manage the full cycle of a field and service companies that can provide basic services to design and build wells. We also do not have enough refineries to process our crude oil or the means to store strategic reserves, which affects the entire sector.

To reverse the decline, we need to increase production through more exploration, which requires attracting more operators, both international and local. The legal framework for exploration in Angola is not designed for medium or small local operators, making it a tough and expensive environment for them to survive.

What opportunities do you see for KAESO outside Angola, particularly in Namibia?
While there are still opportunities in Angola, Namibia presents an interesting prospect. We entered Namibia in 2022 and established an operational oilfield service workshop in Luderitz, becoming the only company with such facilities there. We invested in significant infrastructure, including one of the biggest breakout machines in Namibia, a 25,000 PSI pressure test bay, cranes and other equipment. We served major international OFS companies, who deployed their services from our base. This positions us well for future developments in Namibia, even before any commercial production. ■

Matuzalem Sukete

General Manager
ANGOLA ENVIRONMENTAL SERVIÇOS (AES)

How would you assess the environmental regulations in Angola's oil and gas sector?
Angola's regulatory landscape has evolved considerably, placing greater emphasis on environmental compliance compared to earlier years. While challenges persist, AES ensures full compliance with international standards and local regulations.

What services does Angola Environmental Serviços offer?
Angola Environmental Serviços (AES) was established to cater to the environmental and waste management needs of Angola's oil and gas sector. AES will be celebrating its 20th anniversary in January 2025. Throughout our history, we have maintained a leadership position in environmental and waste management, providing an integrated service that allows major companies to focus on their core business while we handle auxiliary services associated directly or indirectly with waste management. For the last 20 years, we have been recognized for our capacity to treat drill cuttings using Thermal Desorption Technology. This technology allows for the recovery of the contaminating oil, known as base oil, contributing significantly to the circular economy and environmental sustainability by reducing carbon footprints compared to traditional burning methods. We support industry players in complying with regulations, providing necessary guidance and implementation support.

Have you noticed changes in service demand, especially with growing environmental consciousness?
Over the past few years, there has been a significant transformation within the industry, prompting new challenges that require innovative solutions. In recognition of our efforts, AES was honored with an industry award in 2023 for our sustainability project addressing the challenges in the storage of NORM contaminated equipment by developing a decontamination solution, bringing significant improvement in the related logistical constraints. This solution not only reduces waste volume but also supports recycling initiatives.

How do you manage workforce challenges in Angola, known for its demand for skilled labor?
AES prides itself on employing an over 95% local workforce, reflecting our dedication to supporting Angola's economic development and local content goals. Recognizing the technical nature of our operations, we invested significantly in training programs to equip our workforce with the necessary skills and qualifications.

What operational challenges has AES faced in recent years?
Our journey has been marked by initial economic challenges stemming from heavy capital investments in technology and infrastructure without the assurance of the immediate demand for our services. Overcoming these challenges, AES has focused on developing innovative solutions and enhancing local capacity to meet industry demands effectively. For instance, during the Covid pandemic, our robust local workforce and operational resilience ensured uninterrupted service delivery despite global disruptions.

What opportunities do you see for AES within Angola and potentially beyond?
We are currently exploring opportunities in Namibia, where the growth of the oil and gas sector presents promising prospects. ■

Janice Faria

CEO
ENAGOL

Can you introduce Enagol to our audience?
Enagol, Energias de Angola Lda, is a private entity with over 15 years of operations. Our primary focus lies on Non-Destructive Testing (NDT) services, with extensive experience in the oil and gas domain. Additionally, we have previously undertaken energy projects in Angola and Mozambique, particularly in power generation. While our core remains the oil and gas sector, we are expanding into the construction industry as well, with ongoing engagements with civil construction entities. Despite initial unfamiliarity with NDT services among our construction clientele, they responded positively once they were informed about its benefits. Presently, we are active in Angola, Namibia, and Mauritius, and have minor projects in Mozambique, with Luanda serving as our base.

Which African countries do you think are good for expanding outside of Angola?
As an Angolan, I am very patriotic and wish for all projects and revenue to stay within Angola. However, we are facing tough times due to exchange rate fluctuations and inflation. This makes it challenging to pay suppliers abroad. The Angolan oil and gas industry relies on suppliers from countries like Germany and the USA. However, we must pay for goods in foreign currency, and our banks face difficulties sending money abroad. When the National Bank of Angola conducts bids for US dollars, banks often do not have enough currency to meet demand, causing a shortage. Consequently, we sometimes wait up to three months to pay our suppliers, impacting our operations. Clients want quick results, but delays in payment and bureaucracy slow us down. We have had to take on debt to cover costs while waiting for payments, and the process of invoicing and receiving payments can take up to 120 days.

To mitigate these challenges, we have started exploring other markets. Namibia and Mozambique are particularly promising due to recent discoveries. While these markets are relatively new and undeveloped compared to Angola and Nigeria, we see this as an opportunity to enter early and establish ourselves before the market becomes saturated. Currently, we are active in Namibia providing inspection services for fabrication. Namibia will be the next 'El Dorado' of Africa.

What are Enagol's plans for the coming years?
We have actively participated in bids for onshore exploration blocks, securing shares in four blocks, two of them still without an operator. Additionally, we have partnered with Acrep in KON-19 and Etu Energias in CON-8, where they act as operators, and we are part of the shareholder group. Our approach aligns with the Angolan Ministry's focus on prioritizing local involvement in onshore projects. Looking ahead, we are also considering offshore opportunities. While large IOCs dominate offshore operations in Angola, we are encouraged by our involvement in the industry with other Angolan companies like Etu Energias. We believe this strategy mirrors the successful approach seen in Nigeria, where local companies are taking charge of onshore operations. Offshore will be the next frontier. ■

Francisco Monteiro

Chairman and CEO
BRIMONT

Can you provide an overview of BRIMONT and elaborate on its involvement in the energy industry?
BRIMONT, founded with a vision to serve the oil and gas sector, has diversified into a multi-service company encompassing the provision of procurement services and strategic supply, HR solutions, real estate, and industrial production. Our services specialize in offering tailored solutions for companies operating in Angola's oil and gas sector, covering aspects from regulatory compliance to operational logistics. Our journey began with a keen understanding of the Angolan market's nuances and a commitment to addressing diverse needs, including adhering to local etiquette.

One of our pivotal roles revolves around procurement services, where we ensure seamless operations by supplying everything from necessities to emergency supplies. Our evolution has seen us become the largest producer of sodium hypochlorite in Angola, fulfilling environmental requirements within the industry. This hard achievement is a result of resilient growth based on consistent investment in our Angolan workforce and adherence to local content laws. We aim to expand chemical manufacturing and supply, catering to both domestic and international clients, as well as the major oil and gas operators in the region.

Furthermore, our expertise extends to specialized services in chemical applications, such as injection and corrosion management, bolstering asset integrity within the energy sector.

What are the main challenges indigenous companies like BRIMONT face in Angola?
Indigenous companies like BRIMONT face multiple challenges, particularly concerning financial viability and operational sustainability. One significant hurdle is the requirement for prepayment by overseas suppliers coupled with client demands for extended credit terms, averaging officially 30-45 days, but often spanning 90-180 days. This places considerable strain on our financial capabilities, especially in an environment marked by very high inflation and high interest rates. Additionally, the prevalence of international contractors in Angola further complicates matters, as they often benefit from financial instruments and frameworks that provide them with a competitive advantage over local companies like ours.

Where do you see the most opportunity for BRIMONT and other service providers in Angola's energy sector?
The most opportunity lies in major projects that are effectively planned for Angola's development, particularly in oil and gas where developing and controlling the full scale of the industry is a must.

While there are investments coming, the success of these projects may take time due to the level of investment required and the impact of energy transition paradigms. Angola's commitment to net zero and renewable energy is evident, yet the exploration of oil and gas resources remains essential. BRIMONT aims to leverage its experience to support these areas, as well as mining, where Angola holds viability in over 30 of the more critical minerals in the world. Additionally, Angola's strategic geographic location positions it as a logistical hub, offering opportunities for growth and value addition. Our focus is on expanding our capabilities and contributing to the development of Angola's energy sector. ■

Ola Adebowale

CEO
VICTORY OIL & ENERGY

Can you introduce Victory Oil & Energy?
Victory Oil & Energy (VOE) is a dynamic Pan-African company focused primarily on delivering essential oil and gas services while strategically exploring avenues for diversification into renewable and green energy sectors. Our mission is centered around fostering local capacity and capability building within Africa's energy landscape, aligning closely with regulatory frameworks and the strategic objectives of major industry players.

Our service portfolio spans critical areas such as drilling solutions, geoscience services, enterprise training, inspection, certification, qualifications, and integrated project management services. These offerings are tailored to meet the specific demands of jurisdictions like Angola, Namibia, Nigeria, where we are actively expanding our footprint.

Have you seen rising demand for specific services?
Geoscience services are emerging as pivotal in Angola's onshore landscape due to recent acreage developments and assignments. Meanwhile, Namibia presents a nascent frontier, necessitating foundational training in oil and gas fundamentals.

What can you share about Victory Oil & Energy's upcoming plans or initiatives?
Our goal is to ensure that we can bring excellence and drive value in the marketplace in Angola, Namibia, Nigeria and beyond. Each of these jurisdictions has a different play and growth trajectory, but all demand and need strong local service providers operating with international standards and governance. To attain this, it is imperative to pursue grassroots skill enhancement and the infusion of a culture of excellence.

In this regard, we continue to launch initiatives that drive such cultural sustainability within these jurisdictions. We are collaboratively working on running the Visualization Center in Angola, which will be used to host an oil and gas life cycle training program for university fresh graduates. In the same vein, a similar initiative will be launched in Windhoek with an Oil and Gas Training Academy, which we will operate. ■

<< 68

Battle for local content
Like many developing nations, Angola has relied heavily on the resources and technical expertise of large IOCs and multinational oilfield service providers to tap into its oil and gas that lies thousands of meters below sea level. Recognizing the need to include its population in arguably the most important sector of the economy, the government has passed various local content laws, ranging from procurement requirements to 'Angolisation' policies, to ensure local participation and the transfer of knowledge. Cognizant of this, Angola's ecosystem of indigenous service providers has stepped up to support the sector through training, procurement and logistics services, among other offerings.

While the liberalization of Angola's oil and gas sector will bring about new opportunities and open the country to more foreign investment, indigenous companies will likely face even stiffer competition from large, established international players as the economy opens up. Paula Dantas, managing partner of Prometim, a fast-growing indigenous company providing maintenance services to the oil and gas sector, shared her thoughts on how regulators can give younger local companies a fighting chance against established international behemoths: "It would be prudent to establish a policy that exempts local companies from the obligation to present substantial bank guarantees when bidding on contracts, or support them on the obtention of such guarantees. This change would level the playing field, particularly in scenarios where multinational corporations are not subjected to the same financial stipulations."

In addition to the stiff international competition, local companies are having to contend with currency fluctuations and inflation, with Angola's Kwanza being Africa's weakest currency against the dollar as of mid-2023. For large internationals, this is less of an issue as they can rely on their vast reserves of foreign currency and have alternative sources of income that can hedge against a poor performing Kwanza. "One significant hurdle is the requirement for prepayment by overseas suppliers coupled with client demands for extended credit terms, averaging officially 30-45 days, but often spanning 90-180 days. This places considerable strain on our financial capabilities, especially in an environment marked by very high inflation and high interest rates," said Francisco Monteiro, chairman and CEO, BRIMONT.

In addition, high interest rates on loans makes access to capital challenging – particularly for Angola's smaller and younger companies. However, Angola's entrepreneurs know there is strength in numbers and are finding ways around these hurdles. For small businesses such as Tubostrans, fostering strong partnerships is critical. "We have a solid partnership with KAESO Energy Services to accelerate the introduction of wellbore cleaning services performed by 100% local companies. This partnership will motivate companies to take advantage of KAESO's and Tubostrans' strong capabilities," said Tubostrans' managing director Raul Costa.

While Angola's indigenous companies are advocating for more equitable local content policies, they are not asking for handouts or for the government to punish foreign companies simply for being foreign. "We do not want to get business simply because we are an indigenous company, but rather because we deliver high-quality services and solutions to the market," said Msuega Tese, executive director at IT-solutions provider Integrated Solutions Angola.

Angolan companies are not sitting idly by as the government steers Angola's economy along its privatization journey and are making their voices and concerns about local issues heard by engaging with authorities such as the ANPG, the national regulator of petroleum, gas and biofuels. Enagol, a 15-year-old indigenous non-destructive testing provider that has successfully bid for onshore exploration blocks, is one such company: "Enagol is part of a group of indigenous oil and gas service providers that are advocating for more opportunities for local companies. While progress is being made with local content laws, many foreign operators still question the quality of local companies. Some foreign companies come with pre-existing contracts from their home countries, favoring their own nationals. The battle for local content is hard," said Janice Faria, Enagol's CEO.

Despite the challenges, regulators have made some welcome changes in the past few years aimed at boosting local companies' small share of the Angolan oil and gas services market. "A previous 'Angolanisation' law forced companies to have a 70% Angolan workforce, but this regulation was incompatible with reality, and in October 2020, a new legal regime of local content in the oil sector was implemented

77 >>

Ricardo Santos

Country Senior Partner
PWC ANGOLA

Can you introduce PwC Angola and outline how it serves the local energy sector?
PwC Angola serves the energy industry by combining our local presence with our global expertise. We provide solutions in assurance, tax, and advisory to a wide range of companies – local and international- covering the entire oil and gas value chain from upstream to downstream, as well as service companies.

What has been driving demand for PwC Angola's services from its energy sector clients?
With a significant reduction in investment in Angola's oil and gas sector, new projects and developments were not sufficient to offset the country's decline in production. As a result, many companies had to rethink their operating models and are looking into their internal processes for efficiencies and their staffing to be more resilient during challenging times.

Companies are implementing technologies as the main driver of efficiency and have been requesting PwC Angola's assistance in their digital transformation journeys. We help our clients introduce automation and AI into their processes and are upskilling people to be able to use the technology effectively. As these clients are exposed to new technologies, they are also exposed to new risks, and governance and cyber security solutions are also in high demand today. Another area driving efficiency has been the outsourcing of some internal functions such as accounting, financial reporting, tax compliance, payroll, and internal auditing, and PwC Angola is assisting our clients in this regard as well.

Are you seeing a connection between tax, audit, and ESG in Angola?
ESG reporting is an area where we see increased demand from our clients. International companies operating in Angola are subject to stringent ESG reporting requirements in their home countries, and that then extends to the supply chain. The Angolan government is also encouraging ESG reporting, resulting in more demand from our clients in this regard. ■

Jurelmo Lopes

General Manager
MAINSOL

Can you give an overview of Mainsol and the company's services to the Angolan oil and gas sector?
Mainsol was established in 2015 by a team of people who recognized the need for facilities maintenance in Angola and the company provided this service for infrastructures such as HVAC systems, lifts, gate controls, and other small technologies. The company grew significantly fast with a 160% growth in revenue by 2017. Although most of our products and equipment are imported, we service our clients with local teams and collaborate with international partners to train Angolans on complex operations.

Today, Mainsol is committed to providing top-tier drilling and completion fluids, drilling and well services, cutting-edge flow solutions, and a comprehensive range of technical equipment rental.

What opportunities do you see?
Our focus is on the Angolan market, but we also have activities in Congo and are in the process of establishing a legal entity in Namibia.

How can the government support local companies and retain more value within the country?
The Angolan oil and gas services market is approximately US$6 billion per year, with local companies only having about US$300 million of that share. Many international companies make tremendous profits and take money out of the country and pay taxes abroad. This does not benefit the economic growth of the country and therefore, further local content development and support is key.

Angola still has a long way to go with regard to local content, but we are seeing more local companies tendering on projects and being granted contracts. Further improvements could be made by enforcing clarity between operators and local service providers so there is clear communication about tender results, and we should also look at ways for local companies to be able to pay for imported products and services in foreign currency. ■

Simplifying the licensing process, offering tax exemptions and creating a stable regulatory environment will encourage new entrants and existing players to invest more.

Edilson Bartolomeu,
CEO,
ACREP Angolan E&P Company

We believe that new services supported by advanced technology and highly qualified Angolan staff create a vast offering that large players can tap into.

Giulio Serra,
Managing Partner,
Indústria Comércio e Serviços (ICOS)

<< 75

to ensure and encourage the participation of local companies. This regulation better promotes local content as it is not only focused on a company's workforce but ensures that some services rendered to the oil and gas industry are exclusive to local companies," said Jurelmo Lopes, general manager, Mainsol.

Although many feel there is a long way to go on the regulatory side to promote Angolan content within the country, regulations can only go so far. In a technically complex field like offshore oil extraction, certain skills will need to be transferred from the private sector. "The [skills] gap can be filled in many different ways, such as through government initiatives and local content laws, but ultimately it is the private sector that must make long-term investments in training local workers to shift away from the expat recruitment model," said Andrew Schnitzer da Silva, co-founder and board member of Ascending, an HR service provider focused on workforce management solutions.

In the past, there was a requirement for foreign companies that wanted to enter the Angolan market to set up JVs with local partners, which generally led to these companies wanting to work with people with high-level contacts and influence, often creating a grey area in terms of business integrity and compliance. The liberalization and relatively stable framework of Angola's oil and gas sector has undoubtedly contributed to attracting foreign investment, as evidenced by TotalEnergies' recent decision to invest US$6 billion in Angola instead of Nigeria. "The oil and gas industry in general is a competitive environment, and majors such as ExxonMobil, that have a global portfolio of opportunities, have to stack them against each other and choose the more competitive opportunities. In recent years, the Angolan government has been focused on the competitiveness of the country's opportunities in the global oil and gas marketplace and is putting in the effort to increase investor confidence," said Katrina Fisher, lead country manager, ExxonMobil Angola.

However, amidst the excitement, authorities must not forget that indigenous companies need support and attention as well. "Unfortunately, being a 100% Angolan company has not resulted in much support or benefits. We often find that foreign companies are easily able to enter the Angolan oil and gas sector without much investment in the country. This is one reason behind our decision to internationalize the company to ensure the company's long-term sustainability," said Ricardo do Amaral, general manager, Octomar.

At least for now, it appears that Angola's reforms appear to already be benefitting operators – both indigenous and foreign – but the impact on indigenous service providers appears to be mixed. "In a globally difficult environment where countries have to compete for investment, the Angolan government has realized that it needed to make significant changes to attract investment. There is more open discussion between the government and industry and we have seen several changes in laws and regulations, as well as incentives for new investments, which will benefit the oil and gas sector," said PwC Angola's country senior partner Ricardo Santos.

Angola will need to continue to attract foreign firms with the know-how and resources to undertake complex and expensive projects if it is to boost oil and gas production. However, it must also find a way to include its citizens in the oil and gas sector, which accounts for a third of its GDP, over 90% of its exports and is the backbone of its economy. In the long term, a robust ecosystem of indigenous companies will be crucial if Angola is to achieve its goals of using its hydrocarbon resources to diversify its economy. By getting a leg up through the cash flushed oil and gas sector, service providers can build up their capacity and branch out into alternative business areas, in line

In recent years, the oil and gas sector mainly requires traditional services, like IT infrastructure support and maintenance, due to the challenging economic conditions.

Msuega Tese,
Executive Director,
Integrated Solutions Angola

We are indeed seeing more awareness and interest in cybersecurity from our clients, including those in the oil and gas sector.

Ivan de Sousa,
Managing Partner,
Menshen

with the government's goals. "There is a challenge in balancing support for new companies without compromising production. Empowering local companies is essential, provided they meet necessary criteria. The government must consider this as oil will not last forever, and the best years may be the next 20 years," said António da Silva, Founder and CEO, GIPSA.

ISQapave employs over 200 staff in Angola today, with around 85% being Angolan, showing that in the case of local content, it might yet be possible for Angola to have its cake and eat it too. "Overall, while the investment climate in Angola is improving, the government needs to strike a balance between promoting local content and encouraging foreign investment," continued Andreevski.

In the face of stiff international competition, Angola's service providers will have to rely on proven track records and deep local knowledge, as well as long standing client relationships that date back to when Angola's oil production took off in the early 2000s. "One of our first customers in Angola was bp, starting with a contract to provide end-user training followed by contracts to provide technical resources for their help-desk," shared Ivan de Sousa, managing partner, Menshen.

Looking at the bigger picture, pan-African cooperation, potentially through existing institutions such as the African Petroleum Producers' Association (APPO) or the African Union, may also help Angola and other African countries strike this balance. "The Nigerian minister of petroleum resources (oil) stated that African countries should have similar policies to enable us to solve the continent's energy problem. With similar policies across the continent, foreign companies would be able to better understand local content laws," said Alves Michael, managing director of Angolan marine consulting firm AFC Mercy.

Passing and enforcing local content policies is only half the battle for Angola's energy sector. To truly reap the benefits of local content, the sector must ensure that there is a robust pipeline of skilled workers – a challenge that many local companies are struggling to address. "It is not easy to retain these trained individuals in our pool of talent as they are often quickly swept up by industry with the demand for technical professionals - such as tank cleaners, maintenance technicians, and radiation protection officers - being extremely high in Angola," said Gourgel Neto, managing director, Resilience 360.

Cultivating home-grown skilled talent can offer an extra layer of security for businesses too. Mário Pais, operations manager of Oceanbizz, explained how his company's approach kept it afloat during trying times: "The pandemic brought about both challenges and opportunities in that many of our client's operations were interrupted and demand for products and services decreased. However, several of our competitors that employed expats could not conduct business as per usual, which gave Oceanbizz, a 100% local company, a point of entry to new markets." ■

Executive Insights on Regulation

"I believe the new labor law implemented is harmful to employers and employees, and instead of propelling us forward, it is pushing us back. The new laws allow for more time off than ever before, resulting in productivity being low and companies shying away from employing women due to maternity leave being almost a year."

Gourgel Neto, Managing Director, **Resilience 360**

"The government is calling investors to enter the Angolan market and we see this as an opportunity to provide local content consultancy to these international companies to assist them in understanding the market. During internal risk assessments, companies often see Angola as high risk, but this is because they lack information about the local workings of the country."

Alves Michael, Managing Director, **AFC Mercy**

"Most of Angola's population is concentrated along the coast and it is challenging to invest in places where the population is small and there are only a few companies requiring our services. In my opinion, the government should implement tax benefits and incentives that will make it more viable for service providers to invest in the country's rural areas where there is limited business."

Francisco Leite, General Manager, **Internet Technologies Angola (Paratus Group)**

"We have seen several changes in laws and regulations as well as incentives for new investments, which will benefit the oil and gas sector. Although changes are positively impacting operators, it seems that service providers are still struggling with historical challenges."

Ricardo Santos, Country Senior Partner, **PwC Angola**

"Increasingly stringent anti-money laundering laws have further brought the Angolan insurance sector in line with existing banking sector laws. By aligning with international best practices, Angola aims to strengthen its position as a preferred destination for investment and business development in the insurance sector."

Tiago Dá Mesquita, CEO, **Zillian Angola**

Frédéric Heintz

General Manager
PETROMAR

Can you share the main developments at Petromar since our last conversation in 2020?
The situation in Angola has changed greatly in the last few years. One of Petromar's two main activities is fabrication of traditional subsea structures, where we are the only manufacturer of pipe-in-pipe quadruple joints in Angola. The fabrication sector is currently booming, surpassing pre-pandemic levels of activity, as projects come back online.

Our other main activity is maintenance, where we have longstanding contracts with Sonangol in Block 3, in Cabinda for CABGOC (Chevron) in Block 0 and 14, and more recently for Azule Energy for their two FPSOs on Blocks 18 and 31. During the Covid pandemic, our maintenance activities were the first to slow, but were also the fastest to ramp up again once activities returned to normal levels.

The expansion of our yard in Ambriz was successfully completed. Initially, we aimed to use this extra space for storage and diversify into logistics, given its access to the sea. However, this diversification has been put on hold as the expanded yard space needs to be dedicated to usual fabrication to meet the current huge levels of demand.

What are the main challenges Petromar and similar players are currently facing?
We are currently at the peak of activity. There are definitely challenges with talent acquisition and retention, as well as logistical challenges with bringing materials to Ambriz and participating in developing the small town of Ambriz. We continue to invest heavily in training on-job for our people to overcome this challenge, which we see as temporary.

What are Petromar's priorities for the coming years?
We see opportunities to further develop and exploit our expanded Ambriz fabrication yard, and we are exploring exporting to West African countries, such as Côte d'Ivoire and Nigeria. ■

DA

SF

Domingos Augusto and Sandro Ferreira

DA: CEO
SF: Sales and Marketing Manager
SONAMET

Can you give an overview of Sonamet and the company's presence in Africa?
SF: Sonamet started with small projects, such as constructing 2 jackets and decks for Chevron's Vuko Kungulo project, and throughout the years, we have pioneered several first-time structures built in Angola, including the first reeling, manifold, turret, topside module, buoys, and very recently a deck with booster compressor. In our 25 years experience, the company has worked with all the major operators active in Angola, including bp, Chevron, ExxonMobil, TotalEnergies and Eni, as either a direct client or through EPCI contractors. Today, we have approximately 2,000 people working in the yard.

Sonamet does some EPC work for shallow water projects, but fabrication remains our core business.

What are the main challenges facing fabricators such as Sonamet?
SF: Labor has not been an issue for Sonamet as we have a training center where we train our workforce, mainly focused on the locals. As we have fluctuations in business activity, we are obliged to mobilize and demobilize people according to workload, and when people are remobilized into our operations, we refresh them on safety and all the activities in the yard at this training center.

What opportunities does Sonamet see outside of Angola?
DA: We have bid on opportunities in Nigeria, Mozambique, and even Brazil. Our focus is currently on expanding to Namibia, and because Angola has a more mature oil and gas industry than Namibia, we believe our expertise, knowledge, and training capabilities can be a great benefit to the country and the growth of its industry. We have already started to train 30 Namibian welders. Angola is a true oil and gas nation with vast accumulated knowledge and experience in developing projects, and we look forward to collaborating with Namibia in growing their industry. ■

Frecissimo Sarmento

District Manager
CHAMPIONX QUÍMICOS

Can you introduce ChampionX Químicos and give an overview of how it serves the Angolan oil and gas industry?
ChampionX Químicos (CHXQ) is a joint venture between a local entity and ChampionX, a global leader in petrochemical solutions for the oil and gas industry. Our solutions include efficient fluids separations, flow assurance, integrity mitigation and production enhancement. CHXQ developed local infrastructure and expertise to enhance oil production in Angola. We work closely with Sonangol on their upstream and midstream business and are a key player in managing the Luanda refinery.

Where does ChampionX Químicos currently see the most opportunity for growth in Angola?
Angola's potential is huge. Looking at customers' investment in upstream deepwater, potential success down in the southern part of Angola (Namibe), midstream developments with Angola's refining goals and onshore developments, CHXQ sees great opportunities ahead as we sit in a very privileged position. Additionally, our local content strategies are in alignment with government goals and our main customers.

ChampionX also aims to reduce its clients' carbon footprints and increase sustainable practices in the industry by providing local equipment, services, and skilled local personnel. Today, we have a 94% nationalization ratio and a fully Angolan management team. This was a result of more than two decades of investing in developing our local content, high-skilled professionals and first-class infrastructure.

What are the main challenges of doing business in Angola?
This is very cyclical business. At the moment we can point out two major business challenges; importation and currency stability.

Do you see an uptick in demand for more environmentally friendly products?
Approximately 75% of our clients have a pre-requirement for sustainable products, and they are demanding products that are not only green but also increase efficiency. The government has increased its focus on ESG, mirroring North Sea requirements. Many contracts tendered today can only be won by companies that have 'green' products. ■

António da Silva

Founder and CEO
GIPSA

Can you introduce GIPSA?
GIPSA is an indigenous oil and gas service company in Angola, established in late 2014. As part of a government initiative to empower local businesses, GIPSA has enabled entrepreneurs like me to enter the capital-intensive oil sector and explore opportunities in other industries such as mining.

We offer a wide range of services including drilling, manpower services, downhole tool rentals, and wireline. Our service portfolio is comprehensive, encompassing scaffolding, blasting, painting, chemical supplies, and engineering services. While we currently import many supplies, our future plans include developing local manufacturing capabilities. We maintain a presence at the Sonils base, the primary hub for oil service companies, and are certified by Angola's National Petroleum and Gas Agency (ANPG), underscoring our adherence to national standards and regulations.

Which services are driving growth for GIPSA?
The oil and gas sector in Angola offers significant opportunities, particularly for local content companies, which currently occupy only about 2% of the market. This indicates vast potential for growth. At GIPSA, we leverage our expertise in drilling, manpower, and downhole tools to capitalize on these opportunities. With over 400 potential service areas identified by ANPG, we focus on areas where we have a strong foundation.

Do you feel authorities can do more to support indiginous companies and bolster local content?
There is a challenge in balancing support for new companies without compromising production. Empowering local companies is essential, provided they meet necessary criteria. The government must consider this as oil will not last forever, and the best years may be the next 20 years.

Do you have a final message?
As a young company, GIPSA aims to contribute to the growth of Angola's economy. We believe others will follow our lead, allowing for collective and faster progress. We hope to spread the word so that Angola and Africa's development path reaches its peak soon. ■

Patricia Lopes

Country Manager
MECWIDE ANGOLA

Can you give an overview of Mecwide Angola?
We have been working in Angola since the company's incorporation, but in 2012, we officially established a branch in the country. Mecwide is divided into six business units: Oil and Gas, Mines and Cement, Industry and Energy, Technical Assistance services, Data Centers, and Modular Systems.

In October 2023, Mecwide opened a 14,000 square-meter metalworking yard in Angola, which will provide pre-fabrication of piping and manufacturing of steel structures, process equipment, and customized and compact systems of metalwork construction. This key investment demonstrates our commitment to the country and forms part of our sustainable growth strategy.

In light of the global energy transition, has Mecwide Angola observed a shift in the types of projects the company is involved in?
Mecwide was the main EPC contractor on Sonangol's Falcão 2 project in Soyo where we executed the construction of a facility to receive, treat and distribute gas supplied by the Angola LNG Gas Receiving Distribution Unit (GRDU).

Mecwide Angola was recently awarded by Saipem a project within the New Gas Consortium Development from Azule worth US$2.2 billion. This is currently the largest gas development in Angola and comprises two offshore platforms, Quiluma and Maboqueiro, which will be subsea connected to shore, with an expected production rate of 4 billion cubic meters of gas per year. Mecwide's scope of work within this project is the construction of this entire onshore gas pipeline.

We can see a clear shift towards gas, renewables, and cleaner energies. The Angolan government has implemented new laws and regulations on the subject in order to support and boost the development of these sectors. We were involved in the construction of Angola's first big solar power plant by MCA Group, which was the biggest public solar energy project in sub-Saharan Africa at the time. ■

Elisabete Alves

COO for International Infrastructure
MCA GROUP

Can you give an overview of MCA Group and how the company serves the African energy sector?
In light of the global energy transition, MCA realized that it would be beneficial to diversify into the energy sector, and in 2017, we developed our first project in the energy sector in Angola. The 370 MW Solar Project was co-developed by MCA, and we are also responsible for the engineering, procurement and construction of the seven PV parks that make up the project. While infrastructure remains core to our business, MCA's main focus today is on further developing renewable energy projects, a circular economy, sustainable urban development, and healthcare.

Can you elaborate on MCA Group's renewable energy portfolio in Angola?
In Angola, we currently have two renewable energy projects, one being the construction of seven solar parks totaling an installed capacity of 370 MW of which four installations with a total capacity of 340 MW have been completed. The Biópio park in the Benguela province is the largest solar PV plant in Southern Africa and has an installed capacity of 189 MW.

The second renewable energy project in our portfolio is the Rural Electrification Project which aims at providing 60 remote communities in five Angolan provinces with sustainable electric power. We are developing 48 newly built mini-grids and 12 extensions of the existing national grid across the provinces of Moxico, Lunda Norte, Lunda Sul, Bié, and Malanje. The project includes energy generation through photovoltaic parks, storage in lithium-ion batteries and the execution of transmission and distribution lines to deliver the electricity to the communities.

Have you seen interest and support from the government for renewable energy projects?
The Angolan government and the President are committed to sustainable goals and are supporting the renewable energy sector not only to meet these targets but also to diversify the energy mix and increase the electrification rate of the country. ■

Mário Pais

Operations Manager
OCEANBIZZ

Can you give an overview of Oceanbizz?
Oceanbizz was established in Angola in 2017. Today, we specialize in ship chandlering, general procurement, catering, freight and forwarding, logistics and warehousing, husbandry services, visa issuance, and crew change services. Our main clients are shipping companies and service providers to the oil and gas industry.

What are Oceanbizz's main objectives and growth strategy for 2024 and beyond?
As a small company, Oceanbizz is taking a measured and one-step-at-a-time approach while still staying on track with developments in the Angolan and global markets. We have recently started to distribute Mobil lubricants nationwide from our distribution hub in Lobito and hope to continue to grow our local market share in this regard. Oceanbizz has the objective to expand all our operations to Cabinda by early 2025, and to Namibe province by 2026. Our approach is strategic, ensuring that we are well prepared and consolidated in our areas of operation by 2027, diligently preparing to meet the needs of our clients promptly and effectively. Our primary focus is on providing swift responses, a capability that sets us apart in the market. ■

Ognen Andreevski

Operations Director
ISQ APAVE

Can you provide an overview of the services provided by ISQapave in Angola?
Our services include non-destructive testing, inspection, seal inspection, lifting, tubular inspection, and various engineering assessments. Currently, we have a workforce of 200, with approximately 85% being Angolan.

Could you elaborate on the development of Cabinda?
Cabinda is experiencing significant development, particularly with regards to its refinery and fabrication yards. Chevron, one of our major clients, has reopened fabrication yards in Cabinda, indicating a resurgence in activity.

How competitive is the market in Angola?
The market continues to grow, driven by investments from major players such as Chevron, and ExxonMobil. However, one of the main challenges is the shortage of skilled labor in Angola. Companies have to rely on expatriates to meet their workforce needs, adding to the complexity of operating in the market. While new entrants are always a possibility, the barriers to entry, including regulatory requirements and the need for specialized expertise, can be significant. Overall, while the market presents opportunities for growth, it also poses challenges that require careful navigation. ■

Tiago Dá Mesquita

CEO
ZILLIAN ANGOLA

How important is the energy sector to Zillian Angola today?
Since 2017, we have expanded our involvement to include operational risks for oil and gas exploration and production. We have successfully placed operational policies for entities like bp, Eni, TotalEnergies and others in the London reinsurance market. We have also been involved in placing reinsurance for specific offshore construction projects like Dalia, Agogo and Begonia, among others. These involvements have necessitated the development of a specialized local team proficient in handling the unique challenges of energy insurance and reinsurance, combining international expertise with local insights to ensure robust risk management and claim handling capabilities.

How do you view Angola's 2022 Insurance Law and the current regulatory framework?
The 2022 insurance law introduces robust reforms aimed at strengthening regulatory oversight and enhancing market stability within Angola's insurance sector. Key provisions include stringent corporate governance standards, heightened minimum capital requirements, and consumer protection. The recent 2024 Insurance and Reinsurance Brokerage Law unified insurance and reinsurance brokerage laws. These regulatory changes are instrumental in fostering a more dynamic insurance market in Angola. ■

Namibia

If we have a stronger Namibia we have a stronger African oil and gas industry, which will benefit all of us.

Bráulio de Brito
Founder and Executive Chairman, **TRADINTER** and Chairman, **AECIPA**

Image courtesy of Chris Stenger at Unsplash

Namibia

From deserts to discoveries: The new energy frontier

Sandwiched between Angola to the north and South Africa to the South, Namibia is blessed with a 1,572-km Atlantic coastline, abundant wind and sunshine, as well as an impressive mining industry. Now, fueled by a slew of recent significant oil discoveries and a groundbreaking US$10-billion green hydrogen initiative, the country is poised to emerge as one of Africa's main energy hubs. The government's proactive drive to attract both local and foreign investment promises to unlock new revenue streams, create jobs, and diversify the economy.

In 2022, TotalEnergies announced the Venus-1 discovery, 290 km off Namibia's southern coast. With an estimated 1.5-2 billion barrels of oil, Venus-1 became the company's largest-ever sub-Saharan oil find and its largest discovery in approximately 20 years. Subsequent discoveries made by Shell, Galp and other majors led to a rush of excitement, which led to IOCs increasing their stakes in Namibian blocks and service providers rushing in from Angola, South Africa and beyond to establish a presence in the country. Unlike many African oil-producing nations, Namibia has enjoyed continual political stability and security since gaining independence in 1990, evidenced by the speed at which many international companies have been able to establish a foothold in the country.

In his interview with Global Business Reports, Tom Alweendo, Namibia's minister of mines and energy, explained the country's ambitions to exploit these hydrocarbon resources as sustainably as possible and ensure that value addition occurs within the country. "We are deeply committed to learning from the experiences of other countries where oil discoveries failed to translate into sustainable economic development. Our primary objective is to ensure that the newfound oil resource benefits the Namibian people and accelerates our journey toward becoming a fully developed economy," he said.

NAMCOR (the National Petroleum Corporation of Namibia) has been forging partnerships with the IOCs, most recently announcing a farm-out agreement with Chevron for the PEL 82 license in the Walvis Basin. "Our partnerships have yielded significant discoveries in blocks such as PEL 39, 56, and 83. Currently, our focus is on appraising discovered oil and developing a production plan," shared Ebson Uanguta, NAMCOR's interim managing director.

Smaller companies are also jumping into the black gold rush. Eco Atlantic Oil and Gas, a Toronto headquartered pure-play exploration company, has a long history in the country dating back to 2011 when it acquired five blocks. "Large companies like TotalEnergies, ExxonMobil, Chevron, Shell and bp continue to invest in exploration, understanding the long-term need for these energy resources. Our strategy is to partner with these companies, leveraging their technical expertise and financial strength to explore and develop our blocks," said Eco Atlantic Oil & Gas' CEO Gil Holzman.

With no history of commercial oil production, Namibia will be heavily reliant on IOCs for their expertise and resources, especially as many of Namibia's discoveries are ultra-deepwater fields, with deposits as deep as 6 km. Robust infrastructure will need to be rapidly built out to tap into these deposits. "Currently, Namibia's infrastructure, both onshore and offshore, is underdeveloped for large-scale oil and gas production. To address this, partnerships with the Namibian government, IOCs, and private investors are essential," continued Uanguta.

Fortunately, the biggest names in the industry are already active in the country, and recent technological advancements mean that many of these obstacles can be overcome. "Advances in technology have made deep-water drilling more feasible, as demonstrated by TotalEnergies's Venus discovery in 2022. Modern equipment and drilling ships can reach depths previously considered unattainable," said Holzman.

First commercial oil production is anticipated by 2030, but Namibia is getting the ball rolling now by signing partnerships, hosting conferences and providing a regulatory framework for environmental matters, local content, and petroleum revenue management. Ndapwilapo Selma Shimutwikeni, founder and CEO of Namibian strategic advisory firm RichAfrica Consultancy, was involved in the drafting of the National Energy Policy and shared her advice for foreign companies looking to enter the Namibian market: "Companies should plan for varying conditions across the country. The process of business registration and obtaining necessary permits is thorough, ensuring companies are well-prepared to operate."

With a population of around 3 million, Namibia is the second least densely populated nation in the world, behind only Mongolia. "Namibia's relatively small population size presents challenges in terms of infrastructure development and market

89 >>

Tom Alweendo

Minister of Mines and Energy
GOVERNMENT OF NAMIBIA

> ***Namibia offers a compelling value proposition for investors looking to capitalize on the country's vast potential in the mining and energy sectors.***

Can you introduce the Ministry of Mines and Energy and outline its mandate and goals for Namibia's mining and energy sectors?

I have overseen the Ministry of Mines and Energy since April 2018. The Ministry serves as the custodian of Namibia's minerals and energy resources. Mining especially is one of the most significant sectors of the Namibian economy, contributing over 50% of our revenue and up to 15% of our GDP. Energy, particularly with the recent oil discoveries, is becoming increasingly important as well, potentially eventually overtaking mining in terms of its significance to our economy. We seek to leverage these sectors as catalysts for broader economic development. Our mandate includes overseeing the exploration, extraction, and regulation of minerals and energy resources to ensure their sustainable management and utilization for the benefit of Namibia's economy and people.

What are Namibia's plans for exploiting recent oil discoveries?

The major oil discovery two years ago was met with great enthusiasm and debate. While some voices advocate for moving away from fossil fuels due to climate change concerns, we perceive this discovery as a significant economic opportunity for Namibia. It is crucial to understand that our nation, like many others in Africa, faces pressing issues such as high unemployment rates and inadequate livelihoods. Therefore, the discovery of this oil resource is incredibly exciting for us, as it has the potential to help solve some of these socio-economic challenges. We are deeply committed to learning from the experiences of other countries where oil discoveries failed to translate into sustainable economic development.

Mining significantly contributes to Namibia's economy. How does this benefit Namibians, and how can it be replicated in the energy sector?

Historically, African nations, including Namibia, have often found themselves on the losing end of resource extraction deals. Our resources have been exploited without generating equivalent benefits for our people. Recognizing this, Namibia is redefining its approach to resource management. In the case of critical minerals like lithium and rare earths, we are taking proactive steps to ensure that value addition occurs within our borders. This means evaluating and processing these minerals locally before export, thereby maximizing the economic benefits for Namibia.

For oil and gas, we are applying similar principles. We are advocating for regional refinery projects to retain more value within the continent. This strategic shift is not about resource nationalization; it is about ensuring that our resources contribute meaningfully to our economic development.

Can you elaborate on Namibia's recent MoU with the EU regarding green hydrogen, and how do you envision the future of green hydrogen and renewables in Namibia?

Namibia is well-placed for green hydrogen and renewable energy. We have ample solar and wind resources. We are poised to develop renewable energy assets, with green hydrogen offering great promise. Namibia will eventually become a net-zero economy, with the potential for renewable energy production eclipsing our fossil-fuel-based production potential. We are actively promoting green hydrogen, signing agreements with the EU and Japan. Namibia aims to lead in this energy transition, fostering investment in renewables for a competitive edge in this evolving landscape. Overall, we are optimistic about our role in transitioning to renewable energy. We will be careful not to only produce green hydrogen solely for export. We want more value to be produced within the country.

What are the key advantages that Namibia offers for investment in the extractive industries?

Namibia offers a great investment environment with robust infrastructure, a safe environment, political stability, and a favorable regulatory framework. Our country is rich in mineral and energy resources, making it an attractive destination for investors seeking long-term opportunities. Additionally, Namibia's commitment to sustainable development and good governance ensures a conducive business climate and mitigates investment risks. We prioritize transparency, accountability, and stakeholder engagement to build trust and confidence among investors. Moreover, Namibia's strategic location in southern Africa provides access to regional markets and opportunities for collaboration and partnerships. Overall, Namibia offers a compelling value proposition for investors looking to capitalize on the country's vast potential in the mining and energy sectors. Finally, Namibia is simply a nice place to live and work in, and this is reflected by our booming hospitality and tourism sector. ■

Ebson Uanguta

Interim Managing Director

NATIONAL PETROLEUM CORPORATION OF NAMIBIA (NAMCOR)

*» **The recent discoveries in the Orange Basin position Namibia's offshore as a global exploration hotspot.** «*

Could you introduce NAMCOR, sharing its mission, mandate, and current operations?

NAMCOR (National Petroleum Corporation of Namibia) was founded in Namibia in 1991 with a clear mandate to ensure state participation in the oil and gas industry. Initially, our focus was on acquiring and interpreting seismic data to evaluate the hydrocarbon potential of Namibia's offshore and onshore basins. This effort attracted significant interest from international oil companies, leading to partnerships and exploration investments within the country.

Over the years, NAMCOR has strategically expanded its role. We have diversified into the importation, distribution, and marketing of petroleum products to meet domestic demand. Presently, we operate a network of 19 fuel stations across Namibia.

Our involvement spans both upstream and downstream activities, significantly advancing Namibia's oil and gas sector. Through partnerships and strategic initiatives, we continue to play a pivotal role in fostering economic development and ensuring energy sustainability for Namibia.

What is NAMCOR's take on the recent discoveries in the Orange Basin?

NAMCOR views the recent discoveries in the Orange Basin as pivotal for Namibia's hydrocarbon profile. The surge in exploration, particularly offshore, has attracted major players like Chevron, Shell, and TotalEnergies. Our partnerships have yielded significant discoveries in blocks such as PEL 39, 56, and 83. These discoveries position Namibia's offshore as a global exploration hotspot. Currently, our focus is on appraising discovered oil and developing a production plan. We anticipate commercial oil production by 2029, with ongoing exploration efforts to tap into unproven reserves, potentially containing billions of barrels of oil equivalent. Collaborating with TotalEnergies and Shell, we aim to conduct further drilling campaigns to optimize production strategies and unlock Namibia's hydrocarbon potential.

What are the main technical or financial challenges NAMCOR and the Namibian oil and gas sector anticipate over the next five years?

Our offshore oil discoveries pose significant technical challenges due to their depth, ranging from 2-3 km deep, with deposits found as deep as 6 km. This necessitates advanced technology and expertise, especially for exploration and development. Collaboration with experienced IOCs is crucial for accessing the necessary technological support.

Infrastructure development is another critical aspect. Currently, Namibia's infrastructure, both onshore and offshore, is underdeveloped for large-scale oil and gas production. To address this, partnerships with the Namibian government, IOCs, and private investors are essential. These collaborations can facilitate infrastructure projects such as pipelines, processing facilities, and export terminals through public-private partnerships and incentivized investments.

Economic challenges loom large, particularly the high initial investment required for exploration and development in deepwater environments. Additionally, market volatility poses risks for investors. Mitigating these financial challenges involves implementing favorable fiscal regimes and securing funding from international financial institutions.

Environmental concerns, such as potential oil spills and disruption to marine ecosystems, require stringent regulations and adherence to best practices. NAMCOR has adopted measures to mitigate these risks, including comprehensive environmental impact assessments and compliance with international standards.

How does NAMCOR ensure Namibians are involved in the oil and gas sector, and how do you promote local content?

Our approach at NAMCOR is multifaceted. We prioritize skill development and training to enable full participation in the industry. This includes expanding scholarship programs, vocational training, and internships in collaboration with local and international educational institutions. We are also dedicated to strengthening local businesses in the oil and gas supply chain, ensuring they have the capacity and meet industry standards to compete effectively. Moreover, we advocate for Namibia's participation across the entire value chain of the oil and gas industry, not solely in exploration and production but also in downstream activities. This comprehensive involvement maximizes the benefits to the country.

Furthermore, sustainable, and responsible development is paramount. We are committed to enhancing our community development programs to ensure that local communities benefit directly from the country's hydrocarbon wealth. This includes strategic investments in infrastructure, healthcare, and education in regions affected by oil and gas activities. Our goal is to strike a delicate balance between fostering thriving sectors and fostering socio-economic development for all Namibians.

Do you have a final message for our audience?

NAMCOR is thrilled about the hydrocarbon prospects in Namibia's offshore basins. We are ready to collaborate with international oil operators to maximize benefits for investors and Namibia. We are committed to leveraging this oil discovery for the benefit of all, especially Namibians. ■

<< 86

access due to limited domestic demand. However, the country's strategic location as a regional gateway allows companies to leverage these geographic advantages for regional expansion and market penetration," continued Shimutwikeni.

Despite its small population, Namibia boasts many universities and vocational training centers that produce world-class technicians, welders, pipe-fitters and other workers, some of whom may already have experience working in the country's longstanding mining industry, which is responsible for over 50% of government revenue and is the largest contributor to GDP. Now it is a matter of tapping into this skilled talent pool by closing the small skill gap and certifying and training these workers for offshore operations. Some of Namibia's service providers are already rising to the challenge. "APOS is establishing a state-of-the-art Training and Certification Center. Our mission is to equip workers, companies and stakeholders with the essential skills, knowledge and certification required to enter, excel, and progress in the oil and gas industry," said Veronique Herman, CEO, Africa Provider Offshore Services (APOS).

Luckily, Namibia will not have to look far for technology and knowledge transfers, with its northern neighbor Angola having a well-established oil and gas industry and its southern neighbor South Africa being the largest economy on the continent and serving as the Africa HQ for many international conglomerates. Angolan fabricator Sonamet has not wasted any time, having already stepped up to share the expertise it has gained over its 25-year history. "Angola has a more mature oil and gas industry than Namibia, and we believe our expertise, knowledge and training capabilities can be a great benefit to the country and the growth of its industry. We have already started to train 30 Namibian welders," shared Domingos Augusto, Sonamet's CEO.

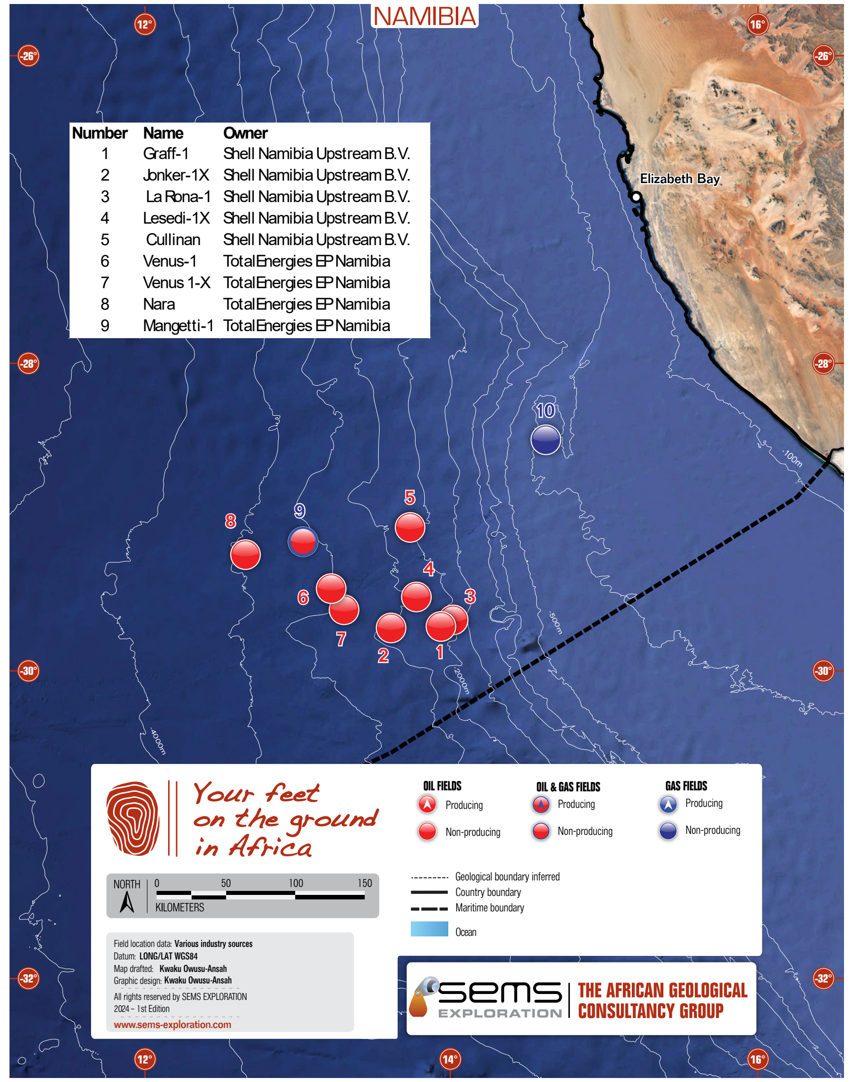
In 2023 AECIPA, the main association representing Angolan oil and gas service providers, signed an agreement with the Namibian Association for Offshore Oil and Gas Service Providers (NAOGSP) intending to facilitate bilateral collaboration between Angolan and Namibian service companies, fostering productive relationships and encouraging knowledge exchange. "AECIPA and NAOGSP are establishing channels for sharing industry information such as best practices, technical advancements, regulatory updates, and local content development and implementation strategies so that this developing industry can bypass some of the mistakes we made during our development. If we have a stronger Namibia, we have a stronger African oil and gas industry, which will benefit all of us," said Bráulio de Brito, AECIPA's chairman.

Due to the immense publicity around Namibia's discoveries and the lull in oil and gas activity in Mozambique due to the ongoing insurgency, Southern African players are all-in on Namibia. "Although it is still a young sector, we believe now is the time to enter as competition is rife. Due to Namibia's past relationship with South Africa, there will be significant competition from South African companies that will be able to easily set up in the country," said Ricardo do Amaral, general manager, Octomar.

Additionally, TotalEnergies recently announced its intent to pull out of several offshore blocks in South Africa – freeing up additional resources and manpower in the region.

Support is coming from as far as Nigeria, exemplified by the recent JV between Moneda Invest Africa (Moneda) and the Namibian government, wherein Moneda acts as a financial and technical partner for local companies to assist them in accessing financing and to guide them through tendering processes.

Nigerian delegates representing industry associations such as the Petroleum Technology Association of Nigeria (PETAN) have been heard speaking at various Namibian energy conferences and Heinken Lokpobiri, the Nigerian



To achieve robust local content in Namibia's oil and gas industry, we must implement clear local content laws, invest in specialized training centers, and provide financial support to local businesses.

Veronique Herman,
CEO, **Africa Provider Offshore Services (APOS)**

minister of state for petroleum resources (oil), pledged to support Namibia through the exchange of knowledge and skills. "Nigeria has a seven decades long history of oil and gas exploration and production; very few African nations can match this experience. We are looking at how we can act as a 'big brother' and make available our experiences to other African nations so they can learn from our mistakes over our decades-long hydrocarbon development journey," said Gbenga Komolafe, commission chief executive, Nigerian Upstream Petroleum Regulatory Commission (NUPRC).

Namibia can lean on other African nations with long histories of oil and gas production and learn from their successes as well, particularly when it comes to local content and adding value within the country. "The IOCs are interested in getting resources out as quickly as possible with minimal stress and would rather give contracts to Western companies that have a track record. In this, the African country loses the real benefit of the resource," said Moneda's group chief executive Ejike Egbuagu.

Aside from oil and gas, Namibia also has great renewable energy potential thanks to its abundant sunshine and wind. Cost projections show that Namibia can theoretically produce some of the most cost competitive green hydrogen globally, and if Namibia meets its targets, 56% of its energy demand will be met by renewables by 2030. Namibia aims to foster its budding renewable sector, signing MOUs with the EU and Japan on green hydrogen cooperation. The US$10 billion Hyphen project is due to start construction in 2025, with off-takers in Germany expecting delivery as soon as 2027. Green energy projects opened up a whole new area of opportunity for service providers in Namibia, and unlike with fossil fuel projects, developers will likely face fewer challenges in sourcing funding. "Namibia is also focusing on green hydrogen which is an attractive area for Fugro, and with the country being accessible for service providers like us, we intend to further expand our presence in this market," said Robert Hawkins, commercial director - Africa, Fugro.

However, Namibia will have to balance the short-term gains from exporting green hydrogen with longer-term opportunities presented by using it domestically. "We are optimistic about our role in transitioning to renewable energy. We will be careful not to produce green hydrogen solely for export. We want more value to be produced within the country," said minister Alweendo. ■

Ndapwilapo Selma Shimutwikeni

Founder and CEO
RICHAFRICA CONSULTANCY

Can you tell us about RichAfrica Consultancy's role in Namibia's oil and gas sector?

RichAfrica Consultancy is specialized in providing strategic advisory services in natural resources law and policy, sustainability as well as business facilitation. We offer tailored advisory services to clients in both the public and private sector, providing comprehensive market entry advice, assisting in navigating regulatory frameworks, and identifying credible partners. Additionally, we play a pivotal role in facilitating investment linkages, leveraging our extensive network and industry knowledge to assist companies. Moreover, RichAfrica founded the Namibia International Energy Conference more than a decade ago, which hosted its 6th edition in April 2024, further solidifying our role as a leader in fostering dialogue and investment in the energy sector.

What does the road ahead look like for Namibia in terms of energy development and what can the Namibian government do to foster the growth of the oil and gas industry?

The road ahead for Namibia in energy development is filled with promise, but it requires a concerted focus from the government and industry stakeholders on several key areas to ensure successful development of the country's valuable resources. The recent offshore oil discoveries present a significant economic opportunity, necessitating a robust regulatory framework to ensure transparent and sustainable exploration and production. Upgrading and expanding energy infrastructure is critical, and public-private partnerships can play a pivotal role in mobilizing resources for these projects. Policy and regulatory reforms are essential to attract and retain investment, requiring clear guidelines and stable regulations to build investor confidence. Additionally, building local capacity through training programs and promoting local content will ensure that the benefits of energy development are widely shared within the community. Lastly, regional cooperation can enhance energy security and create a resilient energy network, facilitating cross-border investments and infrastructure development. ■

Gil Holzman

CEO
ECO ATLANTIC OIL & GAS

Can you introduce Eco Atlantic and its assets in Africa?

Eco Atlantic Oil & Gas Ltd is a pure-play exploration company focused on offshore exploration for oil and gas in stable jurisdictions in the Atlantic Margin. We started by acquiring five blocks in Namibia in the first ever open licensing round held by Namibia's Petroleum Commissioner in 2011, marking the start of our journey.

We expanded from Namibia to Ghana in 2014 and entered Guyana later that year before the first ever oil discovery was made there. We signed the Orinduik block in Guyana in January 2016 in partnership with Tullow Oil. Recently, due to increased activity in offshore Namibia and the Orange Basin, we acquired two additional blocks on the South African side of the Orange Basin. Today, we have eight licenses: four in Namibia, two in South Africa, and two in Guyana. Our strategy is to enter early, partner with top-tier companies, de-risk, explore, discover, and monetize discoveries.

How would you compare Namibia and South Africa as jurisdictions?

Namibia is probably one of the best jurisdictions to work in the oil industry, and not only in that sector but also in mining, tourism, and other industries. South Africa presents more complexity due to its size and history. Overall, our experience across these jurisdictions has been very positive.

How does being publicly listed impact Eco Atlantic's approach to ESG?

Governance is a top priority since we are listed on two stock exchanges, and we adhere to strict reporting standards. We strive to leave a positive impact wherever we operate, engaging in community development projects like building schools, libraries, and feeding programs.

Being a public company cultivates a better ESG culture because of the transparency and scrutiny involved. We report four times a year, and our activities are constantly monitored by the public, institutional investors, and the market. ■

Geographies

» I am advocating for our capital markets across the continent to come together to invest in the oil and gas sector for the benefit of all Africans. «

Heineken Lokpobiri
Minister of State for Petroleum Resources (Oil)
GOVERNMENT OF NIGERIA

Image courtesy of Jealife Pictures at Unsplash

Gabon

Facing uncertainty after a coup

Blessed with 2 billion barrels of proven oil reserves, Gabon enjoys a GDP per capita four times that of most African nations, and the country is heavily reliant on oil, with the petroleum sector being responsible for 50% of GDP and 80% of exports. In August 2023, a coup d'état ended the 56-year-long rule of the Bongo family over Gabon – the eighth successful coup to occur in West and Central Africa since 2020.

The dramatic change in government has rocked the country's oil and gas sector, with the new transitional government declaring its desire to restructure the sector by embarking on a mission to acquire oil and gas assets from IOCs and private companies. This has involved the national oil company Gabon Oil Company (GOC) taking over the majority interests of Carlyle Group's Assala Energy as well as Sinpoec's Addax Petroleum's oil and gas interests in Gabon. "The Gabonese State and the national oil company GOC are entitled to hold a mandatory participating interest in a petroleum contract of up to 15%, and any acquisition by the state in excess of 15% must be purchased at market price," said Nicolas Balesme, managing partner, Gabon and regional leader, Central Africa, Deloitte.

The rapid political upheaval in the nation has understandably brought uncertainty for many foreign investors. Even before the coup, FDI inflows into Gabon totaled US$1.1 billion in 2022, compared to US$1.5 billion one year earlier, and Lloyds Bank anticipates another drop. Despite this, its GDP grew by 2.3%, fueled by new oilfields, low OPEC+ restrictions and global demand. As such, many players feel there is still opportunity in the country. Additionally, it is not unusual for OPEC countries to own most of their oil assets, so for many, it was no surprise that the new transitional government is aggressively snapping up oil assets. "Many African countries have a sovereign vision of their oil and gas sector. In Gabon, policies have been put in place at the state level to have more control over the energy and resources industry," continued Balesme.

Despite the political uncertainty, it appears many stakeholders still have confidence in Gabon, evidenced by Anglo-French player Perenco recently signing an MoU to commence the first phase of a 20 MW gas-to-power project in Mayumba to be completed in 2025. "We are working on opportunities in Congo and Gabon, focusing on presenting solution-based opportunities rather than just seeking contracts. Our plans include providing more solutions and new technologies, especially in gas-to-power," said David Pappoe Jr, CEO of Energas West Africa, a provider of engineering services and gas-to-power power solutions across the continent.

Gabon has set crude production targets of 220,00 bpd and throughout the year has been heavily promoting investment in on- and offshore acreage – drawing the attention of industry players in nearby countries. "The opportunities in Namibia and Gabon are highly promising. Our strategy involves partnering with local companies to ensure mutual benefits, thereby opening new markets for GIPSA and fostering regional cooperation and economic integration," said António da Silva, founder and CEO, of Angolan company GIPSA.

If Gabon's transitional government can maintain stability, follow through on its strategy and hold free elections in August 2025 as promised, then there is a good chance that oil and gas players across the world will resume investments and projects in the nation. "The proactive strategy of the State in the oil and gas industry should position GOC as a prominent player in the short term," said Balesme. ■

»Our strategy involves partnering with local companies to ensure mutual benefits, thereby opening new markets for GIPSA and fostering regional cooperation and economic integration.«

António da Silva, Founder and CEO, **GIPSA**

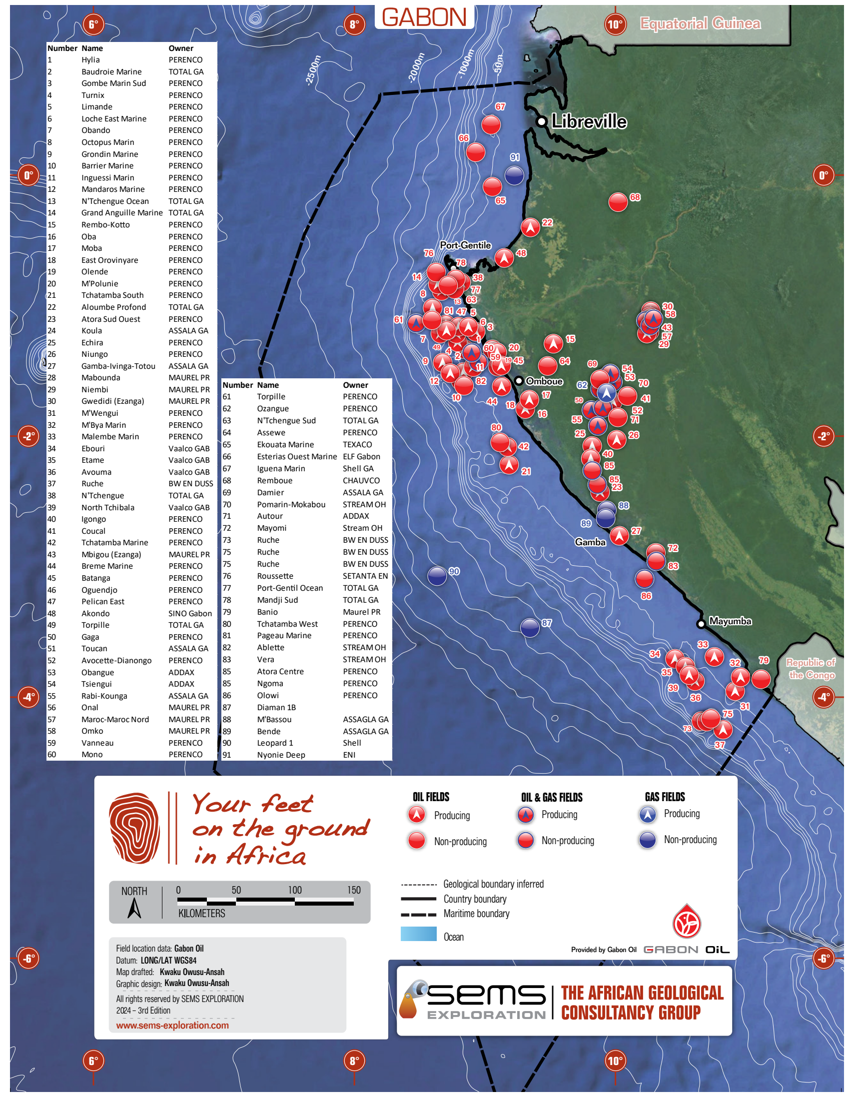


Image courtesy of Ralph Messi at Unsplash

Nicolas Balesme

Managing Partner, Gabon and Regional Leader, Central Africa

DELOITTE

»

Many African countries have a sovereign vision of their oil and gas sector.

«

What have been the main recent developments for Deloitte Gabon over the past years, especially in the energy industry?

Deloitte in Gabon and Central Africa has continued the regional development of our practices and teams in different lines of professional services, including our Financial Advisory, Risk Advisory and Consulting Services which are key pillars for the strategic development of our firm in Gabon, Central Africa, and the entire francophone African region. We have been extremely active in the energy resources and oil and gas sectors.

Key changes in the oil and gas sector have put the focus on cost reductions, restructuring, local content development and the integration of upstream, midstream, and downstream operations in the region - for instance, transformation projects in LNG, fertilizers, refinery plants and storage facilities to build an oil and gas value chain, which encompasses more local content and retains added value within the region.

Deloitte is acting as a key player in Gabon and neighboring countries to provide a very large storefront of multidisciplinary services to the energy and oil and gas industry, in terms of Audit & Assurance, Tax & Legal, Business Process Solutions and Advisory services.

How was the oil and gas industry impacted by the recent change of governance in Gabon?

Many African countries have a sovereign vision of their oil and gas sector. In Gabon, policies have been put in place at the state level to have more control over the energy and resources industry and there is a clear strategic action plan for purchasing oil and gas interests from IOCs and private oil and gas companies, as we have seen since September 2023, with the new governance (CTRI) during the transition period. This has involved taking over the majority interests of Carlyle Group's Assala Energy as well as Addax Petroleum's oil and gas interests in Gabon. The Gabonese State and the national oil company GOC are entitled to hold a mandatory participating interest in a petroleum contract of up to 15%, and any acquisition by the state in excess of 15% must be purchased at market price.

In this framework, the proactive strategy of the State in the oil and gas industry should position GOC as a prominent player in the short term.

As far as the last updated Hydrocarbon Code is concerned, the regulatory framework has heavily impacted foreign investment and, since 2019, there have been slight adjustments in this Code to provide more attractive opportunities for companies looking to invest in Gabon's oil and gas sector. However, we have not yet seen that these adjustments have significantly increased investment attractiveness.

What are the biggest challenges oil and gas companies face today in Gabon, and what opportunities exist during this transition period?

Local content laws as well as the tax and regulatory framework and the business climate are key challenges for existing and new foreign oil and gas operators in Gabon.

In the upstream oil and gas sector, the undisputed leader Perenco Oil & Gas Gabon (POGG) has continued to increase its market share to now hold more than 50% of the production in the country. They are continuing to invest in sustainability projects in the oil and gas sector, as well as focusing on local content development and training.

Gabon has realized that the energy transition will require a lot more use of gas, and efforts are being made to ensure sufficient availability of gas for the local population. POGG has opened a 15,000 t/y LPG plant in Batanga, Gabon, which will meet 35% of the domestic market's LPG demand. There are significant opportunities for Gabon in the gas space.

What are Deloitte Gabon's objectives for the next two years?

Deloitte Gabon will continue the regional development and diversification of our business, especially in terms of human capital and our consulting and risk advisory services. We are structuring our regional teams to be able to serve both international clients and national champions, aligned with our regional approach in Central Africa, to provide them with quality work and added-value services. Our strategy is to have a regional approach with specialized and mutualized teams in terms of skills and experience to serve our international clients operating in various African countries, with the same level of quality we have globally. ■

Sierra Leone

Fueling Freetown

Located on the West African coast, Sierra Leone's strategic geographic position and offshore sedimentary basins make it an attractive prospect for oil and gas exploration. Despite being a relatively new player in the global energy market, the nation has made considerable strides in recent years, with various exploratory activities indicating the presence of hydrocarbon reserves. The Petroleum Directorate of Sierra Leone (PDSL) estimates 44 billion barrels of oil in place, with 10 to 15 billion recoverable.

The sector's development is seen as a key driver for diversifying Sierra Leone's economy, which has historically relied on mining and agriculture. "Exploration began in the 1980s, leading to eight wells being drilled and four discoveries made, notably the Mercury well. Historically, Sierra Leone prioritized mining over hydrocarbons. Since 2003, we have conducted five licensing rounds, attracting major companies, particularly after the 2011 jubilee discovery in Ghana," shared Foday Mansaray, director general of the Petroleum Directorate of Sierra Leone (PDSL) – the governmental authority responsible for overseeing oil and gas activities.

The country has had to face similar challenges to other frontier oil and gas markets, especially attracting financing. "The biggest bottleneck for us currently is the energy transition conversation, which hinders companies from investing in frontier nations like Sierra Leone. In 2020, following the fourth licensing round, we granted a provisional license to a company, but they could not raise funds because banks were unwilling to lend to them," continued Mansaray.

To overcome these challenges, Sierra Leone has leaned on fellow African nations with established oil and gas sectors for support. Nigerian E&P giant F. A. Oil Limited has shown interest in Sierra Leone, recently acquiring six offshore blocks during the nation's fifth licensing round. "We are also open to collaboration with neighboring countries to leverage expertise and resources if needed. Recent negotiations with F. A. Oil Limited underscored the importance of local content, with a commitment to sourcing 100% of goods, services and management locally, whenever possible," said Mansaray.

Armed with extensive seismic and well data and a pipeline of planned exploration wells, Sierra Leone is now racing against the clock to entice foreign investors and IOCs to develop its hydrocarbon resources. ■

Foday Mansaray

Director General

PETROLEUM DIRECTORATE OF SIERRA LEONE (PDSL)

Can you introduce the Petroleum Directorate of Sierra Leone (PDSL) and outline its mandate?

The PDSL is responsible for overseeing oil and gas activities for the state. We facilitate licensing rounds, attract foreign investment, and promote the country's hydrocarbon sector. We believe we have significant reserves: 44 billion barrels of oil in place, with 10 to 15 billion recoverable. Ensuring energy access is crucial, and we aim to combat energy poverty locally and contribute to Africa's broader energy security. Currently, our hydrocarbon activities are entirely offshore. Exploration began in the 1980s, leading to eight wells being drilled and four discoveries made, notably the Mercury well. Historically, Sierra Leone prioritized mining over hydrocarbons. Since 2003, we have conducted five licensing rounds, attracting major companies, particularly after the 2011 jubilee discovery in Ghana.

Are you prioritizing local content and promoting local expertise in Sierra Leone's energy sector?

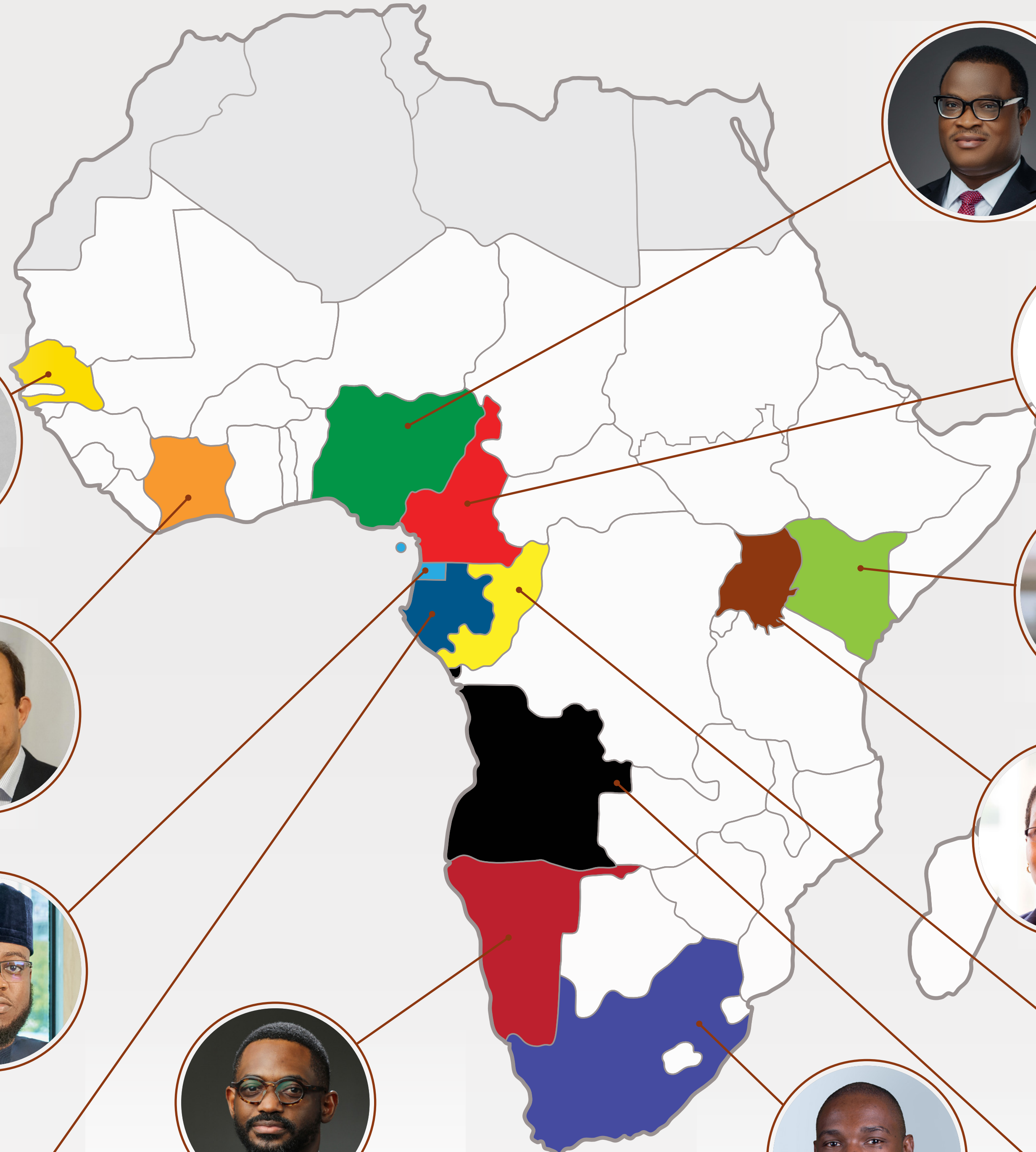
Local content is a cornerstone of our strategy for developing our energy sector. We are formulating an oil and gas master plan to guide sector governance, with a strong emphasis on ensuring local participation and skills transfer, so Sierra Leoneans benefit directly from the industry's development. We are also open to collaboration with neighboring countries to leverage expertise and resources if needed. Recent negotiations with F. A. Oil Limited underscored the importance of local content, with a commitment to sourcing 100% of goods, services and management locally, whenever possible.

What are the primary hurdles to exploration and development in Sierra Leone?

The biggest bottleneck for us currently is the energy transition conversation, which hinders companies from investing in frontier nations like Sierra Leone. To address this challenge, we have revamped our strategy to attract companies by improving the ease of doing business in Sierra Leone. This has raised our profile and made us more appealing to potential investors. ■

Image courtesy of Bunting Kargbo at Unsplash

Energy players share key projects across sub-Saharan Africa



"We are currently expanding our service center in Senegal and we aim to continue establishing more centers across the continent."

Gaby Hanna, SVP - Head of Region Middle East and Africa, **MAN Energy Solutions**

"In 2023, we executed our first international project, which involved providing 24-hour diving services to support the installation of the first FPSO in Côte d'Ivoire. Working in a new country poses challenges, but our thorough planning resulted in a smooth and successful operation."

Ricardo do Amaral, General Manager, **Octomar**

"In Equatorial Guinea, we are involved in small-scale domestic LNG supply projects aimed at serving local industries. Our goal is to expand the natural gas footprint not only in Nigeria but also in selected markets across Africa."

Olakunle Williams, CEO, **Tetracore Energy Group**

"Gabon has realized that the energy transition will require a lot more gas, and efforts are being made to ensure availability of gas for the local population. Perenco has opened a 15,000-tonne per year LPG plant in Batanga, which will meet 35% of the domestic market's LPG demand."

Nicolas Balesme, Managing Partner, Gabon and Regional Leader, Central Africa, **Deloitte**

"Our track record in financing transactions of up to US$200 million meets the criteria for being awarded contracts. Under our JV with the government, Namibian companies can meet the tenders and be awarded IOC contracts."

Ejike Egbuagu, Group Chief Executive, **Moneda Invest Africa**

"With the global focus on renewables, we have seen a drastic increase in enquiries for battery energy storage feasibility studies."

Martin Mkhabela, Director, Energy, **WSP in Africa**

"Our cumulative production has surpassed 12 million barrels of oil and 100 billion standard cubic feet of gas, surpassing the initial reserve estimates. The successful drilling of new wells and workover of existing wells have contributed greatly to increased production and optimum field development over the years."

John Anim, Managing Director, **Platform Petroleum Limited**

"In Cameroon, we are progressing the up to 95 MW Bini a Warak hybrid hydroelectric and solar project, and have a ~41% interest in the Cameroon Oil Transportation Company."

Pade Durotoye, Managing Director – Nigeria, **Savannah Energy**

"We are integrating African countries into the biofuel value chain, utilizing agri-feedstock from degraded land. Vegetable oil production began in Kenya in 2022, and recently, the IFC and the Italian Climate Fund have announced a US$210 million investment to support this project in the country."

Mario Bello, Head of Sub-Saharan Africa Region, **Eni**

"Our immediate priorities include advancing the Kingfisher and Tilenga projects to production, progressing the East African Crude Oil Pipeline to meet our targets, and finalizing agreements for the Uganda Refinery."

Proscovia Nabbanja, CEO, **Uganda National Oil Company**

"Our recent contract with TotalEnergies Congo for the maintenance and repair of pumps and compressors is a testament to our growing influence. The Congo office/workshop, staffed by 65 professionals specializing in rotating mechanical equipment, is poised for expansion."

Paula Dantas, Managing Partner, **Prometim**

"Our immediate priorities involve completing a seismic acquisition in Angola by year-end, processing, and interpreting data in 2025, with drilling commencing by early 2026."

Domingos Freitas, Board Member, **Effimax Energy**

Republic of the Congo

Gas reserves set to ignite prosperity

The Republic of Congo, a nation where the oil and gas sector serves as the backbone of the economy, stands as one of sub-Saharan Africa's top oil producers. With an economy heavily reliant on hydrocarbons, oil production contributes approximately 70% of the country's GDP and accounts for over 80% of its export revenues. In 2023, the Republic of Congo produced around 271,000 bpd, securing its position as the third-largest oil producer in sub-Saharan Africa, after Nigeria and Angola. Since emerging as a significant producer in the 1970s, the Congolese oil and gas sector has grown from strength to strength, and today the capital city Brazzaville hosts the headquarters of the African Petroleum Producers' Organization (APPO).

Italian supermajor Eni has established a strong presence in the country, most notably through the Congo LNG, the natural gas liquefaction (LNG) project in the Republic of Congo. Currently in its production phase, Congo LNG has a total LNG production capacity of 3 million t/y, supplying both the local electricity market and other countries, with Europe as the main destination. "In the Republic of Congo, the project's second phase is being developed in parallel with the first to reach a total capacity of 4.5 billion cubic meters of gas annually by 2025," said Mario Bello, head of sub-Saharan Africa region, Eni.

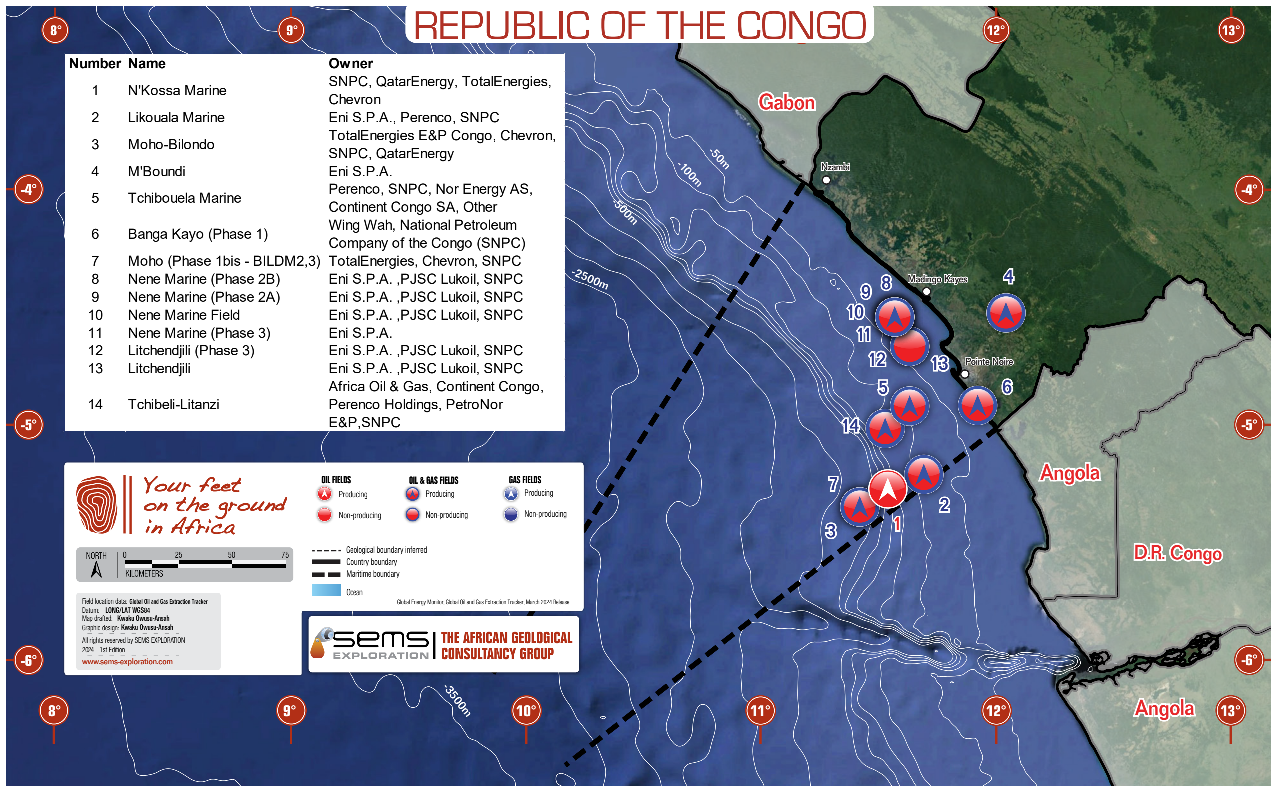
The Congo LNG project is part of the Republic of Congo's broader strategy to address energy poverty and drive regional economic growth by leveraging its over 10 trillion cubic feet of proven natural gas reserves. "In partnership with Eni and Lukoil, we are advancing the Congo's gas export ambitions and have already started exporting LNG with the first ship setting sail from the Marine XII Tango FLNG facility to the Piombino regasification terminal in Italy in February 2024," shared Maixent Raoul Ominga, managing director of the Société Nationale des Pétroles du Congo (SNPC), the Congolese national oil company.

With ambitions to produce 3 million t/y of gas by 2025, the Congolese Ministry of Hydrocarbons has been working on a gas master plan and the formation of a dedicated national gas company. A new Gas Code is also being introduced, expected to attract further investments by revising fiscal terms and making small-scale projects more viable.

TotalEnergies is another IOC with a strong presence in the country that dates back to the 1960s. The French supermajor recently committed US$600 million to bolster exploration and production activities in the offshore Moho Nord field, which accounts for around half of Congolese oil production, with roughly 140,000 bpd. Massive IOC investments like these have had a knock-on effect and opened doors for hundreds of service providers. "Our recent contract acquisition with TotalEnergies Congo for the maintenance and repair of pumps and compressors is a testament to our growing influence. The Congo office/workshop, staffed by 65 professionals specializing in rotating mechanical equipment, is poised for expansion, aiming to introduce additional services within the country," said Paula Dantas, managing partner, Prometim, an engineering and manufacturing services company.

The Republic of the Congo is the newest member of OPEC, and since joining in 2018 has had to contend with a global pandemic and wildly fluctuating oil prices. "The volatility of the global markets, a lack of infrastructure, and the need for modernization of technical capabilities are the main challenges the Congolese oil sector is facing. SNPC's 'Performance 2025' program is a comprehensive strategy designed to address these challenges with a focus on four pillars," continued Ominga.

The Congolese authorities reaffirmed their commitment to OPEC in the wake of Angola's departure. With its vast reserves and strategic location, the country has the potential to solidify its position as a key player in the global energy market. However, realizing this potential hinges on the government's ability to foster a stable investment climate, improve infrastructure, and prioritize environmental sustainability. ■



Number	Name	Owner
1	N'Kossa Marine	SNPC, QatarEnergy, TotalEnergies, Chevron
2	Likouala Marine	Eni S.P.A., Perenco, SNPC
3	Moho-Bilondo	TotalEnergies E&P Congo, Chevron, SNPC, QatarEnergy
4	M'Boundi	Eni S.P.A.
5	Tchibouela Marine	Perenco, SNPC, Nor Energy AS, Continent Congo SA, Other
6	Banga Kayo (Phase 1)	Wing Wah, National Petroleum Company of the Congo (SNPC)
7	Moho (Phase 1bis - BILDM2,3)	TotalEnergies, Chevron, SNPC
8	Nene Marine (Phase 2B)	Eni S.P.A. ,PJSC Lukoil, SNPC
9	Nene Marine (Phase 2A)	Eni S.P.A. ,PJSC Lukoil, SNPC
10	Nene Marine Field	Eni S.P.A. ,PJSC Lukoil, SNPC
11	Nene Marine (Phase 3)	Eni S.P.A.
12	Litchendjili (Phase 3)	Eni S.P.A. ,PJSC Lukoil, SNPC
13	Litchendjili	Eni S.P.A. ,PJSC Lukoil, SNPC
14	Tchibeli-Litanzi	Africa Oil & Gas, Continent Congo, Perenco Holdings, PetroNor E&P,SNPC

Image courtesy of Eni

Maixent Raoul Ominga

Managing Director

SOCIÉTÉ NATIONALE DES PÉTROLES DU CONGO (SNPC)

Can you introduce Société Nationale des Pétroles du Congo and give an overview of your current operations?

Société Nationale des Pétroles du Congo (SNPC) was established in 1998 and is dedicated to developing and efficiently managing the nation's hydrocarbon resources. We are active in the entire petroleum industry chain, from upstream to downstream, through six proactive subsidiaries: SONAREP which is focused on exploration, exploitation, and production; ILOGS which specializes in logistics; SFP which is responsible for drilling; CORAF, which is a refinery; SNPC Trading which specializes in the commercialization of liquid and gaseous hydrocarbons; and SNPC Distribution which is responsible for trading refined products. We also have the SNPC Foundation which is in charge of our ESG actions, with the focus areas of intervention mainly being health, education, culture, sport, environment, social, infrastructure, and electricity.

By law, SNPC is mandated to have a share of at least 15% of all permits issued in Congo's hydrocarbon industry.

Can you comment on recent developments in the Congolese oil sector and SNPC's key ongoing projects?

In September 2023, SNPC, Eni Congo, and Lukoil signed a long-term contract for the purchase and sale of LNG with Eni SPA, marking an advancement in the LNG Marine XII project. In partnership with Eni and Lukoil, we are advancing the Congo's gas export ambitions and have already started exporting LNG with the first ship setting sail from the Marine XII Tango FLNG facility to the Piombino regasification terminal in Italy in February 2024.

On the upstream side, SNPC is now the operator of three more permits: Le Mayombe II, Kouakouala II and Nanga I. Studies are ongoing on those permits to start exploration and drilling works as soon as possible.

In partnership with the Forêt Ressources Management (FRM), SNPC has launched the Eco Zamba reforestation project which will consist of planting 50,000 hectares of forest in Northern Congo over the next 10 years as part of our implication in the energy transition.

What are the biggest challenges facing the Congolese oil sector, and how is SNPC's 'Performance 2025' program addressing these?

The volatility of the global markets, a lack of infrastructure, and the need for modernization of technical capabilities are the main challenges. SNPC's 'Performance 2025' program is a comprehensive strategy designed to address these challenges with a focus on four pillars - increase our revenue through optimizing our activities and production and acquiring new plays both onshore and offshore; cost control and reduction by taking action on all levers and niches allowing the Group to ensure better quality spending; contribution and support to government action, where our mandate is to market the share of crude oil belonging to the state; and better governance and control of activities of the Program. We are also focused on training human resources to ensure they can be efficient in new technologies and innovations implemented on the ground. ■

Uganda

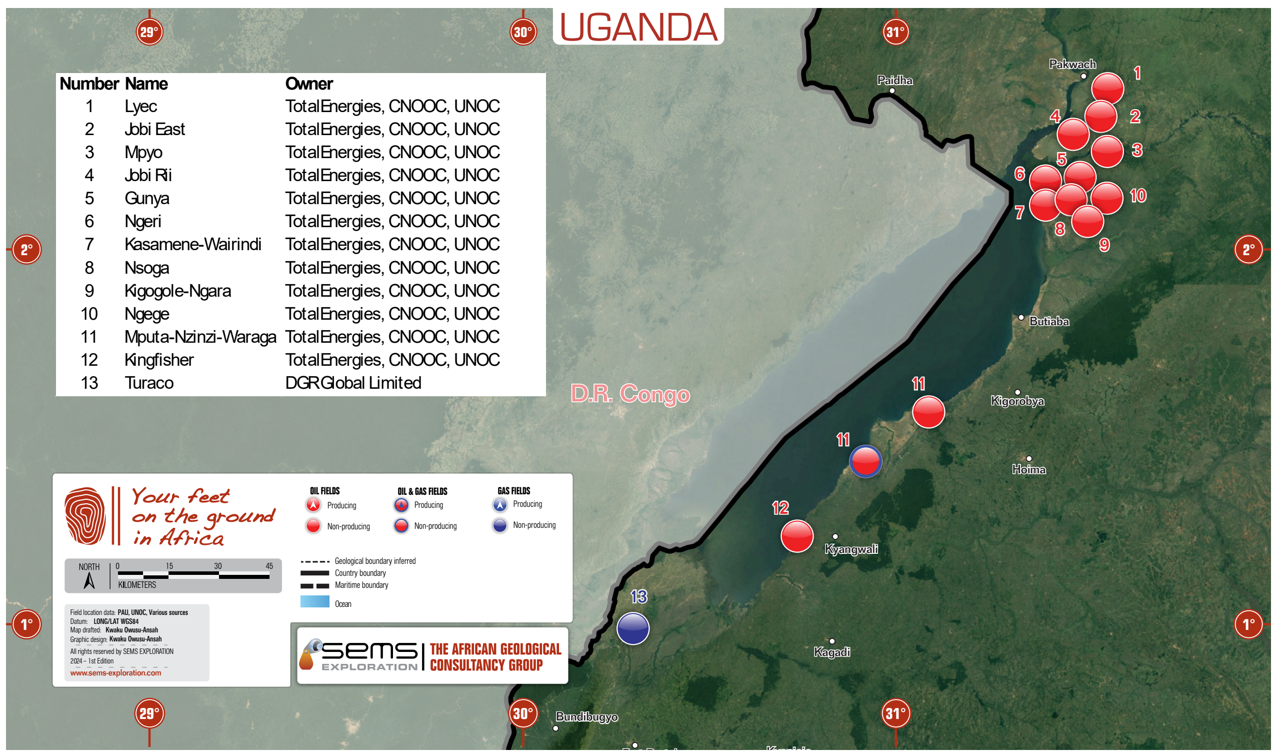
Balancing economic ambitions with sustainable development

With estimated reserves of 6.5 billion barrels of oil, Uganda stands on the brink of joining Africa's major oil producers, a status that carries both opportunities and challenges. As the country gears up for commercial production, stakeholders are navigating complex terrain, balancing economic aspirations with environmental and social responsibilities.

The landlocked nation's Lake Albert region is of particular interest, with oil and gas resources estimated at over one billion barrels. Uganda is developing these resources under the projects Tilenga, operated by TotalEnergies, and Kingfisher by CNOOC Uganda Limited (part of the China National Offshore Oil Corporation). These projects, and many others, are undertaken in partnership with the Uganda National Oil Company (UNOC). "The drilling of wells in both the Tilenga and Kingfisher development areas is ongoing, with several wells already completed. These include producer wells and injector wells, with a few monitoring wells. We continue to optimize these activities with a focus on maintaining schedule and cost," shared Proscovia Nabbanja, UNOC's CEO.

Both the Tilenga and Kingfisher projects have environmental concerns due to their footprints overlapping with the Murchison Falls Park. As such, the projects have faced scrutiny and challenges, particularly concerning the displacement of local communities and the potential environmental impacts on the ecologically sensitive Lake Albert region. Nevertheless, development is well underway, with first oil anticipated in 2025, and service providers pouring in from Nigeria, Angola and other African nations to lend support: "We have members working in Uganda, Mozambique, Zambia and Namibia, and we encourage collaboration and knowledge transfer across countries and indigenous companies to create more value within the continent," said Wole Ogunsanya, chairman of the Petroleum Technology Association of Nigeria (PETAN).

Accompanying these two upstream projects is the 1,443 km East African Crude Oil Pipeline (EACOP). The pipeline will transport crude oil from landlocked Uganda to the Tanzanian coast and is essential for bringing the oil from these two projects to international markets. Once complete, the US$5 billion EACOP project will be the longest electrically heated pipeline in the world, capable of transporting 246,000 bpd. "We have made substantial progress, with crucial commercial agreements signed, major contracts awarded and the initial stages of construction underway. We have faced challenges with pushback from climate activists but we have ensured that the technical planning puts environmental considerations at the forefront. With stringent local and international standards, adaptation of technology that ensures minimal impact on the environment and contingency planning, we are confident we can deliver the project in a manner that protects the environment but also delivers the social and economic needs for the country and the region," said Nabbanja.



Another major project underway is the refinery in Kabaale, which should reduce the nation's dependence on imported refined products significantly. Alongside the refinery is the Kabalega Industrial Park, which will host petrochemical and fertilizer plants, among others. Fertilizer plants will be particularly welcomed considering 70% of Uganda's population is engaged in agriculture. Much like with Nigeria's new Dangote refinery, Uganda will have to find the right balance between exporting raw resources via the EACOP or adding value domestically by producing petroleum derivatives and increasing domestic consumption. "Africa's energy demand is going to grow 50-55% over the next two decades, but the question is how do we support local refining in such a way that African countries can minimize imports and still maximize profitability from their crude oil production?" questioned Anibor Kragha, executive secretary, African Refiners and Distributors Association (ARDA).

The success of Uganda's hydrocarbon boom will depend on the careful management of its resources, the implementation of sustainable practices, and the equitable distribution of the benefits across the country. "We have put in place robust frameworks and policies that mandate the inclusion of Ugandans in every aspect of the oil and gas value chain. Our initiatives focus on training and capacity building, ensuring that Ugandans are well-equipped to participate and benefit from this sector," continued Nabbanja. ■

Image courtesy of Bill Wegener at Unsplash

Proscovia Nabbanja

CEO

UGANDA NATIONAL OIL COMPANY (UNOC)

What is Uganda National Oil Company's mandate?

As a wholly owned entity by the Government of Uganda, UNOC is tasked with managing the state's commercial interests in the petroleum industry, ensuring the nation's oil and gas resources are utilized to create sustainable value. Our operations encompass the entire oil and gas value chain, including exploration, development, production, and marketing of petroleum products. Through our comprehensive activities across upstream, midstream, and downstream sectors, UNOC is dedicated to transforming Uganda into a major oil producer.

Can you share details on ongoing upstream projects UNOC is involved in?

One of our most significant upstream projects is the Kingfisher Development Area (KFDA), operated by CNOOC Uganda Limited. Equally important is the Tilenga project, operated by TotalEnergies E&P. These projects are the backbone of our production goals, and we are proud to report substantial progress in drilling and infrastructure development, after making a final investment decision in February 2022.

We are actively involved in exploration activities to identify new reserves, a crucial step in ensuring sustainable production in the long term. We recently acquired the Kasuruban Block and are currently implementing the work program while seeking a strategic partner to jointly take this license forward.

Can you provide an overview of the progress made on the East African Crude Oil Pipeline (EACOP)?

The East African Crude Oil Pipeline (EACOP) is a landmark project for Uganda and the region, aimed at transporting crude oil from Uganda to the port of Tanga in Tanzania. We have made substantial progress, with crucial commercial agreements signed, major contracts awarded and the initial stages of construction underway.

What other mid- and downstream projects is UNOC involved in?

Our midstream strategy includes developing the Uganda Refinery in Kabaale, Hoima District, which is poised to reduce our reliance on imported petroleum products significantly. We see the refinery as a critical piece in the country's industrialization agenda, not only producing refined products but spurring off other industries such as petrochemicals, fertilizers and agro-based industries. Alongside the refinery, the Kabalega Industrial Park is being developed to support these ancillary industries and services.

What are UNOC's priorities for the coming years?

Looking ahead, our immediate priorities include advancing the Kingfisher and Tilenga projects to production, progressing the EACOP to meet our targets, and finalizing agreements for the Uganda Refinery. We are also focused on enhancing our operational efficiencies, expanding our exploration activities, and reinforcing our commitment to National Content.

A significant development in our downstream business line is the Petroleum Supply (Amendment) Act 2023, which mandates UNOC with the sole importation of petroleum products into the country.

Our goal is to position Uganda as a leading oil producer in Africa, driving economic growth and development for our country. We are also working on the development of an additional terminal, the Kampala Storage Terminal, which will enhance our storage capacity and logistical capabilities. ■

AA Holdings
Ace Energy Group
ACREP Angolan E&P Company
AFC Mercy
Afentra
Afreximbank
Africa Finance Corporation (AFC)
Africa Provider Offshore Services (APOS)
African Energy Chamber
African Petroleum Producers' Organization (APPO)
African Refiners and Distributors Association (ARDA)
AIPCC Energy
Angola Environmental Serviços (AES)
AOS Orwell
Ascending
Asiko Energy
Association of Service Providers of the Angolan Oil & Gas Industry (AECIPA)
BRIMONT
Bureau Veritas Nigeria
Calaya Engineering Services
ChampionX Químicos
Chevron Nigeria Limited
Craigwal Petroshore Limited (CPL)
Deloitte Gabon
Deloitte Nigeria
Dentons ACAS-Law
Dovewell Oilfield Services
Eco Atlantic Oil & Gas
Effimax Energy
Enagol

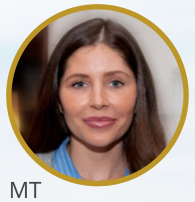
Energas West Africa
Energy and Mineral Resources (EMR)
Eni
Eraskorp
Eterna Plc
Etu Energias
Eunisell
ExxonMobil Angola
Falcon Corporation
Fugro
Future Oilfield Services Limited (FOSL)
G. Elias
GasInvest
Gasland Nigeria
GCA Energy
GIPSA
Heirs Energies
Heli Malongo
Heritage Oil
Hyde Energy
Ikosh Nigeria
Indústria Comércio e Serviços (ICOS)
Integrated Solutions Angola (ISA)
Internet Technologies Angola (Paratus Group)
ISQapave
KAESO Energy Services
Kavod Offshore Services
KPMG West Africa
Laser Engineering and Resources Consultants
Loyz Marine Services Limited

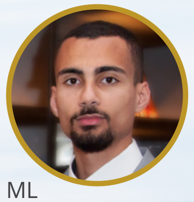
Mainsol
MAN Energy Solutions
MCA Group
McKinsey & Company
Mecwide Angola
Menshen
Mezovest
Moneda Invest Africa
Montego Energy
Moteriba Group
Namibia Ministry of Mines & Energy
National Petroleum Corporation of Namibia (NAMCOR)
ND Western
Neconde Energy
NewcrossEP
Nigeria Ministry of State for Petroleum Resources (Oil)
Nigerian Upstream Petroleum Regulatory Commission (NUPRC)
Oando Energy Resources
Oceanbizz
Octomar
Ofserv
Oida Group
Oilserv Limited
OPAC Refineries
Pan Ocean Oil Corporation (Nigeria) Limited
Petroleum Directorate of Sierra Leone (PDSL)
Petroleum Technology Association of Nigeria (PETAN)
Petromar

Platform Petroleum Limited
Poseidon Energy Services
Prometim
PwC Angola
Resilience 360
RichAfrica Consultancy
RusselSmith
Savannah Energy
SBM Intelligence
Seven Oceans Oil and Gas
SLB
Société Nationale des Pétroles du Congo (SNPC)
Sonamet
Sonangol Refining & Petrochemical Company (Sonaref)
Substrata Oil And Gas
Telmek Global Resources (TGR)
Tetracore Energy Group
Tradinter
Tranos
TREXM Holdings
Triumph Power and Gas Systems
Tubostrans
Udo Udoma & Belo-Osagie
Uganda National Oil Company (UNOC)
UTM Offshore
Victory Oil & Energy
Westfield Energy Resources
Women in Energy Network (WIEN)
Workforce Group
WSP in Africa
Zillian Angola

Editorial and Management Team

Senior Project Director: Margarita Todorova
Business Analysts: Micah Lanez and Eneko Johnson


MT


ML


EJ

Executive Editor: Mungo Smith
Operations Director: Miguel Pérez-Solero
Project Assistant: Sojoud Hamdy
Graphic Designer: Kaori Asato
Graphic Designer (ads): Özgür Ergüney
Graphic Designer (cover): Gonzalo Da Cunha
General Manager: Alfonso Tejerina

Your opinion is important to us,
please be in touch to share your comments on this report: info@gbreports.com.

For updated industry news from our on-the-ground teams around the world, please visit our website at gbreports.com, subscribe to our newsletter through our website, and follow us on X (@GBReports) and LinkedIn (gbreports).

Thank you!

We would like to thank the honorable ministers, executives, and authorities who took the time to meet with us.


Image courtesy of Heritage Oil

GBR

Global Business Reports