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◀ COP28 Delivers Clean Energy Deals for Africa

THE ENERGY REPUBLIC

A SPECIAL EDITION FOR COP28 | INDUSTRY UPDATES | AFRICAN ENERGY | DECEMBER 2023 - JANUARY 2024 EDITION

SAIPEC 2024

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FORGING BUSINESS
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REINVENTING NEW BUSINESS PARTNERSHIPS, PROJECT DEVELOPMENT

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EDITOR'S NOTE

Dear Executives,

Happy New Year!

Welcome to our first edition for 2024, a joint publication from December 2023 to January 2024, featuring a post-event report of COP28.

This magazine features in-depth analyses about the final resolutions from the 2023 United Nations Climate Change Conference also known as COP28, held in Dubai, United Arab Emirates, from 30 November until 12 December 2023. **COP28 'Action Agenda'** which includes phasing out fossil fuels would continue to be an argument between oil producers especially from Africa as they have made it clear that it will continue to use its oil and gas resources to develop the continent as well as alleviate energy poverty. Phasing out fossil fuels in Africa will have a negative impact on major African economies among other issues. Some prominent energy lawyers have voiced their opinions on the impact of phasing out fossil fuels in Africa, featured on page 9.

As we have entered the year 2024, Rethinking Africa Foundation, a German stakeholders and investors initiative is pushing for a turning point in relations between Germany and Africa, with a focus on project development and creating jobs in the African continent. This is a welcome development in boosting German-Africa business relations on key areas to drive growth and ROI for both parties instead of the traditional foreign aid which hasn't really brought the much needed development in Africa.

There are several industry updates in the global energy industry featured in the magazine coupled with other industry events and a useful list of project development in Africa, Europe, the Middle East, etc...

As we navigate through the year 2024, we will continue to provide our readers with the industry updates covering project developments and opportunities worldwide.

We are looking forward to your comments.

Please feel free to send your comments via email:

info@theenergyrepublic.com

Best regards,

Ndubuisi Micheal Obineme

Managing Editor

The Energy Republic Marketing and Communications Limited

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United Nations Climate Conference: COP28 Post Event Report, Everything You Need to Know

COP28 was the 28th annual United Nations (UN) climate meeting, where governments discussed how to limit and prepare for future climate change. During the opening plenary, parties adopted a decision to kick start the new loss and damage fund that was established the previous year in Sharm el-Sheikh, Egypt, and several countries announced pledges for its initial capitalization. This success was made possible by an agreement reached in the Transitional Committee that was tasked and met throughout 2023 to make a recommendation on the institutional arrangements for the fund.

Parties also swiftly adopted the agendas for the meeting. Pre-session consultations managed to secure agreement for several contentious issues to be addressed either in presidency consultations or under existing agenda items, rather than as stand-alone items.

Despite these initial high points, negotiations throughout the two-week meeting were difficult, especially on the central outcomes for this conference: the first Global Stocktake (GST) under the Paris Agreement, the framework for implementing the Global Goal on Adaptation (GGA), the mitigation work programme, the work programme on just transition pathways, and matters related to Paris Agreement Article 2.1(c), on aligning finance flows with low-greenhouse gas (GHG) climate-resilient development.

During the second week, negotiations were largely conducted behind the scenes, with the Presidency, its appointed ministerial Co-Facilitators, and others conducting bilateral consultations on draft texts to identify landing zones. Key issues of contention related to, among others, language on fossil fuel phaseout in the GST decision and references to means of implementation for the GGA.



*World leaders gathered for the world climate action summit at the COP28.
Photo Credit: Mahmoud Khaled / COP28*

Despite the Presidency's intention to close the meeting on time on Tuesday, 12 December, consultations continued into the early hours of Wednesday, 13 December. In the early morning, draft decisions on the remaining issues were eventually posted and adopted by the closing plenary.

Parties adopted a decision on the GST that recognizes the need for deep, rapid, and sustained reductions in GHG emissions in line with 1.5°C pathways. It encourages parties to ensure their next nationally determined contributions have ambitious, economy-wide emission reduction targets, covering all GHGs, sectors, and categories, and aligned with limiting global warming to 1.5°C.

Among other things, the decision also calls on parties to contribute, in a nationally-determined manner, to global efforts on:

- ◀ Tripling renewable energy capacity globally and doubling the global average annual rate of energy efficiency improvements by 2030;
- ◀ Accelerating efforts toward the phase-down of unabated coal power;
- ◀ Accelerating efforts globally towards net zero emission energy systems, utilizing zero- and low-carbon fuels well before or by around mid-century;

- ◀ Transitioning away from fossil fuels in energy systems, in a just, orderly, and equitable manner, accelerating action in this critical decade, to achieve net zero by 2050 in keeping with the science;
- ◀ Accelerating zero- and low-emission technologies, including, inter alia, renewables, nuclear, abatement and removal technologies such as carbon capture and utilization and storage, particularly in hard-to-abate sectors, and low-carbon hydrogen production;
- ◀ Accelerating and substantially reducing non-carbon-dioxide emissions globally including, in particular, methane emissions by 2030;
- ◀ Accelerating the reduction of emissions from road transport on a range of pathways, including through the development of infrastructure and rapid deployment of zero and low-emission vehicles; and
- ◀ Phasing out inefficient fossil fuel subsidies that do not address energy poverty or just transition, as soon as possible.

Closing statements showcased how difficult it was to reach a compromise on the GST. Many denounced the lack of a clear reference to fossil fuel phaseout, weak language on coal and methane, and the loopholes associated with so-called “transitional fuels,” which the decision says “can play a role in facilitating the energy transition while ensuring energy security.” Others found the reference to these specific global efforts too prescriptive and underscored the bottom-up and nationally determined nature of the Paris Agreement. Nevertheless, the decision is celebrated as the “beginning of the end of fossil fuels.”

Other outcomes of the conference include:

- ◀ The adoption of the framework for the GGA established in the Paris Agreement, which aims to guide the implementation of the goal and, among other things, establishes impact, vulnerability, and risk assessment (by 2030), multi-hazard early warning systems (by 2027), climate information services for risk reduction and systematic observation (by 2027), and country-driven, gender-responsive, participatory, and transparent national adaptation plans (by 2030);
- ◀ The designation of the consortium of the UN Office for Disaster Risk Reduction and the UN Office for Project Services as the host of the Santiago Network on loss and damage;
- ◀ The launch of the implementation of the work programme on just transition pathways, with at least two hybrid dialogues to be held before the two annual sessions of the Subsidiary Bodies;
- ◀ The decision to continue and strengthen the dialogue to exchange views on and enhance understanding of the scope of Article 2.1© of the Paris Agreement (on aligning finance flows with low-GHG climate resilient development) and its complementarity with Article 9 of the Paris Agreement (on climate finance); and
- ◀ The decision to convene an expert dialogue on mountains and climate change and expert dialogue on the disproportionate impacts of climate change on children at the Subsidiary Bodies meetings in June 2024.



The UAE Climate Change Conference convened from 30 November to 13 December 2023, 23 hours longer than originally scheduled. The conference consisted of the 28th meeting of the Conference of the Parties (COP) to the UN Framework Convention on Climate Change (UNFCCC), the 18th meeting of the Conference of the Parties serving as the Meeting of the Parties to the Kyoto Protocol (CMP 18), the 5th session of the Conference of the Parties serving as the Meeting of the Parties to the Paris Agreement (CMA 5), and the 59th sessions of the Subsidiary Body for Scientific and Technological Advice (SBSTA 59) and the Subsidiary Body for Implementation (SBI 59).

In total, 97,372 people were registered for on-site attendance, including 51,695 delegates from parties, 25,360 observers, 3,972 members of the media, and 16,345 support and Secretariat staff. Of the observers, 4,885 were guests of the host country, the United Arab Emirates (UAE). Another 3,074 people, including 177 delegates from parties, 2,821 observers, and 76 media representatives registered for online participation. COP 28 was by far the largest UN climate change conference to date.

The summit took place in Dubai, in the United Arab Emirates (UAE). It was scheduled to last from 30 November to 12 December 2023 but overran by a day.



Dr. Sultan Al Jaber, COP28 President, speaking during his closing speech to accelerate global climate action post COP28.

COP28 ‘Action Agenda’ Commits to Phaseout Fossil Fuels, Triple Renewables, Strengthen Financial Architecture to Accelerate Global Climate Ambitions

COP28 concluded with a historic agreement by 198 Parties to deliver a new era of climate action.

The Parties agreed a landmark text named The UAE Consensus, that sets out an ambitious climate agenda to keep 1.5°C within reach. The UAE Consensus calls on Parties to transition away from fossil fuels to reach net zero, encourages them to submit economy-wide Nationally Determined Contributions (NDCs), includes a new specific target to triple renewables and double energy efficiency by 2030, and builds momentum towards a new architecture for climate finance.

The UAE Consensus, which follows a year of inclusive diplomatic engagements and two weeks of intense negotiations, reflects the COP28 Presidency’s goal to provide the most ambitious response possible to the Global Stocktake and delivers on the central aims of the Paris Agreement.

“The world needed to find a new way. By following our North Star, we have found that path,” said COP28 President, Dr. Sultan Al Jaber during his closing speech. “We have worked very hard to secure a better future for

our people and our planet. We should be proud of our historic achievement.”

“I promised a different sort of COP. A COP that brought everyone together – private and public...civil society and faith leaders, youth and indigenous peoples. Everyone came together from day one. Everyone united, acted and delivered.”

Throughout the COP28 process, Dr. Al Jaber and the COP28 Presidency team have expressed determination to deliver “a plan that is led by the science” and to define a new way for this and future COPs, based on the inclusion of diverse peoples and elevating the needs of the Global South.

“It is a balanced plan that tackles emissions, bridges the gap on adaptation, reimagines global finance and delivers on loss and damage,” said Dr. Al Jaber. “It is built on common ground. It is strengthened by inclusivity and it is reinforced by collaboration. It is an enhanced, balanced, but make no mistake, historic package to accelerate climate action.”

Major commitments contained in the final negotiated text include:

◀ An unprecedented reference to transitioning away from all fossil fuels to

enable the world to reach net zero by 2050.

◀ A significant step forward in the expectations for the next round of Nationally Determined Contributions (NDCs) by encouraging “economy-wide emission reduction targets.”

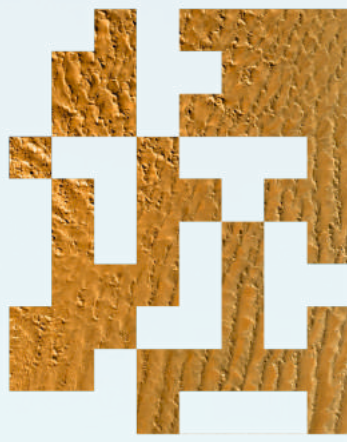
◀ Building momentum behind the financial architecture reform agenda, recognizing the role of credit rating agencies for the first time, and calling for a scale up of concessional and grant finance.

◀ A new, specific target to triple renewables and double energy efficiency by 2030.

◀ Recognizing the need to significantly scale up adaptation finance beyond the doubling to meet urgent and evolving needs.

Outside the Global Stocktake, COP28 delivered historic negotiated outcomes to operationalize Loss and Damage, securing \$792 million of early pledges, providing a framework for the Global Goal on Adaptation (GGA), and institutionalizing the role of the Youth Climate Champion to mainstream youth inclusion at future COPs.

Throughout 2023, the COP28 Presidency has taken bold and decisive steps to deliver beyond the negotiated text through its ‘Action Agenda’




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COP28 Agreement to Transition Away from Fossil Fuels: Impact on African Oil Producers

The 28th meeting of the Conference of Parties (COP28) which concluded in December 2023 assessed amongst others, the progress made under the Paris Agreement and called on parties to; transition away from fossil fuels to reach net zero “in a just, orderly, and equitable manner”, phase out inefficient fossil fuel subsidies, and submit economy-wide Nationally Determined Contributions (NDCs).

One of the major outcomes of COP28 was the Oil and Gas Decarbonization Charter (the Decarbonization Charter) which hinged on the reduction of upstream and downstream emissions by adopting a differentiated approach to take advantage of the diversity of the capabilities across this sector.

The Decarbonization Charter represents a shift in the industry’s approach to climate change, acknowledging the need for significant emissions reductions and an equitable transition.

This paper is focused on the impact of these resolutions on African oil and gas producers and the modalities that can be adopted to mitigate the effect of the transition.

IMPACT OF THE ENERGY TRANSITION FOR AFRICA OIL PRODUCERS

With top oil-producing nations such as Nigeria, Angola, and Libya, Africa plays a significant role in global oil production, with estimated crude oil reserves of around 8% of the world’s total.

National Oil Companies (NOCs) operating in Africa contribute to a significant portion of Africa’s oil and gas supply with Algeria’s Sonatrach, Angola’s Sonangol, the Libyan National Oil Corporation, and the Nigerian National Petroleum Company Limited projected to account for 85% of liquid production and 88% of natural gas production by African NOCs from 2023 to 2024.

Economic Instability

African-producing nations are heavily reliant on revenue from fossil fuel exports and in many instances, oil and gas inflows constitute 35% to 82% of government revenues.⁴ Undoubtedly, a decline in oil and gas demand or prices would impact their revenue streams and GDP, particularly for those who have been unable to diversify their economy such as to benefit from non-oil revenue.

Given the substantial investments required to transition to renewable energy, African oil-producing countries have made it clear that it is necessary for them to continue to harness their oil and gas reserves to generate sufficient revenue to finance renewable energy initiatives and meet global emission reduction goals.

In this regard, the African Petroleum Producers Organization (APPO) advocates a balanced approach that takes into account Africa’s development priorities and the potential negative impact of a speedy transition.

Stranded Assets

Reduced investments in oil production on account of COP28 are also likely to impact the development of stranded assets in the near future.

Stranded assets are those investments that have already been made but are seen to no longer earn sufficient economic returns as a result of changes in the market and regulatory environment brought about by climate policy.

As it affects African oil producers, a rapid shift to cleaner sources will result in stranded assets as global extractive companies and investors realign their portfolios in response to evolving market dynamics and new low-carbon regulations affecting investment flow. For a country like Nigeria which is facing reduced investment inflows and modest production despite having significant upstream assets valued at around US\$90 billion,⁸ abandoning these assets does not appear to be an option.

Energy Security

Energy access in Africa remains low with more than 50% of the sub-Saharan region lacking access to electricity. As indicated in a recent World Bank Press Release, the proportion of the Nigerian population with access to electricity stands at around 55.4%, which translates to approximately 44.6% of Nigerians, or 90 million individuals, lack access to electricity.

This brings to the fore, the impact of migrating from fossil fuel in the absence of adequate resources and infrastructure to transit to cleaner energy sources. Without careful planning, rapid decreases in fossil fuel investments might create energy supply shortages, impacting both industries and households. Channeling significant investments into the primary energy sources of oil, gas, and coal in Africa can serve not only to enhance industrialization, and alleviate energy poverty but will also enhance the continent’s resilience in addressing climate change.

This is in addition to the argument that reliance on renewable energy alone cannot meet Africa's energy needs. On the other hand, phasing out fossil fuels, will not only reduce what is considered the continent's inconsequential emissions but may essentially phase out the insufficient available energy, thus transitioning from 'dawn to darkness'.

Investment and Financing for Fossil Fuel Projects

Increasing the political pressure on climate change on developing economies could deprive many oil and gas projects in Africa of access to funding or where available, at a premium.

The ripple effects of this would manifest in loss of revenue and capital shrink, increased cost of borrowing, and debt overhang. Currently, about US\$245 billion worth of gas projects on stream until 2030 are at risk of becoming stranded assets, even if minimal efforts are taken towards climate change.

Even for projects that are not abandoned, a rapid shift away from fossil fuels may affect access to capital for such projects, which will delay project completion and potentially increase debt obligations.

In addition, diminished foreign investments in fossil fuel projects in Africa could limit resources for energy infrastructure, and impede the growth in power generation capacity and access.

Loss of Jobs

With the COP28 resolutions, the energy sector might witness job losses, particularly within the fossil fuel industry including sectors such as mining, extraction, refining, distribution/logistics, and power generation relying on fossil fuel sources.

Although the IRENA African study reveals that some countries in Sub-Saharan Africa will benefit from reductions in fossil fuel imports and domestic generation of renewable energy which will in turn boost job creation and economic growth, the report acknowledges that oil producers in the region like Nigeria and Angola are exceptions to this assertion, given their heavy dependence on fossil fuel. With African countries already struggling with low unemployment rates, any further decline in employment could create

additional challenges for oil-producing nations in Africa.

WAY FORWARD FOR AFRICAN OIL AND GAS PRODUCERS

Despite the challenges faced by the African economy in transitioning from fossil fuels as emphasized by COP 28, the reality of climate change persists, as Africa continues to bear a disproportionate impact from climate change despite being the least contributor to global emissions. African nations must therefore embrace creativity in addressing these impacts while aligning themselves with the global transition.

◀ Just and Inclusive Transition from an African Perspective

Broadly, the concept of a just and inclusive energy transition entails ensuring that the transition does not disproportionately affect vulnerable nations and underscores the importance of incorporating their needs and perspectives into the drive towards net zero. It is crucial to highlight that Africa's energy transition cannot be identical to the rest of the world, instead, the transition necessitates region-specific solutions hinged on inclusivity and equity.

In this regard, the UAE Consensus backed by the Action Agenda of the COP28 spells out four pillars of the global climate action including: fast-tracking a just, orderly, and equitable energy transition; and underpinning everything with full inclusivity

While the inevitability of shifting from fossil fuel production to renewable sources is widely recognized, a critical concern for African nations lies in the right to a just transition.¹⁶ This entails the acceleration of fossil fuel production in the most sustainable way to enable African nations to industrialize before reinvesting those gains in green energy sources. Several African countries possess substantial untapped resources like coal and oil, which can render the transition to renewable energy more challenging, especially for those nations that have heavily invested in non-renewable infrastructure.

The proposition is not for the transition to cease, but to implement a gradual transition strategy while utilizing relatively cleaner fossil fuels, like gas. Demonstrating the phased approach towards just energy transition, the Nigerian Government, as part of the Economic Sustainability Plan, launched the National Gas Expansion Program which included a financial commitment of over N90 billion for Compressed Natural Gas development, and

an allotment of N25 billion to provide clean cooking fuel in the form of Liquefied Petroleum Gas to 30 million households.

The Nigerian Energy Transition Plan which was launched in 2022 advocates for the utilization of gas as a transition fuel in Nigeria's net-zero pathway particularly in the power and cooking sectors.¹⁷ Similarly, Ghana's Energy Transition and Investment Plan employs a blend of regulations, incentives, and supportive programs to reduce the country's fossil fuel dependence.

In the same vein, African nations should delineate their energy transition plans hinged on their respective starting points to ensure access to clean, affordable, and dependable energy as a cornerstone of inclusive development, particularly for economic growth, and to narrow socioeconomic disparities.

Thus, a just and equitable transition from fossil fuels to renewable energy is imperative, not solely to address climate change but also to extend accessible, reliable, sustainable, and modern energy to about 580 million Africans who remain devoid of electricity access.

Economic Diversification

With increasing price volatility and geopolitical instability suffered by African countries that are significantly reliant on fossil fuels, diversification of energy sources is now imperative for long-term sustainable development and economic stability.¹⁹ Expansion into sectors such as agriculture, manufacturing, and tourism establishes additional sources of economic growth, diminishes reliance on energy exports, bolsters resilience against fluctuations in the energy market, and stimulates the generation of employment opportunities.

This strategic approach ensures long-term stability and growth, equipping African nations with the capacity to ensure a more inclusive transition to a low-carbon economy while safeguarding vulnerable populations.

Repurposing Stranded Assets

Stranded assets used for fossil fuel extraction or processing can be repurposed and redeployed for renewable energy purposes, for example, converting abandoned oil fields for solar or wind energy generation.

This would lead to the mitigation of financial losses and environmental impacts associated with fossil fuel activities. This however requires innovative solutions as not all stranded assets can be effectively repurposed, therefore necessitating the need to assess their potential alternative uses in alignment with current trends. This could also involve adapting the asset's functions and integrating it into a new value chain to reduce the capital expenditure required to acquire new assets.



ACCELERATING THE ELIMINATION OF METHANE EMISSIONS AND THE DECARBONIZATION OF OIL & GAS



◀ Need for Upskilling and Capacity Building

A major challenge to the energy transition journey is the need for technical expertise and capacity building by developing African countries, necessary to deploy and maintain renewable energy systems. It is therefore important that indigenous capacity is strengthened across African countries.

Governments of oil-producing nations in Africa play a pivotal role in establishing a conducive environment by implementing regulatory frameworks, providing incentives, and investing in human capital. Initiatives centered on skills training, education, and capacity building in renewable energy technologies can effectively narrow the gap between workforce readiness and industry requirements. This ensures that the region optimizes the potential for job creation during the transition. In this context, efforts and investments should be channeled into retraining and assisting workers in declining sectors, enabling them to transition toward new opportunities within the clean energy sector. Implementing this would also drive the development of new industries thus allowing the energy transition to become a major job creation opportunity for Africa.

Recognizing that a just transition approach should focus on minimizing job displacement, upskilling measures would help employees within the oil and gas sector to integrate into the cleaner energy space.

◀ Global Cooperation and Partnerships

In the context of the energy transition in Africa, global partnerships play a pivotal role in facilitating access to financing for new energy infrastructure. Various partnerships, such as the Africa-EU Energy Partnership, the EU-Africa Green Energy Initiative, and the Just Energy Transition Partnerships (JETPs) are already in place. Additionally, the Alliance for Green Infrastructure in Africa initiative emerged during COP28. African nations can derive benefits from these partnerships by actively engaging with funders and stakeholders. Customizing these initiatives to African countries' specific needs is crucial for aligning them with the continent's development priorities, thereby contributing to sustainable and inclusive growth. A case in point is the \$ 350 million funding from the World Bank through the Rural

Electrification Agency which has led to the deployment of over 300 mini-grids at several locations across Nigeria. More recently, the World Bank approved the Nigeria Distributed Access through Renewable Energy Scale-up (DARES) project financed by a \$750 million credit provided by the International Development Association (IDA), with a projection to provide 17.5 million Nigerians with access to clean energy.

Furthermore, collaboration between the public and private sectors, facilitated by public-private partnerships (PPPs) presents an active transnational financing strategy for clean energy initiatives, playing a pivotal role in expanding renewable energy capacity. It also fosters the exchange of knowledge, transfer of technology, and the distribution of risks, simultaneously harnessing government resources and private sector expertise.

Successful implementation of PPPs expedites project execution, improves financial viability, and fosters local capacity development. Governments, through PPPs, extend regulatory support, offer access to land, and create policy frameworks, while private partners contribute financial investments, technical expertise, and operational proficiency, thereby alleviating financial pressures on governments. Given that renewable energy projects are often considered high-risk investments, potentially deterring private capital due to various risks involved, PPPs present a distinctive avenue to mitigate these risks by distributing them between public and private entities.

◀ Policy and Regulatory Changes

Admittedly, various support initiatives already exist across several African countries, however, it is important to note that strengthening of institutional capacities can simultaneously promote the shift away from fossil fuels and support the expansion of Africa's power sector. Enhancing such capacities spanning local and city to national

levels can effectively integrate expertise within local institutions and expand the reach of inventive business models and technologies. It is imperative to establish strategies that rectify market imbalances that currently favor fossil fuels. These actions should however be implemented cautiously to prevent aggravating challenges related to energy poverty and limited energy access, as highlighted above in this paper. African countries should consider streamlining regulatory processes to facilitate the deployment of renewable energy projects. This includes simplifying permitting procedures, standardizing grid connection requirements, and ensuring transparent and speedier licensing procedures.

Implementing a predictable and efficient regulatory environment reduces project development timelines and minimizes uncertainties for investors. A comprehensive agenda encompassing research, policy development, regulatory measures, and enabling legislation will be essential. This agenda should not only focus on innovating the existing financial ecosystem but also address the fundamental shifts required in the system.

CONCLUSION

The global imperative to reduce greenhouse gas emissions cannot be ignored, but careful consideration must be taken of the potential pitfalls for African oil-producing countries, which risk further entrenchment in socio-economic hardship. As the world rallies behind the urgent call for climate action, the Decarbonization Charter needs to ensure that no country is indeed left behind. By emphasizing the importance of a just and inclusive transition hinged on equitable policies, the proposed measures in this article provide a roadmap for fostering resilience in African oil-producing nations.

This approach ensures a more inclusive path for these countries, assisting them in adapting to the demands of COP28 to transition from fossil fuels and enabling oil and gas companies to successfully navigate the evolving energy landscape.



Mohamed Hamel, Secretary General of Gas Exporting Countries Forum (GECF), delivers his statement at the COP28 World Climate Summit, in Dubai United Arab Emirates, December 9, 2023. REUTERS/Thomas Mukoya/File Photo

GECF Feature Article: Implications of COP28 for the gas industry

The COP28 UN Climate Change Conference held in Dubai, the United Arab Emirates, is a GECF member country. One of the most significant outcomes of COP28 was the inauguration of the **Global Stocktake (GST)**, a pivotal element outlined in **Article 14 of the 2015 Paris Agreement**. The GST serves as a comprehensive global assessment, gauging the progress made in addressing climate change and identifying the remaining challenges. The decision titled **"Outcome of the first global stocktake"** was adopted. Some elements of this document are of the utmost importance to the natural gas industry, in particular items 28 and 29.

In item 28, the Parties recognize "the need for deep, rapid and sustained reductions in greenhouse gas emissions in line with 1.5 °C pathways". In this context, the decision calls on Parties to contribute to the following global efforts, in a nationally determined manner, taking into account the Paris Agreement and their different national circumstances, pathways and approaches.

Various global efforts may, directly or indirectly, influence gas markets. First, "transitioning away from fossil fuels in the energy systems in a just, orderly, and

equitable manner, accelerating action in this critical decade, so as to achieve net zero by 2050 in keeping with the science" stands out. There was a vigorous debate on the path forward to achieve climate goals, with a heightened emphasis on addressing the role of fossil fuels in the global energy mix.

In this context, abandoning the wordings like "phasing-out or phasing-down of fossil fuels" in favor of the approved wordings "transitioning away from fossil fuels" **could be considered as a positive signal for the gas industry**, aimed at efficiently resolving the energy trilemma challenge rather than deliberately eliminating specific energy sources from the global mix.

There is an understanding that there is no singular solution, underscoring the need for a diverse array of energy sources and technologies to collectively meet global climate goals.

Second, a focus on "accelerating zero- and low-emission technologies, including, inter alia, renewables, nuclear, abatement and removal technologies such as carbon capture and utilization and storage, particularly in hard-to-abate sectors, and low-carbon hydrogen production" opens bright perspectives for advancing new technologies, such as CCUS and blue hydrogen, in the natural gas industry. Third, "accelerating efforts towards the phase-down of unabated coal power" paves the way

for the accelerated development of coal-to-gas switching on the global level.

In item 29, the Parties recognize that "transitional fuels can play a role in facilitating the energy transition while ensuring energy security". Natural gas is considered as one of the most efficient and widely accepted transitional fuel. In this context, even an emphasis on "tripling renewable energy capacity globally by 2030" is a positive signal to the gas industry,

since natural gas is a perfect backup energy source for renewables, notable for its intermittency.

Moreover, item 154 states that "measures taken to combat climate change, including unilateral ones, should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade". This item was a response to requests from developing countries to address trade-related unilateral measures such as the EU's Carbon Border Adjustment Measures (CBAM).

The GECF served as an advocate for the voice of natural gas at COP28. The GECF Secretary General, HE Eng Mohamed Hamel delivered a statement at the event, emphasizing the need "to support financing for natural gas projects and the scaling-up of cleaner technologies, such as carbon capture, utilization, and storage. This is crucial for a just, inclusive, and orderly energy transitions that satisfy the need for sustainable development, energy security, and energy affordability."

President Tinubu unveils bold vision for greener Nigeria

President Bola Tinubu says Nigeria is taking a significant step towards a sustainable and eco-friendly future by introducing a pioneering initiative to deploy a fleet of 100 electric buses.

The President spoke at a high-level meeting with stakeholders and investors on the Nigeria Carbon Market and Electric Buses Rollout Programme on the sidelines of the COP28 climate summit in Dubai, UAE.

President Tinubu explained that the strategic initiative is aimed at significantly reducing Nigeria's carbon footprint and modernizing the country's transportation systems as part of a larger effort to position Nigeria and Africa as the pioneering frontier of green manufacturing and industrialization with a focus on natural gas as a transition fuel alongside other renewable energy sources.

To spearhead this transformative plan, the President announced the appointment of the Executive Chairman of the Federal Inland Revenue Service (FIRS), Mr. Zacch Adedeji, and the Director-General of the National Council on Climate Change (NCCC), Mr. Dahiru Salisu, to co-chair the Nigeria Carbon Market Activation Plan.

"This initiative stands as a testament to our dedication to environmental stewardship as clearly exemplified through our collaboration with the Africa Carbon Market Initiative. Our visionary plan is a strategic guidepost, directing Nigeria towards becoming an investment-friendly destination for carbon market investments.

"We recognize the imperative of fostering an environment that not only attracts investment but also upholds standardized and sustainable industrial practices. As a manifestation of our forward-thinking approach, we are actively looking to implement robust, enabling policies and frameworks that will serve as the catalyst for the burgeoning growth of the carbon market within our national borders.

"In further driving my commitment, I have recently approved an Inter-governmental Committee on



H.E Bola Ahmed Tinubu, President of the Federal Republic of Nigeria

Carbon Markets to be chaired by the Executive Chairman of the Federal Inland Revenue Service and the Director-General of the National Council on Climate Change to drive this visionary plan," the President stated.

The President assured prospective investors that this initiative transcends being a mere pilot project.

"It is a concrete manifestation of our unwavering dedication to a carbon-neutral future. I assure you; this is only the commencement of our ambitious plans, with many more impactful initiatives on the horizon," he said.

President Tinubu, while acknowledging the pressing need for a comprehensive global collaboration on climate-related challenges, called on global partners to join hands in accelerating collective efforts towards a net-zero future.

"As we unveil our initiatives, I challenge other nations to emulate our strides in mapping out their sustainable futures with a clear understanding that Africa is a beacon of innovative solutions to climate-related challenges.

"In this pursuit, we acknowledge the pressing need for comprehensive global collaboration, and we reiterate our commitment to being an active participant in international efforts.

"Nigeria's plans for a greener and cleaner economy can serve as an inspirational narrative for nations worldwide. Our comprehensive approach, rooted in visionary leadership and pragmatic action supported by our technical partners, is poised to

become a blueprint for countries aspiring to also develop and catalyze their markets for sustainable growth," the President concluded.

In his remarks, FIRS Chairman, Mr. Zacch Adedeji acknowledged the visionary leadership of President Tinubu as the guiding force behind Nigeria's commitment to harnessing its vast carbon potential.

Mr. Adedeji pledged the full commitment of the Committee to drive the implementation of efficient policies and frameworks to achieve sustainable carbon market growth.

Reiterating Nigeria's readiness to lead the global effort to combat climate change, Mr. Adedeji described the initial phase of the rollout of the electric buses as a tangible symbol of Nigeria's commitment to modernizing its transportation systems while reducing Africa's modest carbon footprint.

"In the immediate term, Nigeria will proudly unveil a series of innovative, clean, modern, and sustainable initiatives across diverse sectors. These initiatives are strategically designed to not only address climate change-related challenges but also to position Nigeria as an attractive destination for global investments.

"The business-friendly environment and policy frameworks we are developing underscore our readiness to welcome and facilitate investments that align with our collective commitment to a greener future for Nigeria and the African continent," the FIRS Chairman affirmed.

The COP28 Presidency and the Kingdom of Saudi Arabia has launched the landmark Oil and Gas Decarbonization Charter (OGDC), a global industry initiative dedicated to speeding up climate action and achieving high-scale impact across the oil and gas sectors.

To date, 50 companies, representing more than 40 percent of global oil production have signed on to the OGDC, with National Oil Companies representing over 60 percent of signatories - the largest-ever number of NOCs to commit to a decarbonization initiative.

COP28 President Dr. Sultan Al Jaber said, "The launch of the OGDC is a great first step - and whilst many national oil companies have adopted net-zero 2050 targets for the first time, I know that they and others, can and need to do more. We need the entire industry to keep 1.5C within reach and set even stronger ambitions for decarbonization."

Signatories have committed to net-zero operations by 2050 at the latest, and ending routine flaring by 2030, and near-zero upstream methane emissions. They agree to continue to work towards industry best practices in emission reductions and a number of key actions, including:

- ◀ Investing in the energy system of the future including renewables, low-carbon fuels and negative emissions technologies.
- ◀ Increasing transparency, including enhancing measurement, monitoring, reporting and independent verification of greenhouse gas emissions and their performance and progress in reducing emissions.
- ◀ Increasing alignment with broader industry best practices to accelerate decarbonization of operations and aspire to implement current best practices by 2030 to collectively reduce emission intensity.
- ◀ Reducing energy poverty and providing secure and affordable energy to support the development of all economies.

COP28: Oil Companies Join Forces to Launch 'OGDC' Initiative to Unify Net-Zero Emission Target



Dr. Al Jaber said of the Charter, "I am committed to both inclusivity and transparency. If we want to accelerate progress across the climate agenda, we must bring everyone in to be accountable and responsible for climate action. We must all focus on reducing emissions and apply a positive can-do vision to drive climate action and get everyone to take action. We need a clear action plan, and I am determined to deliver one."

The OGDC recognizes that climate change is "a collective challenge that requires strong and focused action from producers and consumers of energy, fundamental changes across society and the energy sector, as well as international collaboration, to advance the energy transition and reduce greenhouse gas emissions from oil and gas."

Beyond decarbonization, signatories recognize it is essential for the oil and gas industry to increase actions, including engaging with customers, investing in the energy system of the future, and increasing transparency in measurement, reporting and independent verification.

The OGDC is a key initiative under the Global Decarbonization Accelerator (GDA), was launched at the World Climate Action Summit during the sideline of the COP28 conference in Dubai, United Arab Emirates.

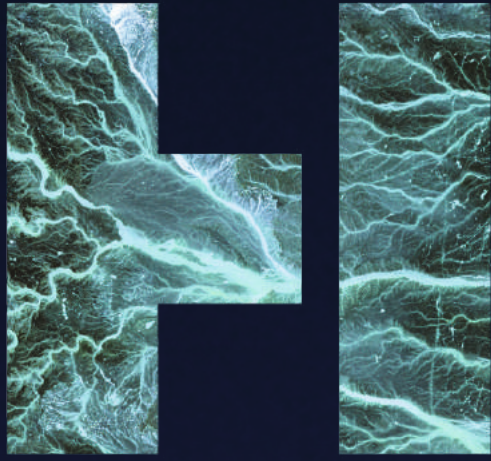
The GDA is focused on three key pillars: rapidly scaling the energy system of tomorrow; decarbonizing the energy system of today; and targeting methane and other non-CO2 greenhouse gases.

It is a comprehensive plan for system-wide change, addressing the demand and the supply of energy at the same time. The GDA has been informed by the thinking of key stakeholders, including international organisations, governments and policy makers, NGOs, and CEOs from every industrial sector.

Signatories to Oil and Gas Decarbonization Charter

NOCs: ADNOC, Bapco Energies, Ecopetrol, EGAS, Equinor, GOGC, INPEX Corporation, KazMunaiGas, Mari Petroleum, Namcor, National Oil Company of Libya, Nilepet, NNPC, OGDC, OMV, ONGC, Pakistan Petroleum Limited (PPL), Pertamina, Petoro, Petrobras, Petroleum Development Oman, Petronas, PTTEP, Saudi Aramco, SNOG, SOCAR, Sonangol, Uzbekneftegaz, ZhenHua Oil, YPF.

IOCs: Azule Energy, BP, Cepsa, COSMO Energy, Crescent Petroleum, Dolphin Energy Limited, Energean Oil & Gas, Eni, EQT Corporation, Exxonmobil, ITOCHU, LUKOIL, Mitsui & Co, Oando plc, Occidental Petroleum, Puma Energy (Trafigura), Repsol, Shell, TotalEnergies, Woodside Energy Group



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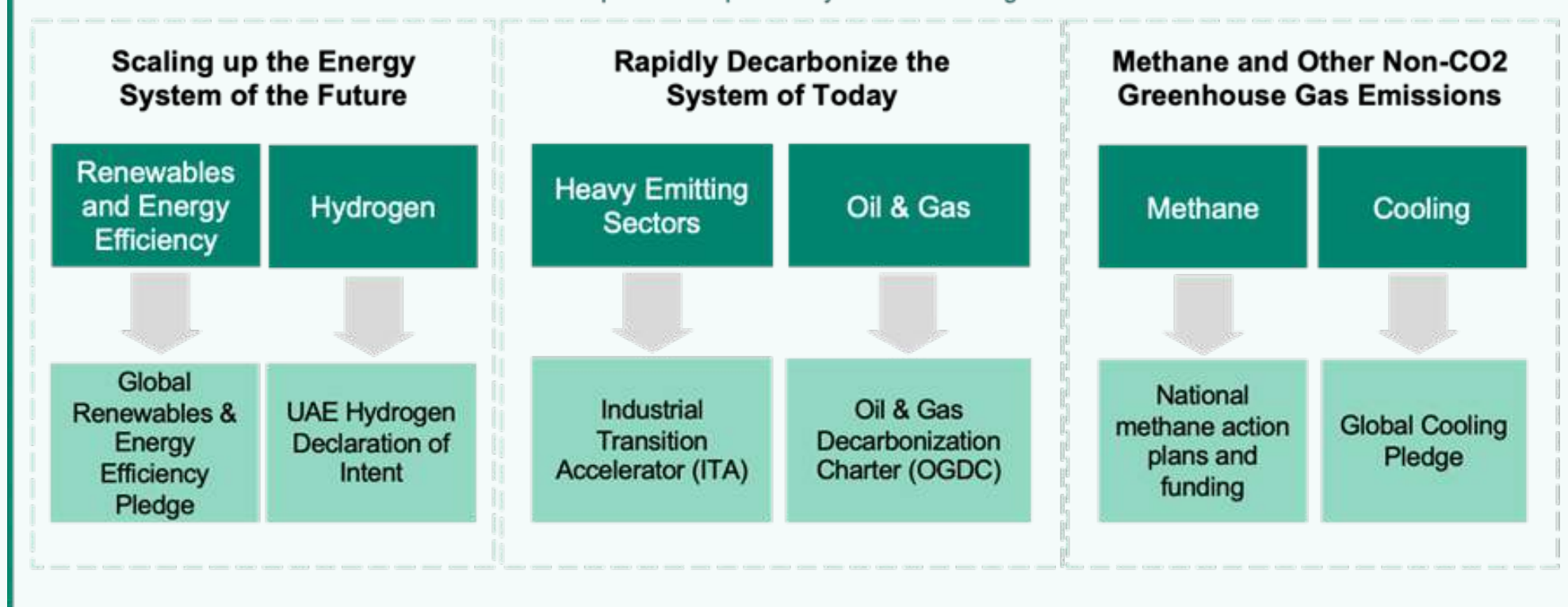
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GLOBAL DECARBONIZATION ACCELERATOR

A comprehensive plan for system-wide change



Al Jaber Unveils Global Decarbonization Accelerator at COP28 World Climate Action Summit

Dr. Sultan Al Jaber, COP28 President, has unveiled the Global Decarbonization Accelerator (GDA) at the COP28 World Climate Action Summit in Dubai, UAE. GDA is a series of landmark initiatives designed to speed up the energy transition and drastically reduce global emissions.

The GDA is focused on three key pillars: rapidly scaling the energy system of tomorrow; decarbonizing the energy system of today; and targeting methane and other non-CO2 greenhouse gases (GHGs). It is a comprehensive plan for system wide change, addressing the demand and supply of energy.

Commentating on the launch of the GDA, Dr. Al Jaber said: “The world does not work without energy. Yet the world will break down if we do not fix the energies we use today, mitigate their emissions at a gigaton scale, and rapidly transition to zero carbon alternatives. That is why the COP28 Presidency has launched the Global Decarbonization Accelerator.”

Ongoing Progress

Today 116 countries have signed the Global Renewables and Energy Efficiency Pledge as of today, agreeing to triple worldwide installed renewable energy generation capacity to at least 11,000 gigawatts and to double the global average annual rate of energy efficiency improvements from around

2 percent to more than 4 percent ever year until 2030.

Through the UAE Hydrogen Declaration of Intent, 27 countries have agreed to endorse a global certification standard and to recognize existing certification schemes, helping to unlock global trade in low-carbon hydrogen.

Decarbonizing the energy system

Under the GDA, 50 companies, representing over 40 percent of global oil production have signed on to the Oil and Gas Decarbonization Charter (OGDC), committing to zero methane emissions and ending routine flaring by 2030, and to total net-zero operations by 2050 at the latest.

Signatories to the Charter agree to target several key actions, including:

- ◀ Investing in the energy system of the future including renewables, low-carbon fuels, and negative emissions technologies.
- ◀ Increasing transparency, including enhancing measurement, monitoring, reporting, and independent verification of GHG emissions and their performance and progress in reducing emissions.
- ◀ Increasing alignment with broader industry best practices to accelerate decarbonization of operations and aspire to implement current best practices by 2030 to collectively reduce emission intensity.
- ◀ Reducing energy poverty and providing secure and affordable energy to support the development of all economies.

Additionally, the GDA includes the launch of the Industrial Transition Accelerator (ITA), which will accelerate decarbonization across key heavy-emitting sectors and encourage policymakers, technical experts, and financial backers to work hand-in-hand with industries to unlock investment and rapidly scale the implementation and delivery of emissions-reduction projects.

Methane and other non-CO2 greenhouse gases

The third pillar of the GDA will address methane and other non-CO2 greenhouse gases through economy-wide methane-emission reduction.

In support of this, more than \$1 billion will be mobilized for methane abatement projects, with additional information to be released on 5 December at the COP28 Energy Thematic Day.

The GDA also covers the Global Cooling Pledge, which targets substantially reducing global cooling emissions by 68 percent by 2050. Such emissions account for seven percent of the global total, a figure expected to triple as more nations adopt air-conditioning. As of today, 52 countries have signed the Pledge.

“The GDA represents an inflection point for addressing various challenges that to date have slowed down the energy transition. Each initiative is underpinned by ongoing accountability frameworks to ensure that the commitments made, are commitments delivered.

“The GDA adds up to more countries and more companies from more sectors than ever before, all aligning with our North Star of 1.5C”, Dr. Al Jaber added.

UAE Commits US\$30 billion to Climate-Focused Investment Vehicle for the Global South

United Arab Emirates has contributed US\$30 billion as part of its commitment to the newly launched catalytic climate vehicle, ALTÉRRRA, that will drive forward international efforts to create a fairer climate finance system, with an emphasis on improving access to funding for the Global South.

With this US\$30 billion commitment, ALTÉRRRA becomes the world's largest private investment vehicle for climate change action and will aim to mobilize US\$250 billion globally by 2030. It aims to steer private markets towards climate investments and focus on transforming emerging markets and developing economies, where traditional investment has been lacking due to the higher perceived risks across those geographies.

Finance for climate action is not currently available, accessible, or affordable enough where it is needed. By 2030, emerging markets and developing economies will require US\$2.4 trillion every year to address climate change. That is why COP28 made fixing climate finance a key pillar of its Action Agenda and has worked to deliver ambitious solutions, including mobilizing private markets at scale.

"ALTÉRRRA provides a transformational solution for attracting private capital. Its scale and structure will create a multiplier effect in climate-focused investment, making it a vehicle like no other. Its launch reflects the COP Presidency's Action Agenda and the UAE's efforts to make climate finance available, accessible and affordable," Dr. Al Jaber, COP28 President said.

Ambassador Majid Al Suwaidi, COP28 Director-General, will serve as ALTÉRRRA's Chief Executive Officer. ALTÉRRRA will have a team of specialist climate investment professionals who bring a strong track record of investing in emerging and developing markets. ALTÉRRRA has been established by Lunate, an independent global investment manager, and is domiciled in the Abu Dhabi Global Market.

Ambassador Al Suwaidi, said: "ALTÉRRRA is a critical element in the UAE's efforts



to create a global green finance ecosystem that stimulates and empowers the growth of a new climate economy. It will build a vibrant climate investment landscape which further catalyzes investment into the Global South."

ALTÉRRRA will have an innovative two-part structure to spur new ideas, incentivize policy and regulatory frameworks, and identify solutions to rapidly deploy capital across the entire value chain of the new climate economy. It has a dedicated investment focus on supporting four key priorities that underpin COP28's Action Agenda, namely: Energy Transition, Industrial Decarbonization, Sustainable Living, and Climate Technologies.

ALTÉRRRA ACCELERATION, a US\$25 billion component of ALTÉRRRA, will steer institutional capital towards climate investments at a scale that has the greatest potential to accelerate the transition to a net-zero and climate-resilient economy. ALTÉRRRA ACCELERATION will serve as an anchor investor and co-investor in climate strategies, allocating capital both directly and through fund partnerships to maximize its global impact.

ALTÉRRRA TRANSFORMATION, a US\$5 billion component of ALTÉRRRA, will provide risk mitigation capital to incentivize investment flows into the Global South, directly addressing the challenges that currently limit climate investment and access to affordable capital.

Inline with COP28's message of full inclusivity, ALTÉRRRA TRANSFORMATION will also create

opportunities to leverage concessional finance to further attract climate investment to Least Developed Countries (LDCs) and Small Island Developing States (SIDS).

The vehicle will add to the UAE's accomplished track record of managing large investment platforms and successfully developing and operating renewable energy projects around the world, leading change as a trusted facilitator at the global crossroads between North, South, East, and West.

ALTÉRRRA, in collaboration with BlackRock, Brookfield, and TPG as inaugural launch partners, has committed US\$6.5 billion to climate-dedicated funds for global investments, including the Global South.

ALTÉRRRA and its partners are committed to the rapid deployment of capital in high-impact projects, particularly in emerging markets. From the vehicle's initial commitment, immediate capital investment has been earmarked for the development of over 6.0 GW of new clean energy capacity in India. This includes the construction of 1,200 MW of wind and solar projects that will begin producing clean power by 2025.

The vehicle and its launch partners are actively exploring a range of additional investment opportunities, including an African development platform with a pipeline of 5GW+ of onshore wind and solar PV energy projects and a rural electrification platform in Latin America that will provide electricity to over 1 million people in remote rural areas and with growth potential.



Investcorp Allocates US\$750 Million as Private Capital in Funding Innovative Solutions on Climate Change

Investcorp, a global manager of alternative investment products, has allocated US\$750 million as private capital to fund innovative projects from companies that provide products, services, and technologies that drive decarbonization and address the impacts of climate change.

Investcorp made the announcement at the Business and Philanthropy Forum at COP28 in Dubai on December 1. The COP28 Presidency welcomed the Investcorp's new US\$750 million investment, which will be integrated into the Climate Solutions Investment Platform, an alternative investment management firm – a coalition between Masdar City, Tencent, and Catalyst that was facilitated by the COP28 Presidency.

The 'Climate Solutions Investment Platform' will provide growth capital to companies that provide products, services, and technologies that drive decarbonization and address the impacts of climate change.

The Innovate for Climate Tech coalition was launched in November 2023. It is facilitated by the COP28 Presidency, anchored by Masdar City, the pioneering sustainable urban community and world-class business and technology hub in Abu Dhabi; Tencent, a world-leading internet and technology company headquartered in China, and Catalyst, a startup technology accelerator based in Masdar City.

"We are delighted to welcome Investcorp to the Innovate for Climate Tech coalition. Their commitment to addressing the impacts of climate through technology aligns with the COP28 commitment towards supporting, promoting, and facilitating the deployment of climate technologies. By working together and building a platform for innovation and investment we can create opportunities for sustainable economic growth and employment, especially in those regions that need it the most," said Adnan Amin, CEO of COP28 UAE.

"Our focus on scaling commercially proven climate solutions provides the most attractive risk-return and delivers the highest impact by helping corporates and consumers achieve decarbonization targets within accelerated timeframes," said Rishi Kapoor, Co-CEO of Investcorp.

Steve Severance, Masdar City's director of growth added, "We are proud to welcome Investcorp as an Investment Partner to the coalition in our effort to advance climate innovation. Masdar City's steadfast commitment to the climate tech ecosystem is demonstrated through strategic partnerships like these. Our firm belief in working together fuels initiatives that accelerate decarbonization and build a more sustainable future for generations to come."

Targeting around \$750 million of capital investment, the platform's focus is on businesses at the "inflection point", where they have matured past many of the risks that face earlier-stage ventures and are poised for rapid expansion.

Some of the latest entities to join the coalition include Siemens, Asian Infrastructure Investment Bank, The Climate Drive powered by the World Business Council for Sustainable Development, Flat6Labs, Gulf Capital, Martin Trust Center for MIT Entrepreneurship, Climate Collective, Startup Nation Central, Rainmaking, Belt and Road Environmental Technology Exchange and Transfer Center, Foresight Group, and Principes Ventures.

In a pivotal development, the coalition's anchor partners globally launched TanLIVE, a platform powered by Tencent. Tailor-made for entrepreneurs, investors, and researchers, TanLIVE has already garnered over 1,000 registered users from key sectors such as ICT, textiles, transportation, construction, energy, nature-based solutions, and packaging.

"The launch of TanLIVE is a testament to Tencent's commitment to leveraging technology as a force for good." Dr. Hao Xu, Vice President of Tencent Sustainable Social Value and Head of Tencent Carbon Neutrality Lab, said, "By providing an online platform for the exchange of ideas among like-minded partners around the world who are committed to working on climate solutions, TanLIVE fosters collaboration and empowers the global community to collectively address climate challenges and drive innovation towards a sustainable future."

Multilateral Development Banks pledges over \$180 billion in new climate finance commitments



Multilateral Development Banks (MDBs) have joined forces together at the COP28 to commit to ambitious climate action and unlock over \$180 billion in climate finance.

At COP28, the Inter-American Development Bank (IDB) made an official announcement that it will triple its direct and mobilized climate finance to \$150 billion over the next decade. The IDB also announced \$5 billion in additional financing for sustainable development projects in the Amazon, as well as a guarantee program to expand lending capacity by \$450 million, and \$1 billion equivalent of incentives for countries to meet climate and nature targets through discounts on loans if targets are met.

World Bank President, Ajay Banga, also committed to increasing their climate finance target to 45 percent by 2025, which would mean \$40 billion in climate finance annually by 2025, of which \$9 billion per year for the next two years is additional. The World Bank also announced \$5 billion to support 100 million people in Africa with clean energy access in the next seven years.

“Something special is happening in Dubai, the order of magnitude is changing. We have said that climate finance needs to be reformed and Multilateral Development Banks (MDBs) are heeding our call. I’m confident that coming out of COP28 climate finance will be a key pillar of their activities for years to come.

We are showing what we can achieve when we are singularly focused on delivery,” said COP28 President Dr. Sultan Al Jaber.

Emerging and Developing Economies will need more than \$2.4 trillion annually in climate finance by 2030.

“MDBs and the IMF will have to play a key role in the implementation of the Global Climate Finance Framework launched by UAE along with key world leaders. I welcome the good progress that has already been delivered towards the implementation of the principles of this framework. MDBs have already delivered a record of nearly \$100 billion in climate finance last year,” said H.E. Mohamed Al Hussaini, UAE Minister of State for Financial Affairs. “During COP28, we have seen some good announcements from MDBs, on more ambitious climate finance targets. These are all good steps, in the right direction. We must now move ahead, with even more momentum and ambition.”

Other commitments by MDBs at COP28 include:

The Asian Development Bank (ADB) announced that it will provide \$10 billion in climate finance for the Philippines between 2024 and 2029

A \$1 billion climate finance commitment by the Islamic Development Bank (IsDB) to support adaptation in conflict-affected countries.

The African Development Bank (AfDB) launched a \$175 million facility for green infrastructure in Africa, as well as a \$1 billion facility to provide insurance against climate

impacts to over 40 million farmers across Africa.

The World Bank announced that it will support 15 countries with national programs to slash methane emissions of up to 10 million tons over the next five to seven years from rice production, livestock, and waste.

The World Bank also announced that it will support the certification of carbon credits for forestry in 16 countries, aiming to generate 24 million credits by next year and 125 million in five years.

IMF, ADB, World Bank, Asian Infrastructure Investment Bank (AIIB), European Investment Bank (EIB) and other international financial institutions, in collaboration with the Government of Bangladesh, announced a country platform for climate and development in Bangladesh. This platform is committed to generating a robust project pipeline integrating a financing strategy to enhance the nation’s ability to mitigate and adapt to the effects of climate change.

EBRD, EIB, and other partners in collaboration with North Macedonia, announced a country platform for just energy transition in North Macedonia to support investments, policy, and technical assistance to accelerate clean energy deployment.

At COP28, the UAE also pledged \$200 million for climate resilience in low-income and vulnerable middle-income countries, through the IMF Resilience and Sustainability Trust.

‘Better, Bigger, and Bolder MDBs’ is a key principle of the COP28 UAE Declaration on a Global Climate Finance Framework launched by the UAE at the COP28 World Climate Action Summit. on Friday 1 December. The Declaration is endorsed by India, France, Barbados, Kenya, Ghana, Germany, the UK, the USA, Senegal, and Colombia. The Declaration calls on international lenders to take ambitious action on climate finance.



COP28
UAE



Patrick Pouyanné, Chairman and CEO of TotalEnergies

TotalEnergies Backs the World Bank's Emission Reduction Trust Fund, Donates \$25 million

TotalEnergies has donated \$25 million over 2024-2030 as part of its support for the Global Flaring and Methane Reduction (GFMR) trust fund, an initiative of the World Bank.

Patrick Pouyanné, Chairman and CEO of TotalEnergies made the announcement during the COP28 Methane summit in Dubai, stating that the company is ready to work with its partners to implement best practices on methane emissions reduction.

The GFMR's mission is unlocking financing mechanisms and technical solutions toward methane emission abatement as well as boost global efforts to end routine gas flaring and reduce methane emissions to the greatest extent possible along the entire oil and gas value chain by providing technical assistance, enabling policy and regulatory reform, strengthening institutions, and mobilizing finance to support action by governments and Oil & Gas operators.

The GFMR will strategically target, fund, and sustain engagements with countries representing the greatest emissions reduction potential.

In his words, Pouyanné stated that TotalEnergies has set ambitious targets to step up its efforts and reduce methane emissions by a further 50% by 2025 – with the ambition to reach this target a year early, in 2024 - and by 80% in 2030, compared to 2020.

"Methane is key in the fight against climate change this decade. At COP27, I called on all Oil & Gas companies, national and international, to join the OGMP 2.0 and work toward zero methane emissions. At COP28, 50 companies representing 40% of global oil production have embarked in the Oil and Gas Decarbonization Charter pledge: the momentum is there and TotalEnergies is proud to be a signatory of this charter. Building on the legacy of our successful support of the World Bank's "Zero Routine flaring" initiative, I am glad that TotalEnergies is renewing and increasing its support with its contribution to this new ambitious GFMR trust fund. TotalEnergies was the first International Company to answer positively to the World Bank call for funding as we are confident that this program will allow concrete actions with real and significant effects on methane emissions reduction", Pouyanné explained.

Methane emissions come from multiple sources: agricultural activities, fossil fuel production and use, decomposing waste, etc. For the Oil & Gas sector, slashing methane

emissions from hydrocarbon production is a priority in its efforts to mitigate global warming.

TotalEnergies is also committed to promoting the United Nations Oil and Gas Methane Partnership (OGMP 2.0) framework with other national and international oil companies. The Company has now held the OGMP Gold standard status for the three years in a row.

TotalEnergies believes that it is the industry's responsibility to reduce methane emissions to near zero by 2030. The Company was a founding member of the World Bank's Global Gas Flaring Reduction (GGFR) partnership and endorsed the "Zero Routine Flaring by 2030" initiative that was launched in 2015.

Speaking further, Demetrios Papathanasiou, Global Director of the World Bank's Energy and Extractives Global Practice said: "Taking quick and decisive action on methane emissions could avoid as much as 0.1 degrees C of warming by mid-century – equivalent to zeroing out the emissions of every car and truck in the world. With GFMR we will support countries with the least capacity and resources to address methane emissions, while also leveraging billions of dollars of private sector finance."

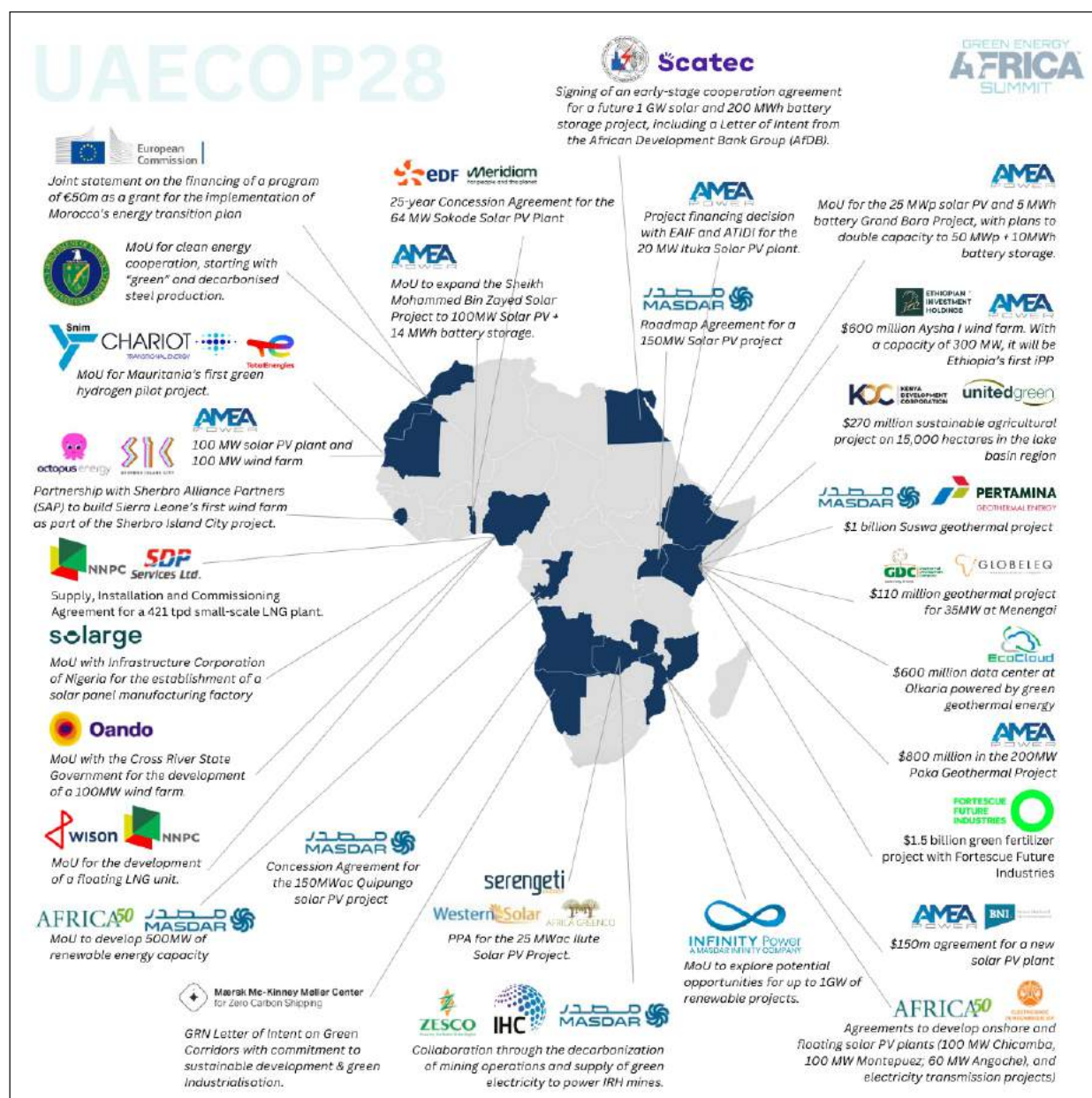
This initiative has been fruitful, having been endorsed by over 100 governments, oil & gas companies and development institutions. Building on the legacy of this successful initiative, the World Bank is stepping up and setting up the new Global Flaring and Methane Reduction (GFMR) trust fund, broadening its focus to include methane venting and leakage in addition to flare gas.

TotalEnergies has responded positively to the call for contributions of this new fund.

TotalEnergies is a global multi-energy company that produces and markets energies: oil and biofuels, natural gas and green gases, renewables and electricity. The company has more than 100,000 employees committed to energy that is ever more affordable, cleaner, more reliable and accessible to as many people as possible.

Active in nearly 130 countries, TotalEnergies puts sustainable development in all its dimensions at the heart of its projects and operations to contribute to the well-being of people.

COP28 delivered clean energy deals for Africa



The Ilute Solar PV Project, with a direct foreign investment of US\$37 million, is expected to contribute to the southern African country's renewable energy targets and energy security. The project will also support GreenCo's mission to increase private sector participation and investment in the African power sector by providing creditworthy offtake and risk mitigation solutions.

The PPA for the Ilute Solar PV Project is one of several deals signed at COP 28.

A 150-megawatt solar plant in southern Angola, to be developed by Masdar, the UAE's flagship renewable energy company, and the Angolan Ministry of Energy and Water. The project will be the largest solar plant in sub-Saharan Africa and will provide clean energy to more than 250,000 households and businesses.

A wind farm on Sherbro Island in Sierra Leone, to be developed by Octopus Energy, a UK-based green energy supplier, and Sherbro Alliance Partners, a social enterprise co-founded by Iris Elba and Siaka Stevens. The wind farm will power up to 300,000 homes and create 250 local jobs.

A 25-megawatt solar PV plus 5- 5-megawatt-hour battery storage project in Djibouti, to be developed by AMEA Power, a Dubai-based renewable energy developer, and the Djiboutian Ministry of Energy and Natural Resources. The project will double its capacity to 50-megawatt plus 10-megawatt-hour battery storage in its second phase.

A 300-megawatt wind energy project in Ethiopia, to be developed by AMEA Power the Ethiopian Electric Power (EEP), and the Ethiopian Ministry of Finance. The project, named Aysha One, will be the largest onshore wind project in the Horn of Africa and the first independent power producer (IPP) project in the country. AMEA Power says it is on track to sign the power purchase agreement and the implementation agreement for the project.

A 20-megawatt solar PV project in the West Nile Region of Uganda, to be developed by AMEA Power and the Emerging Africa Infrastructure Fund (EAIF) and its liquidity supporter, African Trade and Investment Development Insurance (ATIDI). The project, named Ituka, marks AMEA Power's first green field IPP transaction in East Africa. AMEA Power has announced the successful project financing decision with EAIF and ATIDI for the project.

COP28 has delivered clean energy deals for Africa worth billions of dollars, which aims to boost renewable energy development and climate action in various African countries, as well as to foster regional cooperation and integration.

The COP28 climate summit in Dubai provided the ground for the signing of several major agreements on clean energy in Africa.

GreenCo signs PPA for Zambia's first solar project amid several Africa-focused deals. Africa GreenCo Group, a London-based intermediary renewable power buyer and seller, has signed a power purchase agreement with Serengeti Energy and Western Solar Power for the Ilute Solar PV Project in Zambia, one of several deals to boost renewable energy development in Southern Africa.

The 25MWac Ilute Solar PV Project, developed by Western Solar Power, a
Zambian renewable energy developer,
and Serengeti Energy, an African

renewable energy independent power producer owned by a group of development finance institutions, will be the first utility-scale solar project in the country.

It will supply power to the national grid, operated by Zambian National Power Utility, ZESCO Limited.

The PPA, signed at COP 28, follows the successful execution of a system operations agreement signed in October between GreenCo and ZESCO, which allows GreenCo to act as an intermediary buyer and seller of renewable power in Zambia. GreenCo, which is backed by the British and Danish governments, among others, aims to increase private sector participation and investment in the African power sector by providing creditworthy offtake and risk mitigation solutions. It also hopes to foster regional power trade and integration through the Southern African Power Pool (SAPP), while connecting with other power pools and markets in the continent.

Zambia has long relied on hydropower to meet its electricity needs. But droughts and climate change have made this source unreliable and expensive.

A \$150m agreement between AMEA Power and BNI of Mozambique for a new solar PV plant, in addition to a MoU with Infinity Power for up to 1 GW of renewable energy projects in the country, and an agreement between state-utility EDM and Africa50 for the 100 MW Chicamba floating solar project, 100 MW Montepuez solar PV plant, and 60 MW Angoche solar PV plant.

Two deals to increase solar generation capacity in Togo, including an extension of AMEA Power's flagship Sheikh Mohammed Bin Zayed Solar Project to 100-megawatt and 14-megawatt-hours of battery storage, and a 25-year Concession Agreement with Meridiam and EDF for the 64 MW Sokode Solar PV Plant.

Two major agreements with Nigeria to deliver liquefied natural gas (LNG) to the domestic and international markets, were signed by the country's state-owned oil company, NNPC Ltd. The first agreement was signed with Wison Heavy Industry Co. Ltd., a Chinese company, for the development of a floating LNG project in Nigeria that will target the international LNG market.

The second agreement was signed with SDP Services, an independent oil and gas company, for a 421-tonne-per-day LNG

project that will target the domestic LNG market.

The project, located at Ajaokuta in Kogi State, Central Nigeria, aims to ensure the efficient supply of LNG to the Autogas/Compressed Natural Gas (CNG) and industrial/commercial customers nationwide. The project is expected to be operational by December 2024.

Kenya strikes multiple deals for green development

Kenya, another African country with a strong presence at COP 28, has also announced several deals worth a total of 4.48 billion US dollars for green development in the country. The seven separate deals seek to among others reinforce a commitment to develop milestone green energy and fertilizer projects together as well as energy supply chain initiatives. The investors will work together with the government of Kenya to educate and upskill the next generation of workers in a bid to empower local economies. The deals notably include:

A \$1 billion geothermal project at Suswa with the Indonesian government, through Masdar-backed Pertamina Geothermal Energy, to develop a 300-megawatt geothermal power plant that will supply electricity to the national grid and support industrial development.

An \$800 million US dollar geothermal project at Paka with AMEA Power, a Dubai-based renewable energy developer, and Geothermal

Development Co. of Kenya, to develop a 200-megawatt geothermal power plant that will also feed into the national grid and enhance energy security.

A \$600 million data center at Olkaria powered by green geothermal energy in partnership with EcoCloud, a US-based cloud computing company, to provide data storage and processing services to local and international clients.

A \$200 million Clean Energy Supply Chain (CESC) initiative in partnership with the World Bank, the African Development Bank, and the International Finance Corporation, to develop a network of mini-grids, solar home systems, and clean cooking solutions to serve rural and peri-urban communities.

A \$110 million US dollar geothermal project for 35-megawatt with Globeleq, a UK-based power producer, at Menengai, to expand the existing geothermal capacity and diversify the energy mix.

These deals demonstrate the growing momentum and commitment of the public and private sectors to accelerate the energy transition and combat climate change in Africa and beyond. They also show that renewable energy is not only good for the planet, but also good for business.





Nigeria, Germany Sign Agreement to Fast-track Siemens Power Project Implementation

only approximately 3.4 GW reaches consumers on average.

At COP28, President Bola Tinubu and German Chancellor Olaf Scholz, witnessed the signing of an accelerated performance agreement aimed at expediting the implementation of the Presidential Power Initiative (PPI) to improve electricity supply in Nigeria.

The agreement, consummated on the sidelines of the COP28 climate summit, was signed by Mr. Kenny Anuwe, the Managing Director and CEO of FGN Power Company, and Ms. Nadja Haakansson, Siemens Energy's Senior Vice President and Managing Director for Africa.

The PPI, formerly known as the Nigeria Electrification Roadmap Initiative, was the outcome of the visit of former German Chancellor Angela Merkel to Abuja in August, 2018.

An agreement was signed between the governments of Nigeria and Germany in 2019 to improve the power sector.

President Bola Tinubu, since assuming office, has consistently advocated the accelerated realization and expansion of the PPI. To achieve this, the project has been a major focal point in three rounds of bilateral discussions at several meetings between the President and the German Chancellor, in New Delhi, Abuja and Berlin.

The agreement signed today will see to the end-to-end modernization and expansion of Nigeria's electric power transmission grid

with the full supply, delivery and installation of Siemens-manufactured equipment under the time line of 18 to 24 months.

Furthermore, the agreement will ensure project sustainability and maintenance with full technology transfer and training for Nigerian engineers at the Transmission Company of Nigeria (TCN).

Speaking after the signing ceremony in Dubai, Managing Director of the FGN Power Company, Mr. Kenny Anuwe highlighted Siemens Energy's effective delivery of crucial equipment worth over 63 million Euros to the country since the project commenced. This includes 10 units of 132/33KV mobile substations; 3 units of 75/100MVA transformers, and 7 units of 60/66MVA transformers, currently being installed by FGN Power Company at various sites across Nigeria.

The project will also focus on identified load demand centres with a particular emphasis on economic and industrial hubs nationwide; execution of new 330kV and 132/33KV substations in target load centres with economic priority, in addition to thousands of kilometres of overhead transmission lines to connect new substations with existing ones.

About Presidential Power Initiative

Nigeria is setting the course towards economic development and access to energy is the foundation for growth. In Nigeria, the imbalance between power generation, evacuation, dispatch and consumption is a major challenge for the population of around 200 million. While over 13 GW of grid power generation capacity is installed,

On August 31, 2018, in Abuja, the Presidential Power Initiative (formerly the Nigeria Electrification Roadmap) was formed between Nigeria and Germany during a visit by the German Chancellor, Angela Merkel and her business delegation which included Joe Kaeser, Siemens AG CEO. The two nations agreed to explore cooperation in several areas. One such area of cooperation aims to resolve the challenges in the power sector and to expand the capacity for future power needs. Siemens Energy will help to facilitate financing for the project through the German Export Credit Agency (Euler Hermes AG), other ECA's, and other financing Agencies.

The Journey So Far

Siemens Energy was brought on board to assess the situation in Nigeria's power sector, and alongside other stakeholders - from Nigeria's Ministry of Power, Bureau of Public Enterprise ("BPE"), Nigeria Electricity Regulatory Commission ("NERC"), Transmission Company of Nigeria ("TCN") and Electricity Distribution Companies ("DisCos") - decided the immediate priority is to close gaps in the system by enhancing the transmission and distribution segment of the power sector.

Following several engagements and reviews on the technical and commercial considerations for the project, with representatives of the TCN, NERC, BPE, Ministry of Power and all the DisCos, the implementation agreement was signed by the President/CEO of Siemens AG, Joe Kaeser; Head Strategy, Technology & Innovation, Industrial Applications Division at Siemens Energy, Onyeché Tifase; and Director General/CEO of Bureau of Public Enterprises, Alex Okoh in Abuja in the presence of President Muhammadu Buhari on July 22, 2019.



The Green Agenda – NGC Focusing on Sustainability, Climate Education

The National Gas Company of Trinidad and Tobago Limited (NGC) is evolving. NGC and its subsidiaries – together, The NGC Group of Companies – have embarked on a journey to become a more sustainable energy business, through the elaboration of a Green Agenda. This refers to a collection of initiatives, strategies, and investments all aimed at reducing carbon emissions and supporting climate action and adaptation – one of the most pressing sustainability goals.

NGC's Green Agenda includes internal initiatives – targeting a reduction in the carbon footprint of the entire NGC Group of Companies – as well as industry-wide and national projects, which seek to make an impact on a wider scale.

Key to NGC's Green Agenda are the following:

- Sustained focus on building the natural gas industry of Trinidad and Tobago, to support the use of natural gas as a bridge fuel in the global energy transition
- A methane monitoring and mitigation programme to identify and address leaks along NGC's pipeline corridor, using satellite data and infrared visualization
- Collaborative exploration of opportunities to introduce solar power, green hydrogen, and biofuels into the national energy mix, through partnerships with NGC Group subsidiaries and industry stakeholders
- Support of academic research into clean

energy through partnerships with local universities

- Proactive work with vendors to strengthen supply chains and help vendors integrate ESG considerations into their own businesses
- Active lobbies across the energy sector to reduce the carbon footprint of industries, including a Super ESCO project to help improve energy efficiency among light industrial consumers
- An expansion of the Company's 315-hectare reforestation programme to include agroforestry and eco-tourism components
- A focus on supporting sustainable agriculture to build food and nutrition security
- Energy education through a combination of web-based tools, television programs, and school interventions
- Decarbonisation of the transportation sector through CNG and alternative fuels
- Support of sustainable energy business development through a Sustainable Investing Initiative.

Spotlight on Education

Global climate forums such as COP28 underscore the necessity of collaboration and alignment among all stakeholders, if any significant progress is to be made in the climate fight. This not only requires engagement and cooperation at the level of government, but recognition of the supportive role that individual citizens must play.

For this reason, NGC has made public education an axis of its Green Agenda. In the past three years, the company has launched several technology-based products to help build a more

climate-literate and climate-conscious population.

EnergySmarTT

In 2020, NGC launched Trinidad and Tobago's first mobile app around energy efficiency and conservation Energy SmarTT. This app, available for free download by the public, aims to change behaviors and attitudes toward energy consumption – particularly at the domestic level – and increase awareness about the big-picture environmental impact of personal choices. It allows users to gain customized insights into their individual carbon footprint, by tracking the energy expenditure of their homes. The app also helps users calculate the cost and savings of switching to more energy-efficient fixtures and appliances and provides tips for more sustainable energy use.

CariGreen website

Launched in 2021, NGC's CariGreen website (www.carigreen.ngc.co.tt) is a repository for authoritative, updated information on Caribbean clean energy, which aims to make it easier for investors, academics and citizens to conduct research in this area. The ultimate objective was to help expedite investment decisions and clean energy project development in the region.

Following an upgrade in 2022, the website now includes specifications of over 100 wind, solar, geothermal, biomass, hydrogen, and hydropower facilities and projects across Latin America and the Caribbean. The site profiles the capacity and location of these facilities and links visitors to the respective facility websites for further information.

Climate Adaptation and Resilience Portal (CARP)

Despite our best mitigation efforts, the impacts of climate change are already being seen and felt, and societies must prepare for and adapt to these impacts to build their resilience. In this context, NGC launched a new online platform in 2023 called the Climate Adaptation and Resilience Portal (CARP – www.carp.ngc.co.tt), which aims to keep citizens abreast of climate-driven changes impacting Trinidad and Tobago.

CARP uses Geographic Information Services (GIS), artificial intelligence, and predictive modeling to map and chart climate-related risks such as sea level rise, coastal erosion and vulnerability and maritime alerts. The portal also allows users to track temperature and precipitation, tidal information, air quality, deforestation, and even active adverse weather alerts. Other features such as best practices for adaptation from around the

world, meteorological office forecasts, a climate adaptation and resilience news feed, and linkages to other GIS systems showing global trends, make CARP a comprehensive resource for climate information and decision support.

Sustain U

Shortly after the launch of CARP, NGC announced its partnership on an initiative called Sustain U – a training platform that will assist organizations and their employees to build sustainability understanding, learn how to

quantify impact and take tangible action.

It is designed to help accelerate the Caribbean region's pursuit of the 17 United Nations Sustainable Development Goals with content that addresses learning around challenges to building and strengthening regional sustainability.

These include increased risk of climate-related disasters, social issues including crime and poverty, and a pressing need for future-proof institutions to compete more effectively.

The intention is to introduce subscribers to the fundamentals of sustainability across all its dimensions and connect the dots between academic concepts and real-life impacts. Courses are scheduled to become available in 2024.

Looking forward to 2024 and beyond, NGC intends to build on this platform of green initiatives together with its subsidiaries, to expand the reach and impact of its projects, create a more sustainable energy business, and accelerate responsible, future-minded development across the region.

NNPC, Wison Sign MOU to Develop Floating LNG Project in Nigeria



NNPC Trading managing director Sade Lawal said: "We are looking at a time frame of 12 months from execution to the commissioning of the project."

Commenting on the agreements, NNPC gas, power & new energy executive vice-president Olalekan Ogunleye said: "We see both projects as having enormous impact all over the country because they are central to the commercialisation of Nigeria's abundant gas resources and ensuring that our country earns the much-needed foreign revenue from its abundant gas assets."

"It is also consistent with NNPC Management's drive to deliver on Mr. President's gas and power aspirations across the country."

Wison (Nantong) Heavy Industry, an affiliate of Wison Offshore & Marine (WOM), has signed a memorandum of understanding (MoU) with Nigeria National Petroleum Company (NNPCL) Limited for the development of a floating LNG project in Nigeria, targeting local and international market.

The agreements was signed at the UN Climate Change Conference (COP28) held in Dubai, United Arab Emirates.

In a statement obtained by The Energy Republic, Olalekan Ogunleye, EVP Gas, Power & New Energy at NNPC, stated that the company is committed to delivering gas to industries nationwide and accelerating the company's gas commercialization efforts through the floating LNG project.

Xu Kai, representative from Wison, said

the Chinese company will be willing to work together with NNPC to develop the floating LNG project in a time-efficient manner and is looking forward to moving soon to the next stage.

Furthermore, NNPC Trading's subsidiary, NNPC Prime LNG, has signed an agreement with independent oil and gas company SDP Services for the supply, installation and commissioning of a small-scale LNG (SSLNG) project.

With 421 tonnes per day of capacity, the SSLNG project will be located at Ajaokuta in Kogi State, Central Nigeria, and will target the domestic LNG market.

The SSLNG Project will ensure LNG supply to Autogas/Compressed Natural Gas customers and the country's industrial/commercial customers.

It is due to be commissioned by December 2024.

Facts about Nigeria's Natural Gas Resources

◀ Nigeria's proven gas reserves as of January 1st, 2022 are 209.5 Trillion Cubic Feet (TCF), according to the Nigerian Midstream and Downstream Petroleum Regulatory Authority (NMDPRA).

◀ Nigeria has the largest gas reserves in Africa and the 9th largest proven natural gas reserves in the world.

◀ The Nigerian Government has declared 2021-2030 as the 'Decade of Gas' with the objectives to make Nigeria a gas-powered economy. Gas is going to play a big role in achieving this target.

◀ There are huge investment opportunities for investors in the Nigerian gas space including the upstream area for exploration of frontier basins, development of upstream gas fields and the financing of greenfield/brownfield assets.

◀ In Gas & Power infrastructure development, there are opportunities in expanding the country's gas pipeline networks, development of gas-based industries as well as integrated power plants.



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GLOBAL ENERGY STORIES



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33 Italy to Host Fifth International Industrial Valve Summit in May 2024

Offshore Wind Market Set for Growth, Project Development in 2024

Despite a volatile year for offshore wind development in 2023, where interest rate rises, and commodity price increases led to the abandonment of auctions where bid prices were deemed too low for returns, and the cancellation of initial offtake agreements, a record number of offshore wind development zones will be allocated globally in 2024 -2025, according to Youwind Renewables forecast.

According to the Youwind report, European offshore wind leasing rounds are set to award over 80GW in new projects by 2029.

"2023 was a tumultuous year for global offshore wind, but with Government targets for Net Zero requiring significantly increased volumes of offshore wind generating capacity to become operational between 2030 – 2050, auctions held in the next two years are critical to the next 20 years of development," said Anna Rivera, Chief Executive Officer, Youwind.

"With so many different conditions to consider before progressing projects into the full development cycle, however - not only by domestic country tariff and policy but also wind resource and site location – developers and investors need to rapidly assess project locations to swiftly take a final investment decision."

"With the possibility that some of these projects will run into permitting and financing challenges later in the development cycle, there is a real imperative to ensure that sites are screened not only as efficiently



as possible at this stage, but also at a level that ensures critical future development questions are covered as early as possible."

"We know that offshore wind has the potential to significantly drive the decarbonization of global power supplies, but if we're to support the industry in overcoming its current challenges, then we need to give developers and investors the tools to expedite the decision-making on which projects to take forward."

To support the growth in the offshore wind market, Youwind said offshore wind developers and investors need to significantly increase the pace of analysis for market and site attractiveness, resource availability, and project selection.

Youwind also suggested that developers and their investor partners should adopt a reliable means of screening early-stage projects to ensure optimal decision-making in the deployment of capital as well as realize project timelines.

Youwind's technology provides the offshore wind industry with a route to reducing the overall time taken for project site screening by up to 80% - significantly accelerating the project development cycle. Its technological solution enables developers to rapidly

assess project location, wind resource, project layout – including wake losses - and the best installation sequence.

To date, Youwind has been used to analyze over 1000 offshore wind project sites, screening development zones amounting to more than 250TW of potential installed capacity worldwide.

Youwind is the web-based solution for accelerating offshore wind development.

Youwind continues to innovate to address current and future offshore wind development challenges, ensuring a consistently evolving solution for project modelling, optimization and yield performance.

Youwind, built by engineers with over 15 years of first-hand experience in developing offshore wind projects, integrates engineering and cost data to efficiently model key technical and financial indicators and assess the viability of projects. The entirely web-based solution offers distinct tools to analyze and optimize each proposed project design, helping to inform the financing and development of projects that meet the financial expectations of investors.

These tools are backed up by a project development database, encompassing everything from wind resource and power curves to GIS layers, locational data on neighboring projects, and all offshore wind equipment and components.

As offshore wind projects continue to scale in size, technology, and global territory, Youwind offers a trusted single solution for taking projects rapidly to final investment decisions.



Tank Storage sector to network and do business at StocExpo 2024

StocExpo 2024 will feature a jam-packed conference, a Euro Tank Terminal tour, late night networking, the Global Tank Storage Awards, an iTanks pitch contest, and countless more networking opportunities.

Thousands of tank storage industry VIPs and thought-leaders are already registered for StocExpo 2024, including Advorio, Poliport, BP, Saudi Aramco, Exolum, Kinder Morgan, Odfjell, Shell, Stolthaven, Varo Energy, Vopak, Evos and many more.

Just before the show starts, on Monday 11 March, delegates will have the opportunity to learn and network simultaneously as they tour the Port of Rotterdam and VTTI's Euro Tank Terminal. When the exhibition opens on 12 March, delegates will be able to relax, meet people and do business in a number of dedicated areas on the show floor.

On the evening of day one, StocExpo will host late-night networking between 6-8pm allowing engineers and maintenance managers to visit the show after work.

The incredibly popular iTanks Pitchlunch will return for its second year on day two of the event - companies will be invited to pitch their proposition and technologies to members of iTanks, the port-related knowledge and innovation platform.

Also, the much-anticipated Global Tank Storage Awards will return for its seventh

year to celebrate terminal innovations and achievements, as well as the work of successful individuals making a difference to the industry.

Margaret Dunn, Portfolio Director at StocExpo, says, "The excitement for StocExpo is already palpable in tank storage and future fuels circles, and it's building. What makes the event so central for the industry is the quality of the people who exhibit and attend, it's the perfect place to build networks and do business. It's our mission to make that as easy as possible, so there'll be lots of opportunities to rub shoulders with customers, peers, supply chain partners and prospects at StocExpo 2024!"

StocExpo's conference produced by FETSA and Tank Storage Magazine is packed with insight and knowledge from the global tank storage and future fuels industry's best and brightest.

The conference will open on day one with an address from FETSA president, Bruno Hayem, and immediately kick start with a session from Lucia van Geuns, Strategic Energy Advisor at Hague Centre for Strategic Studies, on European Tank Storage and Changing Geopolitical Landscapes. Then, Team Leader Security of Oil Supply at European Commission, Antony LaGrange, will deliver a talk on the Energy Trilemma: Digitalisation, Security of Supply, and Inflation.

After lunch, the sessions will continue with insight from Tamme Mekkes, Business Development Director at Koole Terminals, on How CCUS can Fit with Tank Storage. Afterwards, Matt Wilson, Head of New Energy Markets at Navigator Terminals, will talk on Connecting the Clusters in the UK.

Towards the end of day one Jonathan Feys, CCO of Liquid Bulk Terminals at Ghent Transport and Storage, will discuss the Fuels of the Future with Poten and Partners' Senior Consultant Aline Ingram and Aivars Starikovs, Latvian Hydrogen Association and Hydrogen Europe.

Day two will start with a session on The Value of ESG Reporting at the Terminal hosted by David Tassadogh, Infrastructure Assessment at GRESB. After which he'll be joined by Mathias Potvin, Terminal Manager at LBC Tank Terminals Rotterdam, to discuss How Terminals can Reach Net Zero. Before a short networking break, Frans Jan Hellenthal, Commercial Manager at ETT will be diving into the topic of The Terminal of the Future.

Martin Reuvers, Senior Engineer at Vopak, will take centre stage in the afternoon to consider Revisions to PGS 12 before answering audience questions alongside George Dodoros, Business Development Director at Proton Ventures.

To close out the conference OCI Global's Director, Bowen Xu, will be joined by Jay Leduc, Head of HSE and Sustainability at Hartree Partners and Jannes Elfgen from the Port of Hamburg to discuss the Energy Transition from a global perspective.



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...As TotalEnergies Boss Lauds NNPC Ltd on Reforms

NNPCL, TotalEnergies Sign MOU on Adoption of Methane Detection Technology

The Nigerian National Petroleum Company Ltd. (NNPC Ltd.) has signed a Memorandum of Understanding (MoU) with TotalEnergies for the adoption and deployment of a methane detection technology known as Airborne Ultralight Spectrometer for Environmental Application (AUSEA) in all its upstream operations.

With the agreement, which is a direct benefit from the Company's participation at the recently concluded United Nations Climate Change Conference (also known as COP28) in Dubai, UAE, NNPC Ltd. will be able to deploy the TotalEnergies AUSEA technology on its upstream operations sites to ascertain the level of methane emissions from them, with a view to working out emission curtailment measures to help in combating global warming and climate change.

The MoU was signed by NNPC Ltd.'s Executive Vice President, Upstream, Oritsemeyiwa Eyesan, and Managing Director and Country Chair, TotalEnergies EP Nigeria, Matthieu Bouyer, on behalf of their respective companies, under the watch of the Group Chief Executive

Officer (GCEO) NNPC Ltd., Mele Kyari, and Chairman and Chief Executive Officer of TotalEnergies, Patrick Pouyanné.

Speaking on the collaboration at the MoU signing event, the GCEO, NNPC Ltd, Mele Kyari, described TotalEnergies as a great and reliable partner over the years with whom the Company was looking forward to exploring greater opportunities in the nation's energy sector.

On his part, the Chairman and Chief Executive Officer of TotalEnergies, Patrick Pouyanné, said his company was offering the technology to NNPC Ltd. in keeping with its commitment to promote responsible production of hydrocarbons.

He applauded NNPC Ltd. for its successful transition into a limited liability company,

stressing that he could see and feel the energy that the reforms have brought about, not only in the company but also in the sector.

Putting the deal in proper perspective, the NNPC Ltd.'s Executive Vice President, Upstream, Oritsemeyiwa Eyesan, said the pilot phase of the TotalEnergies AUSEA deployment would be on NNPC Ltd.'s owned operations, adding that the deal would enable the company to deploy methane abatement measures.

Other benefits of the TotalEnergies AUSEA technology include identification of unaccounted emission sources, establishment of a basis for querying and improving current emission reporting processes, provision of data to review operational system and implement corrective actions, and estimation of flare combustion efficiency.

QatarEnergy Awards \$6 Billion EPC Contracts, Signs SPA for LNG Supply to Bangladesh

QatarEnergy has awarded four Engineering, Procurement, Construction, and Installation (EPCI) contract packages to develop the next phase of the offshore Al-Shaheen field (Qatar's largest oil field) to increase production up to 100,000 barrels of oil per day (BPD).

The award is part of Project Ru'ya (vision in Arabic), which is the third phase of Al-Shaheen's development since North Oil Company, a joint venture between QatarEnergy (70%) and TotalEnergies (30%), took over the field's operation in July 2017.

Project Ru'ya, which will develop more than 550 million barrels of oil, will be executed over a period of 5 years with the first oil expected in 2027. The project includes the drilling of more than 200 wells and the installation of a new centralized process complex, nine remote wellhead platforms, and associated pipelines.

The four EPC packages, with varying scopes of work, valued in total at more than six billion dollars, comprise:

- (i) the EPC package for 9 wellhead platforms valued at about \$2.1 billion and awarded to a consortium of McDermott Middle East Inc. and Qingdao McDermott Wuchuan Offshore Engineering Co.;
- (ii) the EPC package for a Central Processing Platform valued at about \$1.9 billion and awarded to a consortium of McDermott Middle East Inc. and Hyundai Heavy Industries;
- (iii) the EPC package for a riser platform valued at about \$1.3 billion and awarded to Larsen & Toubro Limited; and
- (iv) the EPC package for subsea pipelines and cables valued at about \$900 million and awarded to China Offshore Oil Engineering Co (COOEC).

His Excellency Mr. Saad Sherida Al-Kaabi, the Minister of State for Energy Affairs, the President and CEO of QatarEnergy, welcomed



the award of the contract packages as an important milestone in the development of the State of Qatar's largest oil field. His Excellency said: "By awarding these contracts, we are taking an important step towards realizing the full potential of Al-Shaheen field, which produces around half of Qatar's crude oil today."

His Excellency Minister Al-Kaabi added: "I would like to thank North Oil Company and our longtime strategic partner TotalEnergies for their great efforts towards unlocking the true potential of Qatar's hydrocarbon resources and maximizing value from Al-Shaheen field through the implementation of world-class development and operational excellence programs."

The Al-Shaheen field is located 80 kilometers offshore Qatar and is among the world's largest in terms of "oil in place". The field commenced commercial production in 1994 and underwent significant development to reach an oil production rate of 300,000 bpd in 2007.

Furthermore, QatarEnergy and Excelsate Energy (Excelsate) has signed a long-term LNG sale and purchase agreement (SPA) for the supply of LNG from Qatar to Bangladesh.

Pursuant to the SPA, Excelsate will purchase up to one million tons per annum (MTPA) of LNG from QatarEnergy to be delivered to floating storage and regasification units in

Bangladesh for 15 years starting in January 2026.

Excelsate will purchase 0.85 MTPA of LNG in 2026 and 2027, and one MTPA from 2028 to 2040.

Commenting on this occasion, His Excellency Mr. Saad Sherida Al-Kaabi, the Minister of State for Energy Affairs, the President and CEO of QatarEnergy, said: "We are pleased to sign this agreement with Excelsate for the supply of up to one million tons per annum of LNG to Bangladesh. This new agreement will further strengthen our relationship with Excelsate while also supporting the energy requirements of the People's Republic of Bangladesh and its stride towards greater economic development."

Qatar is the largest LNG supplier to Bangladesh and aspires to continue being the LNG supplier of choice for partners in the South Asia LNG markets.





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بقيمة 6 مليارات دولار لمشروع
زيادة إنتاج النفط من حقل الشاهين
بحوالي 100 ألف برميل يومياً

**QatarEnergy announces the
award of \$6 billion EPC
contracts to increase oil
production by about 100,000
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As “Your Energy Transition Partner”, QatarEnergy is committed to building a better and brighter future by helping meet today’s energy needs, while safeguarding our environment and natural resources for generations to come, bound by the highest standards of sustainable human, socio-economic, and environmental development.



Germany set to host World Electrolysis Congress in March 2024

World Hydrogen Leaders are delighted to announce the return of the World Electrolysis Congress for its third edition, taking place from March 4th to 7th in Crowne Plaza Düsseldorf–Neuss, Germany.

Building on the remarkable success of the previous two editions of the World Electrolysis Congress, World Hydrogen Leaders are delighted to announce the return of the industry's

premier event exclusively dedicated to electrolyser technology for clean hydrogen production.

The 3rd World Electrolysis Congress will span four days and host 100 specialised speakers across four streams. It will delve deep into the most relevant topics in renewable hydrogen, including policy, finance, electrolyser efficiency, large-scale projects, and offshore projects.

The momentum in the clean hydrogen sector is undeniable, with over 1000 projects already on the horizon. While the industry is making

incredible strides, there's still much work ahead to turn these ambitious plans into operational realities. Join over 600 experts in Germany from 4 – 7 March 2024 at the Crowne Plaza Düsseldorf–Neuss, Germany to discover the future of electrolysis technology and create collaborations with like-minded individuals through various enhanced networking opportunities.

Register today with The Energy Republic's exclusive 20% discount code.

Simply use code WEC24_TheEnergyRepublic20 during your registration - <https://www.worldelectrolysiscongress.com>

Italy to Host Fifth International Industrial Valve Summit in May 2024

Italy is set to host the fifth edition of Industrial Valve Summit (IVS), the most important international event dedicated to industrial valve technologies and flow control solutions, promoted by Confindustria Bergamo and Promoberg, taking place in Bergamo on 15 and 16 May 2024.

The fifth edition of the event takes place two years after the previous one and continues the path of growth that has marked it since the first edition. To coincide with IVS 2024, the organisers will enrich the offer with side events and moments of interaction, creating a true 'valve week'.

The curtain will be raised on the morning of 14 May with the opening of the Summit and, in the afternoon, with the early opening of the pavilions reserved for exhibitors only, to offer a valuable opportunity for networking between the protagonists of the supply chain participating in IVS. The event will get into full swing on 14 and 15 May and the halls will open their doors to the international valve public, with hundreds of exhibitors and thousands of specialist operators.

At the same time, the extensive calendar of conferences, round tables, workshops, and laboratories that form the IVS scientific programme will continue, proving over the years to be a space where change can be interpreted and the latest technological innovations can be explored, identifying and analysing the challenges the sector is facing.



ORGANIZERS



PROMOBERG

5TH international exhibition
and conference on valve
and flow control technologies

MAY 15TH > 16TH 2024

BERGAMO EXHIBITION CENTRE - BERGAMO - ITALY

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On Friday 17 May, following the two-day exhibition, there will be a further opportunity for foreign delegations attending the fair to meet the players in the extended oil and gas supply chain. As well as being a tool for enhancing the value of 'Made in Italy', the Industrial Valve Summit proves to be a key showcase for skills, resources, and know-how, while promoting the excellence of the national industrial production and the local entrepreneurial fabric.

In view of IVS 2024, international participation is expected to grow, thanks to the partnerships with AVR ANIMA (the industry association representing Italian companies in the valves and fittings sector), ICE (the Agency for foreign promotion and internationalisation of Italian companies), Confindustria Assafrica & Mediterraneo (the international representation of Confindustria supporting Italian companies in the process of growth in Africa and the Middle East) and UNIDO ITPO Italy (the Italian Office for Technology Promotion and Investment of the

United Nations Industrial Development Organisation).

Synergies will bring to the fair a series of international delegations consisting in institutional representatives and entrepreneurs, who will have the opportunity

to interface with the operators of the Oil & Gas supply chain, offering moments of discussion and matchmaking activities. Continuing the theme of international attendance, the IVS organisers confirm the presence of a selection of top-ranking guests among international decision-makers, operators, and speakers.

IVS attracts over 12,000 visitors from more than 60 countries, and 300 exhibiting companies from Italy, Germany, Great Britain, the United States of America, France, South Korea, Spain, the Netherlands, Belgium, South Africa, Turkey, and the Czech Republic.

IVS has established itself as an essential showcase for the entire global supply chain connected to industrial valves and flow control.

ORGANIZERS



CONFINDUSTRIA BERGAMO

PROMOBERG



5TH INTERNATIONAL EXHIBITION
AND CONFERENCE ON VALVE
AND FLOW CONTROL TECHNOLOGIES

Leading the global market flow

Bergamo, Italy

Attending IVS - Industrial Valve Summit gives you the opportunity to share knowledge, experience and ideas with other leading industry professionals and organisations.

IVS - INDUSTRIAL VALVE SUMMIT IS THE:

- * Forum for the industrial valves industry
- * Innovations' platform and technology summit
- * Trend-setting meeting point
- * Take-off for investment decisions
- * International network of experts and specialists



Organising Secretariat

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industrialvalvesummit.com

**May
15TH**

**May
16TH**

2024

WEC unveils Programme for 26th World Energy Congress in Rotterdam, Event to mark major milestone in global Energy Sector

With 100 days until the 26th World Energy Congress, the World Energy Council is pleased to release the event programme, designed to engage key leaders from across the energy ecosystem and drive action.

To be held in Rotterdam on 22-25 April 2024, the World Energy Congress is set to mark the first major milestone of the global energy ecosystem since the historic COP28, continuing to demonstrate the power of convening and the urgency of action.

Centred around the theme Redesigning Energy for People and Planet, the 2024 programme will explore the breadth and depth of the rapidly evolving energy sector – from shifting technologies and the question of financing to the impact of geopolitics; levers accelerating the energy transition; and the changing needs of energy users.

The programme will revolve around five core topics central to progressing a clean and inclusive energy transition:

- ◀ Navigating new energy maps: Bridging the new and emerging realities of global energy transitions
- ◀ Refuelling the future: Leveraging a greater mix of energy sources, solutions, and services
- ◀ Humanising energy: Engaging people and communities in making global energy transitions happen
- ◀ Pathfinding with the world energy trilemma: Connecting energy security, affordability and sustainability
- ◀ Closing the gaps: Enabling faster, fairer and more far-reaching energy transitions

Leading the programme will be a truly diverse group of experts from across industry, government and civil society, with over 260 confirmed speakers, 200+ being C-suite. In addition to the first tranche announced in April 2023, additional speakers include:

◀ Mary Robinson, former President of Ireland; former UN High Commissioner for Human Rights; Chair of The Elders
Chantal Zeegers, Vice Mayor for Climate, Building and Housing, City of Rotterdam, The Netherlands.



◀ His Royal Highness Prince Abdulaziz bin Salman Al-Saud, Minister of Energy, Government of Saudi Arabia, Chairman of the Saudi Arabian Member Committee, World Energy Council

◀ Jim Skea, Chair, Intergovernmental Panel of Climate Change (IPCC)

◀ Francisco Gomes Neto, President and CEO, Embraer

◀ Sharbini Suhaili, Group Chief Executive Officer, Sarawak Energy Berhad

◀ Melina Laboucan-Massim, Founder; Co-founder, Sacred Earth Solar, Indigenous Climate Action

◀ Danielle Merfeld, EVP and Global Chief Technology Officer, Qcells

The World Energy Congress media partners will bring the full programme of experts and discussions to life. In addition to those previously announced, the World Energy Council is pleased to have confirmed a number of new media partnerships with various global top tier and industry trade publications, including the Financial Times, Denki Shimbun, The National, Energy Storage Report, Eco-Business and Power Technology. The full list of media partners can be found on the World Energy Congress website.

Angela Wilkinson, Secretary General, World Energy Council, said: “The depth and breadth of our programme for the 26th World Energy Congress speaks to the increasing diversity in energy systems, the connected challenges in managing orderly energy transitions, and the

opportunities for collaborative innovation by involving more people and diverse communities.

“Over the last 100 years, our enduring mission and world energy community have coevolved to promote a practical, forward looking impact agenda on energy for people and planet. Our visionary leadership and broad stakeholder networks from across the world will take stock of actions following an historic climate-centric COP28 and showcase ground-breaking advances in making faster, fairer and more far reaching energy transitions happen.

“The World Energy Congress in Rotterdam is a significant moment for energy transition leaders to show up and scale together.”

The 26th World Energy Congress will bring together 18,000 attendees, including 7,000 delegates, 70 ministers, C-suite executives, NGOs, experts and academia, entrepreneurs and young energy leaders to reflect on the role of connected energy societies in driving forward global energy transitions.

Registration for the Congress is now open, with a range of options for members and delegates.





Prof. Dr. Stefan Liebing, Founding Member
RTA, CEO of Conjuncta GmbH

RETHINKING AFRICA INITIATIVE:

REINVENTING NEW BUSINESS PARTNERSHIPS, PROJECT DEVELOPMENT

*Rethinking Africa Foundation is based in Berlin, established according to German law (**Gesellschaft mit beschränkter Haftung/GmbH**) working to enable direct economic contacts between German and African companies. Rethinking Africa is committed to directly linking the networks of industrial partners, investors, and entrepreneurs in Africa and Europe to promote new business models and partnerships. The Founding members of Rethinking Africa are a group of German stakeholders specialized in Africa, who are also members of the German export industry, with extensive experience in African trade and investment.*



By Ndubuisi Micheal Obineme

...RETHINKING AFRICA FOUNDING MEMBERS at the press conference during the launching of the initiative

Africa, a continent blessed with abundant natural resources presents greater opportunities for development, economic diversification, and international relations. With about 54 countries, Africa is ranked among the world's largest and most populous continent due to its population growth. African potential presents myriad opportunities for robust, inclusive growth that harnesses its rich natural resources such as renewable energies, oil and gas resources, and human potential to increase prosperity, create job opportunities as well as project development not only for Africans including foreign companies, investors, and entrepreneurs.

For many decades, Africa has been a continent of foreign aid. Aid to African countries has increased significantly in recent years but is far from meeting needs. Generally, Aid to African countries totaled US\$53.5 billion in 2022. In 2022, 15.3% of aid went to low-income countries, 32.5% to lower-middle income, 9.2% to upper-middle income, and 0.1% to high-income countries, according to an ODA report.

African relations with foreign countries have been the aid relationship, which is now perceived that foreign aid in Africa hasn't developed the Continent, but it encourages corrupt practices, ineffective governments, hinders economic and investment growth, stalls democracy, and unstable economic policies.

Some experts have said that foreign aid has decreased long-term economic growth in Africa by fuelling systemic corruption, in which powerful aid recipients funneled foreign funds into their pockets instead of public investment for economic growth, causing higher inflation while hindering African countries' international competitiveness in exporting.

For Africa to compete globally, some prominent experts have said

Africa should stop pushing for aid because it is not in the interest of everyday Africans.

They said trade barriers should be dismantled and provide the necessary support for Africa to compete as it can, noting that one good business contract is worth more to Africa than foreign aid, and one new factory, as well as project development, has more value than a hundred million dollars of aid. They called for a restart and new approach in terms of international relations between Africa and other foreign countries. Africa will have to solve its problems.

To bridge the gap, a group of German stakeholders and investors specialized in African trade and investment has officially launched 'Rethinking Africa Foundation GmbH (RTA)', a new initiative to drive business development and partnerships

between German and African companies as well as attract investors for project development that will create job opportunities and contribute to the economic prosperity of Africa.

In a statement made known to The Energy Republic,

Rethinking Africa is a German economic initiative with a European approach that advocates a change of perspective when looking at Africa.

When it comes to investment relations, RTA advocates for a more pragmatic Africa policy. Rethinking Africa wants to move away from the traditional development aid given to the African continent towards sustainable project development to create jobs and sustainable investments.

The Founding members of Rethinking Africa are a group of German stakeholders specialized in Africa, who are also members of the German export industry, with extensive experience in African trade and investment. The founding members are Prof. Dr. Stefan Liebing, former CEO of Afrika-Verein der deutschen Wirtschaft, as well as the former president of the German Association for Wholesale and Retail (BGA), Dr. Holger Bingmann and the former parliamentary state secretary, Norbert Barthel.



At Rethinking Africa Foundation, Dr. Stefan Liebing is Chair of the board (COB), and is also the CEO of Conjuncta GmbH, while Former State Secretary BMZ Norbert Barthle, is Deputy Chairman of the board and Dr. Holger Bingmann, CEO of Rethinking Africa Foundation GmbH.

Alexander & Partner is also the founding member of Rethinking Africa Foundation GmbH. Alexander, an international law firm operating in Europe, the Middle East, and Africa, with several certified lawyers for International Business Law specialized in advising German and European clients on their business activities in the Near and Middle East, North Africa, and Sub-Saharan Africa, as well as clients from the MENA-Region and Sub-Saharan Africa on their investments in Germany and Europe. In addition, Alexander & Partner has a team of three German-French lawyers.

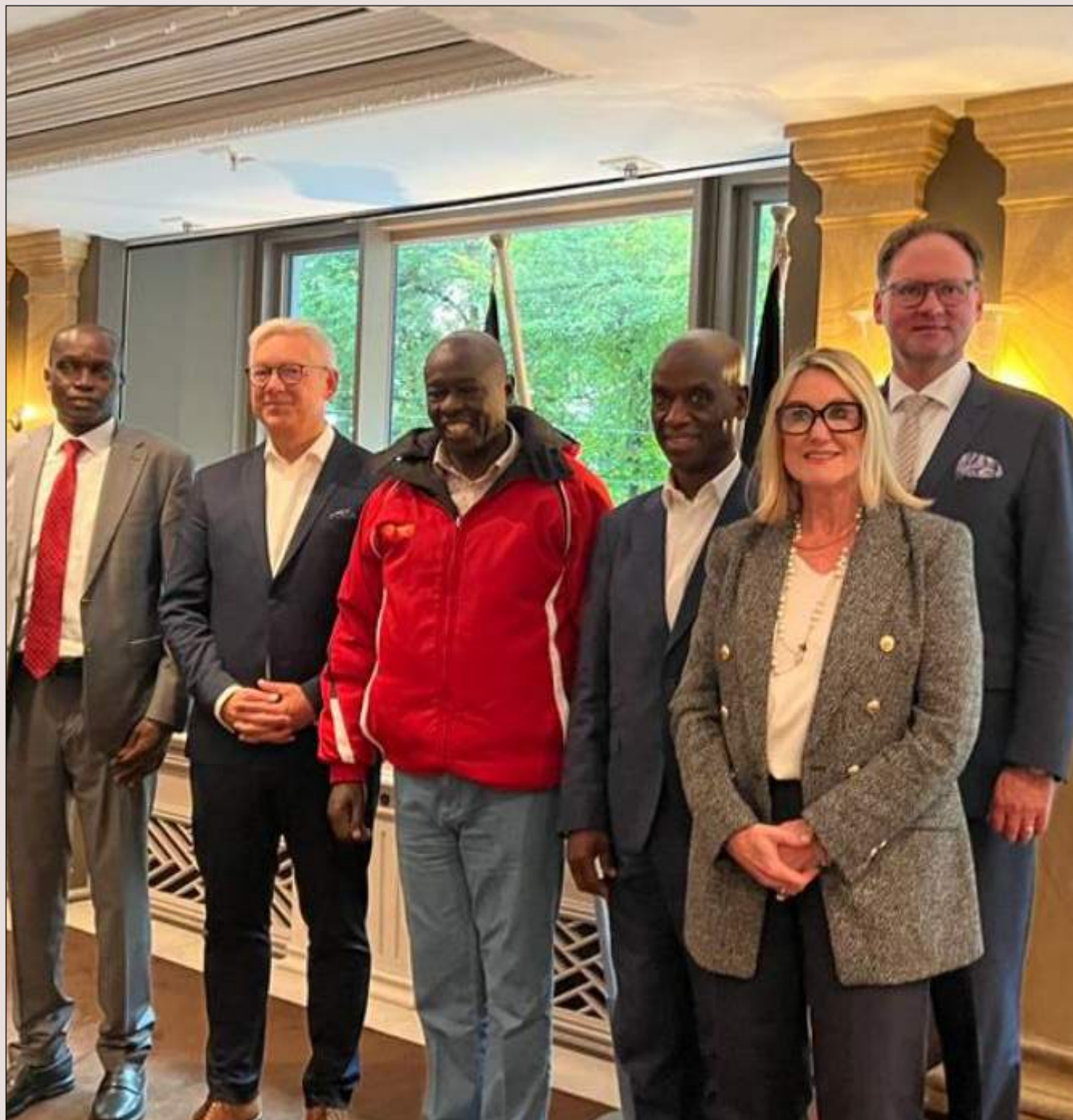
Liebing, Chair of the board at Rethinking Africa has a remarkable level of engagement in Africa, having visited the continent around 300 times and has been traveling around the 54 countries in Africa. He is very much engaged with Africa in terms of economic policy, and foreign trade and has completed and also working on some energy projects in Africa.

He is also an honorary professor for business and technology at the Hanseatic Institute of Technology and Applied Sciences in Douala, Cameroon, and Honorary Consul for the Republic of Cameroon to Germany. He is also one of the editors of a book titled "Practical Handbook Business in Africa".

Speaking about the current relationship between Germany and Africa, Liebing said that there have been a lot of misunderstandings and different expectations from both sides, noting that Africa doesn't necessarily need foreign aid for its development.

He made this known while speaking in a HANSA podcast interview conducted by Janne Silden, which was focused on his engagement and business dealings with its African partners.

Liebing said,



● ● ● —————
"Africa wants a partnership of equal opportunities in doing business together."
 ————— ● ● ●

As part of its extensive engagement in African countries, Liebing stated that African government and business leaders are very interested in business development and investments in projects to create job opportunities as it is the best way of supporting the development of the continent. He said,

● ● ● —————
"Africa needs capital and technology now so that this development can be accelerated."
 ————— ● ● ●

They are looking for jobs and not traditional foreign aid. With this, I'm not sure this is understood on the German side.

"Currently, we are talking about a value-based foreign policy of development. They're talking about feminist development policy, as they call it in Berlin. And it doesn't work well on the African side.

"Africa is self-conscious and they don't need to receive this type of lesson from European leaders. They want to define their path themselves.

"If you look at members of African governments, they have worked internationally and also studied in some of the world's leading universities in the United States, UK, or whatever. So there is no need for German politicians to teach some of these high-class, highly qualified internationally experienced leaders.

● ● ● —————
"We need to help create jobs in Africa, not teach Africans about feminist policy or European 'values'. We need investment, not discussions. We need to talk about projects, not potential."
 ————— ● ● ●

Political and development institutions need to provide the support needed for these projects to be implemented. Nothing else," Liebing explained.

Africa's natural resources such as energy, oil, and gas are an avenue for development, and prosperity as well as boost business partnerships and project development with other countries.

In his words, Liebing said



"At Rethinking Africa initiative, we will discuss numerous investment projects with African delegations, ministers and heads of state and government."



And only oriented towards how jobs can be created locally. I am curious to see what we can achieve as a private entrepreneurial initiative between Africa and Germany".

Rethinking Africa is coming on a different approach focused on project development, he noted.

"We have put together a group of former politicians, business leaders, journalists, professors. With all of our networks, we will approach it the other way around.

"Firstly, we will speak to African leaders to provide specific investment projects. Then, we will try to select those partners on the German side that are needed to be involved to make the project happen.

"For instance, the minister of economics affairs of Cameroon came to Hamburg recently. We discussed the expansion of Douala port which is the main logistics port for all of central Africa.

"With such a project opportunity from Cameroon, we need something to happen there rather than inventing something that could happen in Cameroon.

"We invited shipping, engineering, construction companies, and people that are going to use the port including the German Export Credit Guarantees Agency.



"We brought them to the table and told them to get this project done.

"At the end of the meeting, we signed an MOU to kick start the project," he added.

In terms of project development,



Rethinking Africa will work closely with its African partners to identify and develop concrete projects with the help of relevant companies and financial institutions.



Countries like China, India, Turkey, France, and Japan have discovered Africa as an important and attractive trade partner.

However, Germany's vision of Africa is still marked to a large degree by old stereotypes. A gradual change only has happened over the last few years when it comes to the energy sector, especially in green hydrogen development.

The new formation of Rethinking Africa is committed to bridge the gap by directly linking the networks of industrial partners, investors, and entrepreneurs in Africa and Europe to promote new business models and partnerships. Its objective is to reinvent new business partnerships and project development in Africa that aligns with German companies' and investors' business models while creating much-needed job opportunities and ROI for both parties.

On the other hand, Liebing's company, Conjuncta, part of the founding members/partners at Rethinking Africa is currently developing a green hydrogen project in partnership with Sonangol to supply green hydrogen into Europe from the Republic of Angola.

Conjuncta has also been involved in infrastructure projects, renewable energy, chemicals, logistics, and information technology, for over 15 years in the African continent.

Liebing revealed that Germany is importing two-thirds of its energy needs as the country aims for climate neutrality by 2045, meaning that remaining greenhouse gas emissions will need to be canceled out.

"If we are serious about turning this energy into green energy by 2045, we are still going to import a lot of energy and we need to transform all of these inputs from oil, gas, and coal to green energy.

Speaking further, he said the only way this could be achieved is by importing green hydrogen. The German national hydrogen strategy expects about 80% of our hydrogen needs will be imported from abroad. And that makes a lot of sense because producing green electricity here is expensive than producing it somewhere in Africa, and Latin America where there are better sunshine and wind conditions.

"As an investor, we've decided to develop green hydrogen at our own risk to sell and export the product into Europe and Germany.

"In Angola, we have partnered with a German engineering and project development company and with Sonangol, Angola state state-owned energy producer. A time might come when Europe will need to set up an additional pillar of revenue streams and that is why they do this pilot project to start generating green energy products such as ammonia, methanol, etc.

"We are in the middle of developing this project and within the next 12 months or so, we will make the final investment decision on the project which has a total investment volume of more than a billion dollars.

"With this development, we might be one of the first projects in Africa to deliver green hydrogen into Europe.

"There are also several projects that are being discussed. We are involved in another even bigger project.

"In Mauritania, we have some other German companies who do business in South Africa and Namibia for the export of green hydrogen.

"With this pragmatic approach, Rethinking Africa is pushing for a turning point in relations between Germany and Africa, so that Germany does not end up as a laggard in international relations. We will now start the actual work: Create jobs and enable investment in Africa," Liebing added.

Rethinking Africa Foundation is based in Berlin. It was established according to German law (Gesellschaft mit beschränkter Haftung/GmbH) with the objectives to facilitate direct economic contacts between German and African companies.

CONJUNCTA GmbH



“German Companies Need Guarantees from Govt to Sign Long-term Offtake LNG Contracts” – Liebing, Conjuncta CEO

*The Conjuncta Group is a German investor and project developer specializing in investing in companies and projects in the fields of infrastructure, renewable and conventional energy production, grids, raw materials projects, the health industry, and other sectors. **STEFAN LIEBING, CEO of Conjuncta GmbH**, in this interview with **NDUBUISI MICHEAL OBINEME, Managing Editor of The Energy Republic**, discusses how his company has been investing in Africa and its plans to expand its investment portfolio in the Continent.*

*Furthermore, Liebing also provided more insight into the possibilities of German companies doing business with Nigeria in terms of Liquefied Natural Gas (LNG) supply and hydrogen deliverables. **EXCERPTS:***

TER: Please tell us about Conjuncta’s business activities in major industries.

Leibing: Since 2011, we have been operating and focusing on the development of investment projects and business opportunities. Our regional focus is in Africa, the Middle East, and Central Asia.

We have been active in Africa over the years and we are developing several infrastructure projects which include energy, oil and gas, chemicals, renewable energies, and more recently hydrogen.

Before we set up this business, I was working with Shell on oil and gas, LNG, and other activities within the company.

TER: What role does your company play in terms of project development?

Leibing: At the moment, we have a lot of hydrogen projects including in Angola in partnership with Sonangol, and Mauritania. It’s a billion-dollar investment. In Angola, we are going to use some of the green electricity produced from existing hydropower plants to generate hydrogen which will be converted to Ammonia. It is going to be exported.

We will be doing this production from Angola and other producing countries because there is an urgent need for energy in Europe as we have much less Ammonia now following the Russia-Ukraine war that interrupted gas supply in Europe. We believe this could be a very good business.

In our partnership with Sonangol, we have a joint venture partnership that involves two German developers.

Beyond Angola, we have done many businesses in other African countries.

Our second big hydrogen project is in Mauritania.

We have also been involved in renewable energy projects across the African continent.

TER: What are the challenges your company encountered in investing in these projects in Africa?

Leibing: The main challenge for renewable energy projects is that if you produce electricity for local consumption, it isn’t easy to get financing for it.

European banks will only give you funds if you have long-term offtake agreements with creditworthy and financially strong institutions and many governments and energy utilities are in financially difficult situations which have become worse following the COVID-19 crisis.

This is also because of higher debt ratios in African government budgets which has made it more complicated and challenging than before to finance some of these projects.

However, one of the short-term solutions is to finance projects that are earmarked for export. As soon as we can produce green electricity and transform it to hydrogen for export purposes with strong international off-takers, it's a lot easier to make these projects bankable.

In this case, the strategy would be to create revenues for the African governments by implementing export projects. And, then, it will make them improve their ratings and enable them to finance more domestic energy projects.

TER: What would you suggest the African government and private must do to attract more German investors?

Leibing: Firstly, the African governments need to know that they are in global competition, especially on the framework for investment.

In Germany, we receive delegations from several countries coming to our country to advocate for more investment.

If the projects are equally attractive, German investors will possibly prioritize those countries that offer the best legal framework and no corruption.

There are also lots of projects that make sense from an African perspective, but, it doesn't have any economic value from German perspectives. This is because financing has become very difficult coupled with the rigorous European banking regulations, it becomes more complicated for European banks to finance any of these projects even though they make a lot of sense for African countries.

There is more work to be done on the German and African sides in developing the business framework right.

TER: In one of your recent posts via LinkedIn, you mentioned that Germany's interest in buying LNG and exporting hydrogen from Nigeria isn't realistic for now. Please could you provide more analyses on why you think this business may not work out; and, as an investor, what business model would you recommend between Germany and Nigeria/Africa in expanding their bilateral relations on gas, and LNG deliverables?

Leibing: The problem is mainly on the German side. Germany doesn't have any international oil majors such as BP, or TotalEnergies.

We only have utility companies for distribution of gas and they are very conservative in doing business. Many of these German utility companies aren't strong enough in terms of their balance sheet to sign long-term LNG offtake contracts.

We have tried it several times and nothing has happened so far.

The German government has also tried it with Qatar, and there is no single contract signed with Qatar. That is why I don't think what the German Chancellor, Olaf Scholz said during his visit to Nigeria about Germany's interest in importing Nigerian gas is going to happen because it is the private sector that will sign the agreements.

The main difficulty is that the German private sector because of its structure and the restrictions that energy utilities have, can not necessarily take as much risk in long-term LNG contracts and upstream gas investment as would be required on the Nigerian side.



However, it is a good idea for Germany and Nigeria to work together on LNG supplies. But, it is only going to work if the German government plays an active role in terms of providing guarantees for long-term offtake contracts. If the government doesn't provide a guarantee, I don't think it is going to happen.

To further increase confidence, there is a need to prove the concept by demonstrating joint success stories. Of course, dialogue is important. The Chancellor visited Nigeria recently and President Tinubu has participated in the Compact with Africa Summit in Berlin.

If Germany needs better security of supply, the German Government is required to provide a guarantee for such contracts and investment. The difficulty is that security of supply does not have a market price. That is why Government involvement might be required.

It would be good if the German Government supports the private sector investors who might not always be able to take on all risks themselves. So guarantees for bank loans would certainly be a good instrument to accelerate the development of this LNG supply.

On the hydrogen side, the German government is traveling around the world to discuss bilateral relations with other countries to import hydrogen to Germany. This is a good idea.

Exporting hydrogen from these countries including Nigeria will depend on the price of electricity for which green electricity can be generated and the German private sector will likely buy where this electricity can be generated cheapest. Unfortunately, at this stage, there are a few other African countries that offer better generation costs for wind and solar power than Nigeria does.

TER: Looking forward to the next 5 – 10 years, what are Conjuncta's plans for Africa?

Leibing: We expect to further increase our footprint on the continent, to contribute to industrialization by providing efficient and sustainable infrastructure and we hope that in five years from now, we will export green hydrogen and contribute to the stabilization of revenue flows to Africa even in a post-oil period.

AFRICAN ENERGY STORIES



48 Nigeria, Morocco Held Talks to Fast-Track Gas Pipeline Project 48



49 Nigeria Ready to Partner with Investors for Hydrogen Development in Natural Gas Sector



Nicolas C. Odionwe
Chairman, PETAN, MD, Zissel
United, Executive Chairman, Global
Lifting and Engineering Services
Nigeria Limited



H.E. Dr. Omar Farouk Ibrahim
Secretary General
African Petroleum Producers'
Organization



Prossovia Nabbanja
Chief Executive Officer
Uganda National Oil Company



Esteban Pale
Chairman and CEO
ENH



Chairman, PETAN, MD, Zissel
United, Executive Chairman, Global
Lifting and Engineering Services
Nigeria Limited



Secretary General
African Petroleum Producers'
Organization



Chief Executive Officer
Uganda National Oil Company



Chairman and CEO
ENH

11 African Oil, Gas Producing Countries to Lead Delegation at SAIPEC 2024, Showcase In-Country Opportunities

EU, AFDB Signs New Funding Model to Boost Investments in Energy, Infrastructural Projects in Africa

On the sidelines of this week's Italy-Africa Summit, the European Commission (EC) and the African Development Bank Group have formalised a new Financial Framework Partnership Agreement to boost investments in infrastructure projects in Africa. The European Union's contribution to co-finance operations with the African Development Bank has significantly increased over the last two years, now amounting to €972 million in blending operations and guarantees. This figure will further increase after the signing of the new Financial Framework Partnership Agreement.

Signed today by European Commission President Ursula von der Leyen and African Development Bank Group President Dr Akinwumi Adesina, this landmark agreement renews the partnership between the two organisations. It opens a wide range of opportunities for both organisations to deliver new joint financing for infrastructure projects. For the EU, this would be in keeping with the priorities of the Global Gateway, its strategy to deliver sustainable and trusted connections with partner countries. Between 2021 and 2027, through the Africa-EU Global Gateway Investment Package, the EU will support the African continent with €150 billion worth of investments.

President von der Leyen said: "I'm very glad to launch a new era of cooperation between Europe and Africa. Together we will build clean and competitive economies across the continent, promote skills, create jobs and opportunities, especially for Africa's vibrant youth. Today's new agreement between the European Commission and the African Development Bank Group will power ambitious infrastructure projects under Africa under Global Gateway,



Europe's investment strategy for the world. I'm looking forward to the great projects we will work on together, as partners."

Dr. Adesina said: "The signing of this important Financial Framework Partnership Agreement marks the positive evolution of the relationship between Africa and the European Union. It will enable the African Development Bank Group and the European Commission to leverage on their respective resources to significantly support transformative investments in African countries and build resilient and sustainable economies. I am looking forward to scaling up our strong partnership with the European Commission and to making huge progress towards the achievement of the African Development Bank Group's High 5 strategic priorities."

This agreement will enable a series of investments in Sub-Saharan Africa in strategic transport corridors, in energy and digital connectivity. One of the main joint projects is the development of the "Lobito Corridor", an innovative transport corridor that will enhance export possibilities for Zambia, Angola and the Democratic Republic of Congo, to boost the circulation of goods and to promote the mobility of citizens.



At the Global Gateway Forum in October 2023 the EU and the African Development Bank signed a Memorandum of Understanding with Global Partners to mobilise financing for the development of this corridor. Others partners include the host governments of Angola, DRC and Zambia, the US Government and the Africa Finance Corporation.

The European Commission and the African Development Bank Group have closely aligned strategic priorities and programming. A cooperation agreement signed in 2014 expired in April 2019. Negotiations for a new agreement began after the implementation of the European Commission's new Financial Regulation in 2018. These negotiations also considered developments in both organisations, notably in new provisions regarding the African Development Bank Group's compliance with EU Restrictive Measures.

Global Gateway is the EU's positive offer to reduce the worldwide investment disparity and boost smart, clean and secure connections in digital, energy and transport sectors, and to strengthen health, education and research systems.

The Global Gateway strategy embodies a Team Europe approach that brings together the European Union, EU Member States, and European development finance institutions.

Sub-Saharan Africa: More Than \$1 Billion Contracts Awarded to European Companies in 2023

Offshore project developments in Sub-Saharan African countries including Ivory Coast, Angola, and the Republic of the Congo (ROC) have created lucrative opportunities for European service providers, who offer the latest technologies in drilling, engineering, and subsea services.

As a result, large-scale contracts have been awarded in the past twelve months to support oil and gas exploration activities across the continent.

According to an article published by Energy Capital & Power, it outlined top five service contracts by value awarded to European companies in sub-Saharan Africa oil and gas industry in 2023.

Here is the lists of the top five service contracts by value awarded to European companies:

◀ Saipem, Ivory Coast: \$400 million

In March 2023, Italian multi-national company, Saipem was awarded a \$400-million contract for Subsea Umbilicals, Risers, and Flowlines, as part of the Baleine Phase 2 Project, operated by Eni and Petroci offshore Ivory Coast.

The contract involves the engineering, procurement, construction, and installation of approximately 20 km of rigid lines, 10 km of flexible risers and jumpers, and 15 km of umbilicals.

Saipem's modern vessels, including the Deep Value Driller, will conduct the installation works in 2024. The contract follows Saipem's contributions to Baleine Phase 1, which utilized the Saipem 10000 and Saipem 12000 vessels for drilling activities and fast-track mode contracts.

◀ TechnipFMC, Angola: \$75-250 million

French service company, TechnipFMC secured a significant contract in February 2023 for the Girassol Life Extension Project, led by TotalEnergies and its Block 17 partners.

The development marks the first subsea life extension project in the region. Under the contract, TechnipFMC will be responsible for the engineering,



procurement, and supply of flexible pipes and connectors for the offshore Girassol field. The flexible pipes will extend the life of the field by bypassing rigid pipe bundles previously installed in 2001.

◀ TechnipFMC, Angola: \$75-250 million

TechnipFMC bagged a second Angola contract in June 2023 with Azule Energy for subsea production systems in the Block 18 infills development offshore.

This marks TechnipFMC's first subsea production systems contract with Azule Energy, following a previous announcement for a flexible pipe supply contract. The project involves reconfiguring the existing field layout to accommodate new equipment supporting Azule's production increase plan.

TechnipFMC will provide subsea trees, manifolds, subsea distribution equipment, topside controls, jumpers, flowlines, and umbilicals.

◀ Saipem, Congo-Brazzaville: \$100 million

In October 2023, Saipem secured a \$100-million contract with Eni Congo for the conversion of the Scarabeo 5 semi-submersible drilling unit into a floating production unit (FPU), as part of the Congo LNG Project.

The FPU will function as a semi-submersible production platform, separating gas from liquids and boosting the gas to supply a nearby

floating LNG unit.

The contract covers engineering, procurement, construction, transportation, and commissioning of the FPU, with offshore installation off the coast of ROC scheduled for completion by Q4 2025. The Congo LNG Project will have an LNG production capacity of three million tons per year.

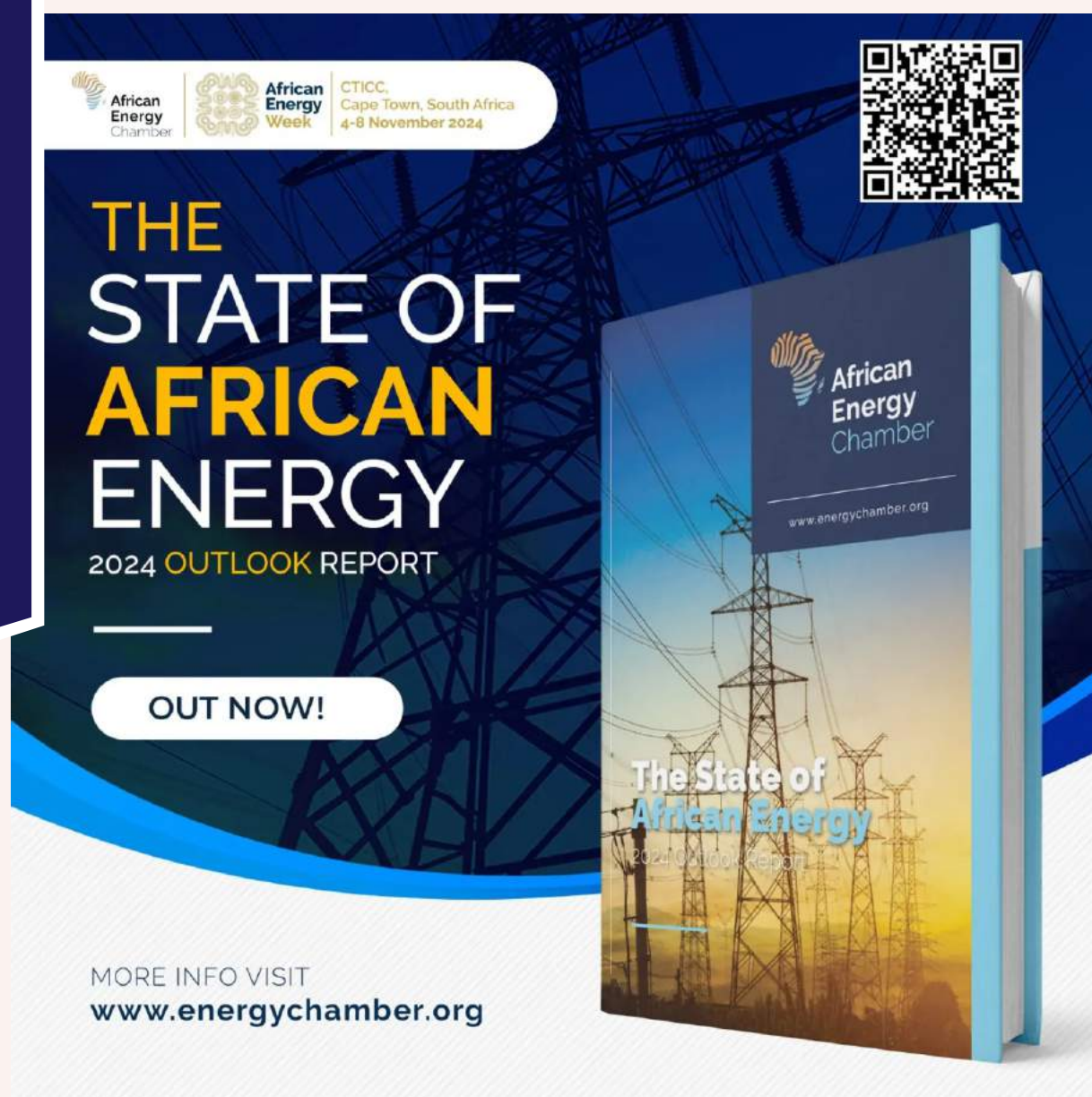
◀ Petrofac, Ivory Coast: Multi-million-dollar contract

International energy services company, Petrofac, secured a multi-million-dollar integrated services contract in July 2023 with CNR International for the FPSO Espoir Ivoirien offshore Ivory Coast. The three-year deal involves Petrofac's Asset Solutions business delivering integrated services for the FPSO, which was sold by BW Offshore to CNR in June for \$20 million.

Approximately 110 personnel, both on- and offshore, will transition from BW Offshore to Petrofac as part of the agreement.

The move enhances Petrofac's presence in Africa, aligning with its expanding portfolio of service contracts across the continent.

Furthermore, The Invest in African Energy (IAE) forum – returning to Paris for its second edition in May 2024 will present an interactive opportunity for service companies to access African upstream projects and forge decisive partnerships.



MORE INFO VISIT
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Africa's energy sector is on the precipice of transformation with large-scale developments kicking off across the continent. Providing a comprehensive overview of the evolving industry, the African Energy Chamber (AEC) has released its latest industry-focused report: 'The State of African Energy 2024 Outlook' now available for download.



The AEC's 2024 Outlook offers insights into projects, trends and projections, serving as the official guide for investing in African energy. From cash flow dynamics and investment trends to production patterns and exploration endeavors, to low-carbon gas and renewables, the report is an essential guide to understanding Africa's evolving energy sector.



On the capital front, the outlook provides insight into ongoing trends and anticipated changes. The 2023 outlook anticipates a relatively flat

evolution of free cash flow and government revenue in Africa for the years 2023–2024. Notably, National Oil Companies (NOCs) and international oil majors emerge as the primary drivers of free cash flow generation during this period. While there's an expected 25% decline in annual government revenue from 2022 levels, the report shows that it still remains notably higher than the pre-pandemic era, highlighting the industry's resilience and adaptability to global energy landscape changes.

Regarding CAPEX distribution, North and West Africa are projected to be leaders in both cumulative and annual spending over the next decade, with a strong focus on liquids.

Notably, the report identifies Nigeria, Libya, Algeria, Angola, and Mozambique as the top five spenders over this period, with NOCs and major industry players expected to collectively account for two-thirds of total CAPEX. Importantly, the allocation of CAPEX aligns with the 'Mean' scenario, aligning with a global warming cap of 2°C, indicating a commitment to climate considerations within the industry.

Global oil and condensate output is expected to increase in 2024, primarily driven by the Middle East and the Americas. Key demand drivers for the next 18 months are the road transport and petrochemical sectors. On the supply-demand front, the analysis reveals a substantial disparity of 2.15 million barrels per day (bpd) is projected for the second half of 2023, with expectations of this gap narrowing to about 1 million bpd in 2024. The Organization of Petroleum Exporting

AEC Launches State of African Energy 2024 Outlook

Countries (OPEC) member nations play a crucial role in driving Africa's oil and condensate output, despite challenges in production compliance due to production declines.

Moreover, there is anticipated growth regarding drilling and rig demand that is expected to persist until 2024, after which a gradual decline is projected. The report forecasts healthy levels of exploration drilling activity for the period spanning 2023–2025, with Algeria, Egypt, Namibia, and Nigeria emerging as primary drivers. With a total of 177 blocks up for grabs in licensing rounds across Africa and awards for these blocks anticipated to conclude within the next 18 months, the report highlights strategic opportunities for E&P players.

Regarding gas, the report foresees a notable global surge in demand for both natural gas and liquefied natural gas (LNG), surpassing existing supply levels. The global gas market's equilibrium hinges on new projects and untapped reserves, and the report emphasizes natural gas's enduring significance in Africa's energy mix up to 2050, with the continent on the brink of becoming a top-five LNG exporter. North Africa is expected to lead in natural gas supply while West Africa will drive LNG exports.

Meanwhile, the anticipated growth in renewable energy capacity, primarily driven by solar and onshore wind resources, presents a significant shift in the energy landscape. The report shows that hydrogen is poised to play a progressively influential role, particularly during the 2030s, signifying the industry's commitment to sustainable energy solutions. Countries such as Egypt, Morocco, Mauritania, and South Africa emerge as leaders in advancing sustainability efforts.

"We are proud to offer the State of African Energy 2024 Outlook for download. The report emphasizes the pivotal role of knowledge and foresight in navigating the complex and dynamic energy landscape and equips stakeholders with the insights they need to make informed decisions in the year ahead. As we venture into 2024, we are on the brink of making substantial strides in overcoming energy poverty through Africa and moving towards a more sustainable energy future," states NJ Ayuk, Executive Chairman of the AEC.



**African
Energy
Chamber**

www.energychamber.org

The State of **African Energy** 2024 Outlook

To Download The Report, Visit - <https://tinyurl.com/ybp2knbh>

2023 has been the best year for solar in the world and also in Africa. With around 350 GW of solar installed around the globe, solar has reached new heights in terms of new installed capacities with a 46% increase compared to 2022. In Africa also, a new record was broken with more than 3.7 GW of new solar installations identified by AFSIA as coming online in 2023.

After a solid year in 2022 already, the appetite for solar in Africa did not stop and grew another 19% in 2023 with the addition of 3.7 GWp. In 2023 only, the equivalent of one third of all the solar installed historically in Africa has been added. As a result, Africa is now home to more than 16 GWp of solar.

South Africa, the undisputed African solar leader

With an estimated 7,781 MW of solar (not including residential installations) by the end of 2023, the country hosts almost 50% of all installed capacity in the continent and is by far the leading country for solar in Africa. This domination is true for both historical installations as well as for 2023 activity.

When zooming in on 2023, 79% of all new capacity installed in the past year was installed in South Africa (close to 3,000 MWp out of a total 3,745 MWp). As a result, South Africa has witnessed the most important increase of solar installations in African history in 2 consecutive years, 2022 and 2023.

Many other countries are also progressing in terms of solar, but in much smaller magnitude. And it is fair to say that solar continues spreading across various parts of Africa. In 2023: 1 country installed more than 100 MW, 17 countries installed more than 10 MW and 27 countries installed more than 1 MW. This is very much aligned with AFSIA's analysis from 2022. However, the number and the average size of solar installations in Africa are increasing.

Based on the info gathered this year, the top 5 countries with the largest new capacities installed in 2023 are: South Africa – 2,965 MWp;



AFSIA Releases African Annual Solar Outlook 2024

Burkina Faso – 92 MWp; Mauritania – 84 MWp; Kenya – 69.5 MWp and Central African Republic – 40 MWp.

Judging national performance solely on installed capacities may be a bit unfair as there are major difference between countries in terms of size, population and electrification level. The AFSIA report therefore proposes to look at solar in each country through two other lenses such as “Wp/capita” and “solar % in the overall generation mix”. This approach gives more credit and visibility to the countries that are small but deliver tangible results on solar.

The African solar market has turned and offers promising opportunities

Until recently, the lion's share of solar in Africa was driven by large-scale grid-connected projects tendered by the national governments with the support of international institutions. But recent data indicate a drastic change in this picture, with the majority of MWs now being installed through C&I projects, projects installed directly at companies and businesses with the purpose of this solar electricity to be consumed directly on the premises.

In 2023, C&I projects represented 65% of all new capacity added in Africa, with 2,429.5 MWp installed, which is more than double what has been commissioned for large-scale projects in 2023 (1,213.8 – 32.4%). This trend is supported by sharply declining equipment prices and a growing offer of financing solutions, which both combined make it significantly easier and more appealing for companies to engage in producing the

electricity for their own consumption.

The other noticeable trend is the exponential rise of green hydrogen projects across the continent. The race for producing the cheapest green hydrogen is global, and several African countries are ideally positioned to win that race thanks to excellent solar irradiation and access to international maritime routes.

Mauritania is one of the most ambitious African countries with regards to green hydrogen, with 57 GW of planned projects. This represents almost 60% of all African green hydrogen development and almost 30% of all solar currently being developed on the continent.

AFSIA Annual Outlook, a wealth of information country-by-country

Next to analyzing the 2023 developments and trends, the AFSIA Annual Outlook report also gives the most recent snapshots of the solar market in each country.

Key national elements such as country objectives for renewables energy, solar policies, current electricity tariffs, key electricity institutions to name a few are identified and highlighted for each country, in order to help decision-makers to make quicker and better-informed decisions about solar developments in Africa.

This year, these “country vignettes” will also be made online and interactive for increased user-friendliness and more regular updates throughout the year.

The 2024 reports can be downloaded at <https://www.afsiasolar.com/data-center/outlook-report/>

African Oil & Gas and the Rest of the World: What Changed in 2023?

By NJ Ayuk, Executive Chairman, African Energy Chamber

It's undeniable that the Russian invasion of Ukraine proved highly disruptive to world energy markets. This geopolitical clash led to the imposition of Western sanctions on the export of Russian oil and fuel and the imposition of a price cap on Russian crude by the G7 group.

It also led to the redirection of world oil trade flows. Asian countries such as China and India, for example, began absorbing considerably more Russian oil and fuel than they had done previously, and many European countries began seeking new suppliers or buying more from existing suppliers outside Russia so as not to run afoul of sanctions.

Meanwhile, European buyers of Russian natural gas also started looking for alternative sources in 2022. They did so with slightly less urgency, it is true, given that natural gas imports were never subjected to sanctions. But they were still keen to find other suppliers, especially after Russian gas deliveries started becoming erratic a few months into the war.

These considerations drove Italy, for instance, to send representatives of the government and of Eni, a partially state-owned company, to Africa for talks with Egyptian, Algerian, and Angolan officials on expanding the scope of existing supply contracts. These talks were successful, as they allowed Eni to secure commitments for the delivery of an additional 7.0-7.5 billion cubic meters of gas beyond the originally planned amount in 2022, plus additional volumes in the following years.

New Links with Europe?

The talks also took place against a backdrop of speculation about how the rearrangement of world oil and gas trade flows had the potential to benefit Africa.

The idea was that Africa could, with a little help, become a natural partner for Europe. The two continents had the advantage of relative geographical proximity (at least along the shores of the Mediterranean Sea) and existing infrastructure connections (such as the subsea pipelines that link Algerian and Libyan gas fields to Italy and Spain). Major European companies — such as the British majors BP and Shell, France's TotalEnergies, and Norway's Equinor, as well as Eni — already had sizeable greenfield and brownfield portfolios in Africa.

So (advocates of this view argued) why not build on these pillars that were already in place and turn Africa into Europe's closest key supplier of fuel and energy?

But that's not how it happened.

New Gaps Between Africa and Asia, South America

Instead, Asian countries awarded far more new exploration acreage to investors than did African states after the conclusion of COP27, the 2022 UN Climate Change Conference held in Sharm El Sheikh, Egypt.

As the African Energy Chamber (AEC) notes in its newly released 2024 African Energy Outlook, Asia has accounted for the single largest portion of post-COP27 exploration acreage awards, equivalent to more than 52% of the offshore total and almost 45% of the onshore total. Africa lagged significantly behind, accounting for 28% of the offshore total and only 5% of the onshore total.

There were also significant discrepancies between Africa and other regions of the world with respect to recent oil and gas discoveries. As the AEC's outlook points out, South America's deepwater zones have yielded nearly 13 billion barrels of oil equivalent (boe) in new commercial finds since 2019, with 3 billion boe per year discovered in 2019 and 2020, 1.5 billion boe in 2021, 2.6 billion boe in 2022 and 2.8 billion boe since the beginning of 2023.



NJ Ayuk, Executive Chairman, African Energy Chamber

By contrast, Africa's deepwater zones have yielded about 7.65 billion boe in new commercial finds since 2019, with 2.9 billion boe per year discovered in 2019, 425 million boe in 2020, 1.135 billion boe in 2021, 1.94 billion boe in 2022 and 1.27 billion boe since the beginning of 2023.

What's more, South American fields have generally contained more oil than their African counterparts, with the mix being 80:20 in favor of oil in the former region, compared to 65:35 in the latter region. And since oil generally commands a higher price than gas, this has made the South American discoveries easier to monetize — and thus more immediately valuable — than those in Africa.

This gap could prove somewhat less significant later in the decade, assuming that the transition away from fossil fuels gains momentum. This shift is expected to have a bigger impact on crude oil-derived petroleum producers than on natural gas, which many African countries view as the best available bridge fuel. (Nigeria, Africa's biggest producer of both oil and gas, is one such country, and its "Decade of Gas" policy is designed to promote and expand domestic gas utilization for electricity production and industrial use.)

In other words, if global demand for crude oil fades as many energy consumers switch from petroleum products to renewables, investment in South America's relatively oil-rich acreage will dwindle over time. However, investment in Africa's relatively gas-rich acreage will remain at peak levels for a longer period, as gas is a cleaner-burning fuel than petroleum derivatives, and African states such as Nigeria will continue to use it for several more years even after they close the last power station to use refined petroleum products.

In the meantime, though, there is still a distance between Africa and the rest of the world in terms of what the continent can do to establish closer ties to energy markets in Europe and elsewhere and to expand the development of its own hydrocarbon resources. The Russia-Ukraine could have helped close that gap to a much greater extent, but instead, other regions have attracted more attention.

This is an All-Hands-on-Deck Moment

That said, I do not believe for one second that we should accept lagging energy industry investments as an inevitable reality for Africa. Instead, energy industry stakeholders should view our report's findings as a call to action. It is not too late to reverse course.

African governments must act immediately to make exploration and production in Africa investor friendly. Now is the time to offer tax incentives, fast-track projects, show more transparency in processes, and do everything possible to minimize investor risk.

Operators have a role to play as well. They should be working cooperatively with government administrations and implementing measures to bring down unit costs, which would allow breakeven prices to be brought down.

Prompt action and cooperation will create a win-win that will allow African nations to reap the socioeconomic benefits of their oil and gas resources and companies to capitalize on the significant opportunities our continent's oil and gas offer.

Nigeria, Morocco Held Talks to Fast-Track Gas Pipeline Project

In a bid to fast-track the process of achieving the Final Investment Decision (FID) on the Nigeria-Morocco Gas Pipeline, the Federal Government has intensified discussions with the Kingdom of Morocco.

The discussion which held on Wednesday, 24th January, 2024, on the side-lines of a meeting between the Honourable Minister of State for Petroleum Resources (Gas), Hon. Ekperikpe Ekpo, and the Moroccan Minister of Energy Transition and Sustainable Development, Ms. Leila Benali, was anchored by the NNPC Ltd.'s Executive Vice President, Gas, Power & New Energy, Mr. Olalekan Ogunleye, and the Director General of the Morocco National Office of Hydrocarbons and Mines (ONHYM), Mme Amina Benkhadra.

The talks focused on how to drive the partnership between the two countries to accelerate the Nigeria-Morocco Gas Pipeline Project in line with the series of Memoranda of Understanding (MoUs) signed between the two countries in Abuja in 2022.

Both parties emphasised the strategic importance of the project to the two countries and the entire African continent and the need to drive it to completion expeditiously in line with the objective of stemming energy poverty on the African continent. It would be recalled that the Cooperation Agreement for the 48" x 5,300Km pipeline



from Nigeria to Dhakia (Morocco) and 1,700km from Dhakia to Northern Morocco was signed in 2017 with a capacity of 30 billion cubic meter (bcm) per year (equivalent of 3.0 billion standard cubic feet of gas per day).

The pipeline would traverse Republic of Benin, Togo, Ghana, Cote d'Ivoire, Liberia, Sierra Leone, Guinea, Guinea-Bissau, Gambia, Senegal, Mauritania, and terminate in Morocco with a spur to Spain.

Due to the international nature of the project, the ECOWAS Commission is saddled with the responsibility to, among other things, facilitate inter-governmental treaty and host government agreements, establishment of Pipeline Higher Authority, and alignment with AU, UN and other relevant international bodies.

The project, among other things, will help drive the monetisation of Nigeria's gas resources, maintain NNPC Ltd.'s energy leadership in Africa, and promote economic and regional cooperation among African Countries.

Upon completion, the gas pipeline will be the world's longest offshore pipeline. In June 2023, it was reported that Côte d'Ivoire, Liberia, Guinea, and Benin had signed agreements with Morocco and Nigeria to participate in the Nigeria-Morocco gas pipeline project.

In Africa, the project promises to support the continent's socio-economic development. The pipeline represents a reliable source of employment and attracts investments to the region.

The pipeline aims to deliver gas from Nigeria to Europe and should supply countries along the way to help fulfill their energy needs.

Nigeria Ready to Partner with Investors for Hydrogen Development in Natural Gas Sector



Ekperikpe Ekpo, Nigeria's Minister of State for Petroleum Resources (Gas)

The Nigerian government has reaffirmed its commitment to partnering with international investors and countries to unlock the full potential of its natural gas resources, with a specific focus on developing a thriving hydrogen sector.

This message was delivered by Nigeria's Minister of State for Petroleum Resources (Gas), Ekperikpe Ekpo, at the Americas Energy Summit and Exhibition in New Orleans, Louisiana, USA.

"We extend an invitation to international

partners, stakeholders, and investors to collaborate with us in unlocking the full potential of our natural gas resources," Ekpo declared.

"Recognizing the importance of innovation and diversification in the energy sector, Nigeria actively explores opportunities in hydrogen production and deployment."

Ekpo underscored the crucial role of hydrogen in transitioning towards a sustainable energy future, highlighting its potential to reduce carbon emissions and pave the way for a cleaner, greener world. Furthermore, he acknowledged the need for international cooperation in this endeavor:

"The Nigerian government is actively setting up the framework for a sustainable energy future. In this pursuit, we are seeking collaborations with countries that have developed expertise and capacity in hydrogen technologies. We believe that international partnerships are essential in fostering knowledge exchange and leveraging collective capabilities for the advancement of hydrogen as a clean and sustainable energy solution."



Ekpo Revives multi billion dollars Brass Fertilizer and Petrochemical Project with potential to create over 70000 jobs



Africa Finance Corporation Invests \$60 Million to Support Angola's Indigenous Companies

Africa Finance Corporation (AFC), the leading infrastructure solutions provider in Africa, has invested US\$60 million in Etu Energias (formerly Somoil), the largest private Angolan oil company, as part of a drive to boost indigenous participation in the continent's energy sector.

The investment is part of a \$190 million debt facility to support Etu Energias in acquiring oil and gas reserves co-owned by France's TotalEnergies and Japan's Inpex Corporation. Following the acquisition, Etu Energias will own a 20% stake in deepwater Block 14 and 10% of deepwater Block 14K, oil reserves located 100 kilometres offshore from Cabinba, northern Angola. Both blocks are operated by US-based company, Chevron.

The acquisition doubles Etu Energias' net production rate from 9,000 barrels per day (bpd) to 19,000 bpd, cementing the company's position as Angola's leading indigenous upstream oil and gas company and a key player in the evolving energy sector.

"AFC is unwaveringly committed to propelling the growth of indigenous operators in the energy sector across the continent," said AFC President and Chief Executive Officer, Samaila Zubairu. "Our financial backing aligns with AFC's broader mission to support the sustainable development of Africa's vast resources, whilst retaining value on the continent. We look forward to working with Etu Energias to achieve Angola's energy transition objectives."

Etu Energias Chief Executive Officer Edson Rodrigues Dos Santos said: "We are pleased to be collaborating with AFC on this noteworthy acquisition. We see it as the first of more to come in a growing relationship. This acquisition marks a significant step as we aim to enhance our operational capabilities by providing a distinctive opportunity for local players like us, especially in offshore operations where international oil companies have historically held dominance."

AFC is stepping up investment in Angola's energy sector following deployment of approximately US\$165 million in Sonangol, Angola's state-owned oil company, between 2021 and 2022, and a recent US\$100 million investment for the construction of the Cabinda oil refinery in northern Angola alongside Gemcorp Holdings Limited (GHL) and African Export-Import Bank (Afreximbank).

The senior debt facility for Etu Energias was structured as a club loan, with AFC playing an active role as a co-mandated lead arranger along with the African Export-Import Bank (Afreximbank). Banco Africano de Investimento (Banco BAI) also collaborated in the financing of the club loan.



Afreximbank, Alphaden Energy & Oilfield Limited Sign \$60M 7-Year Term Loan Agreement for Gas Processing Facility in Nigeria

African Export-Import Bank (Afreximbank), has signed a 7-year term loan agreement with Nigeria's Alphaden Energy & Oilfield Limited for the construction of a 20 million standard cubic feet per day gas processing facility in Bayelsa State, Nigeria.

The agreement was signed by Paschal Anyanwu, CEO of Alphaden Energy & Oilfield Limited, and Rene Awabeng, Director and Global Head of Client Relations at Afreximbank, during the second day of African Energy Week (AEW) 2023, taking place in Cape Town on 18 October organized by the African Energy Chamber (AEC).

"We all believe that gas is going to play a

leading role in how we develop Africa's energy security," stated NJ Ayuk, Executive Chairman of the AEC, who was present at the deal signing, adding, "This is going to be a 45 billion Naira (\$60 million) energy facility that will be developed by an African company. On behalf of the African Energy Chamber and Afreximbank, we salute you."

The project will be built at the Obama flow station, situated in Oil Mining License 63, and will have the capacity to produce 405 million tons per day of Liquefied Natural Gas and 294 barrels per day of crude condensates.

"We believe that every little step that we take

will help make contributions towards the energy independence of this continent,"

Anyanwu stated, adding, "This day marks a significant day in this journey, and hopefully there will be more that will follow in these footsteps as we follow those before us."

The facility will be repaid from the sale of condensate gas, which has been secured by six off-takers and will be transported using 20-ton ISO tanks to customers throughout Nigeria's six geopolitical regions.

Poised to reduce gas flaring and generate significant value from Nigeria's natural gas resources, the transaction is very significant for Afreximbank with regards to its commitments to Africa's energy transition.

Equatorial Guinea Begins Infill Drilling Campaign

At Block G the planned three-well infill drilling campaign has commenced utilising the Island Innovator semi-submersible drilling rig. The first new infill well is expected onstream around the end of Q1, with all three wells expected onstream by mid-year. Panoro holds a 14.25 percent interest in Block G. Partners in Block G are Trident Energy (operator), Kosmos Energy and GEPetrol.

Following completion of the Block G infill drilling campaign, the Island Innovator rig

will relocate to Block S where it will drill the Kosmos Energy operated Akeng Deep infrastructure-led exploration ("ILX") well.

The Akeng Deep ILX well is intended to test a play in the Albion, targeting an estimated gross mean resource of ~180 million barrels of oil in close proximity to existing infrastructure at Block G. Panoro holds a 12 per cent interest in Block S. Other partners in Block S are GEPetrol and Trident Energy who are delivering the drilling program on behalf of the joint venture partners.

John Hamilton, CEO of Panoro, commented: "We are pleased to have commenced the planned infill drilling campaign at Block G which we expect to materially increase gross production at the Ceiba field and Okume Complex from the 2023 average level of 25,000 bopd once all three new wells are onstream. With the high-impact Akeng Deep infrastructure led exploration well at Block S due to follow the infill drilling campaign, and work underway evaluating prospectivity at the Panoro operated Block EG-01, we have an exciting organic growth opportunity set available to us in Equatorial Guinea."



Afreximbank and Torxen Energy Sign \$75 Million Agreement for PPL 241, Offshore Nigeria

Pan-African supranational multilateral financial institution the African Export-Import Bank (Afreximbank) and exploration and production company Torxen Energy Resources signed a \$75 million development agreement for Petroleum Production License (PPL) 241, offshore Nigeria. The deal was signed during the first day of African Energy Week (AEW) 2023's strategic program, taking place in Cape Town on 17 October.

The deal was signed by Emmanuel Ogagarue, Managing Director and CEO of Torxen Energy Resources; Taiye Eyewuoma, Executive Director for Finance and Administration and CFO for Torxen Energy; and Rene Awambeng, Director and Global Head of Client Relations for Afreximbank.

The deal will allow Torxen Energy to use capital investment for various

activities including drilling and the completion of two oil wells. It will also facilitate the construction of a new oil platform within the License as well as the development of a new oil pipeline.

Providing financing solutions and advisory services for the expansion, diversification, promotion and development of African projects, the deal will serve to improve operational efficiency within the license while supporting the West African country's crude oil production.

PPL 241 is situated offshore Nigeria in water depths of 20m in Oil Mining Lease 90, 24km from the Escravos area. Positioned in one of the largest offshore fields in Nigeria, PPL 241 has been subject to extensive 3D seismic data.

The Gambia Signs Agreement on Hydrogen Exploration in Africa's MSGBC Countries

The Gambia's Ministry of Petroleum and Energy, and H2 Gambia Limited – a subsidiary of HydroGenesis – have inked an agreement on hydrogen exploration in the MSGBC country.

The deal was signed during the first day of the African Energy Week (AEW) at the CTICC in Cape Town.

Signed by Ben Sayers, Director of HydroGenesis and Sheick Omar Bittaye, Director of Petroleum of the Ministry of Petroleum and Energy,

The Gambia – in the presence of the country's Minister of Petroleum and Energy, Hon. Abdoulie Jobe – the deal paves the way for the two parties to cooperate on research to determine The Gambia's onshore hydrogen potential.

Bittaye, said the deal allows for extensive research to be undertaken over a period of one year and forms part of the country's energy decarbonization efforts.

Commenting on the role of the project on local content development, Bittaye added that "In

the event we find commercial hydrogen prospects, the deal will enable the optimization of the entire hydrogen and energy value chain which will in turn create more job and economic growth opportunities for the local people."

A new deal will also be signed to allow hydrogen production in the event H2 Gambia Limited discovers commercial scale hydrogen resources in the country. The deal comes at a time The Gambia is maximizing its energy exploration efforts through partnerships with global oil, gas and hydrogen energy companies to ensure energy security and affordability.



Nicolas C. Odinuwe
Chairman, PETAN, MD, Zitadel Limited, Executive Chairman, Global Lifting and Engineering Services Nigeria Limited



H.E. Dr. Omar Farouk Ibrahim
Secretary General
African Petroleum Producers' Organization



Proscovia Nabbanja
Chief Executive Officer
Uganda National Oil Company



Estêvão Pale
Chairman and CEO
ENH



Baboucarr Njie
Managing Director
Gambia National Petroleum Corporation



Thierno Seydou LY
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Petrosen E&P



Dr. Amadou Hassane
E&P Director
Ministry of Petroleum
Republic of Niger



Abdourahim Barry
Deputy National Director of
Hydrocarbons, Direction Nationale
des Hydrocarbures



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HOSTED BUYER PROGRAMME: NEW FEATURE FOR SAIPEC 2024

SAIPEC's Hosted Buyer Programme is designed to connect verified buyers with SAIPEC exhibitors in a simple and efficient manner, forging partnerships and creating experiences designed to go above and beyond building business.

The Hosted Buyer Programme selects pre-qualified decision makers and matches them with suitable sellers to ensure time efficiency and cost-effectiveness at SAIPEC 2024.

This engaging programme will not only lead you to new and interesting partnerships, but it will also set up those partnerships through activities that foster trust and grow relationships, resulting in a natural exchange of ideas and shared experiences.

As a SAIPEC Hosted Buyer, you gain full access to the VIP programmes, VIP meeting room, all networking functions and dinners, as well as a complimentary place to the four-day conference.

The speakers are representatives from the full spectrum of the Sub-Saharan African energy, oil, and gas sectors, which include NOCs, IOCS, regulators, EPCs, indigenous service providers, and industry stakeholders and players.

This year's SAIPEC will return to the Eko Convention Centre in Lagos from 13-15 February 2024 for its 8th edition, as the only oil and gas event held in partnership with the entire Sub-Saharan African petroleum industry.

Book your delegate pass to get access at the conference and exhibition. Please visit the link below to register for the event –

<https://saipex-event.com/booking-ter>

African Oil, Gas Producing Countries to Lead Delegation at SAIPEC 2024, Showcase In-Country Opportunities

African oil and gas producing countries will lead a country delegation to the eighth edition of PETAN's Sub-Saharan Africa International Petroleum Exhibition and Conference (SAIPEC), as well as showcase in-country opportunities and drive the discussion around the role of oil and gas in Africa's energy future.

SAIPEC, hosted by PETAN, plays a vital role in charting the pathway to developing the Continent's untapped energy, oil, and gas resources, representing more than 20 NOCs, governments, and regulators, with over 6,000 delegates including government parastatals, exhibitors, and speakers.

In a statement made known to The Energy Republic, this year's SAIPEC country delegations include Nigeria, Ghana, Uganda, Namibia, Mozambique, Senegal, Tanzania, Sierra Leone, South Sudan, Republic of Niger, Benin, Cameroon, Congo, Cote d'Ivoire, Gabon, Gambia, Kenya, Liberia, Mauritania, Zanzibar.

"SAIPEC creates huge opportunities for partnerships and regional collaboration. The value chain in the oil, gas, and energy industry is such that if properly harnessed, will transform the economy of the entire continent.

The challenge has been an enabling environment to create a private sector-led industry. Governments across Africa, especially the Oil and gas-producing sub-Saharan countries, should provide necessary incentives to attract private-sector investments across the entire value chain. This will trigger a massive economic revolution, human capital development, and deepen local content across Africa", said Nicolas Odinuwe, PETAN Chairman.

With the theme 'The Next Steps: Accelerating African Content', SAIPEC's programme is guided by an esteemed steering committee including conference programs stretch across three days, with both informative strategic and Technical Streams, Special Focus Sessions; the African Content Series, Diversity, Equality and Inclusion, Networking Opportunities, Youth Empowerment programmes and the SAIPEC Industry Awards.

The conference programme features over 100 speakers from across the Sub-Saharan Africa oil and gas industry, with special focus sessions on regional collaboration. Over five days, the full SAIPEC programme features numerous B2B networking and partnership opportunities.

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Namibia gears up for five oil drilling projects in 2024

Five oil drilling projects are set to commence in Namibia next year, the Ministry of Mines and Energy's Petroleum Commissioner, Maggy Shino has revealed.

In a press statement made known to The Energy Republic, Namibia's Petroleum Commissioner said preparations and logistics are underway for drilling new wells, noting that "Total's Deepsea Mira rig departed from Bergen, Norway, at the beginning of April 2023, and it is expected to reach Namibia on November 15. This rig is an enhanced and extended CS 60 E harsh environment design semi-submersible delivered by Hyundai Heavy in South Korea."

To enhance exploration further, she revealed government's plans to acquire a 3D volume for onshore prospecting.

Shino said Namibia is actively seeking investors to unlock its oil and gas potential, including those with substantial resources and those possessing specialized technologies tailored to the region's unique challenges.

This comes as NAMCOR NAMIBIA disclosed that it is progressing plans to further develop the country's oil and gas sector to meet ongoing energy demands and to eradicate energy poverty, with the company setting its sights on drilling two gas and oil wells in collaboration with international oil companies in the fourth quarter of 2023 and into the first quarter of 2024.

"With four major discoveries already under our belt, Namibia holds great potential for further developments in oil and gas, attracting other international oil companies (IOCs) like Shell and Total," Victoria Sibeya, Executive Upstream Exploration at Namcor said.

Namibia expects the first oil from major offshore finds by 2030.

Natural Gas

The Namibian government is actively working to encourage cooperation between global energy giants TotalEnergies, Shell, and BW Energy, the operator of the Kudu gas project, to develop the country's substantial natural gas reserves in the Orange basin.

Petroleum Commissioner Maggy Shino told Namibia Mining & Energy that the government is not forcing collaboration, but rather "encouraging synergies".

This comes in response to recent reports suggesting that Namibia is compelling TotalEnergies and Shell to work closely with BW Energy on a joint development plan for the vast reserves of natural gas discovered in the Orange basin.

Over the past 20 months, TotalEnergies and Shell have identified an impressive 8.7 trillion cubic feet of gas in the prolific deep-water region of the basin, as well as billions of barrels of oil, further enhancing the region's energy potential.

At the same time, BW Kudu General Manager Klaus Endresen has announced that Namibia is on track to achieve first gas-to-power from Kudu by 2027.

Energy experts believe that the multiplication of gas reserves could position the Kudu Project as a regional energy stronghold, bridging power gaps across the Southern African Development Community (SADC) region.

Meanwhile, Shino added that Namibia's renewed commitment to the Kudu Project not only secures its energy future but also sets a precedent for global energy innovation.



Maggy Shino, Ministry of Mines and Energy's Petroleum Commissioner of Namibia

The Kudu Project Development aims to develop the Kudu Gas Field, located offshore in the northern Orange sub-basin. The field, situated within Petroleum Production Licence 003 ("PPL003"), covers an area of 4,567 square kilometres, with a water depth of approximately 170 metres.

The gas produced from the Kudu Gas field will be transported in a 170-kilometre pipeline to a power station that will be built and situated at Uab Vlei, approximately 25 kilometres north of Oranjemund, in southern Namibia.

The gas will then be used to generate electricity from the Kudu 800MW CCGT Power Station to be constructed and run by NamPower (Pty) Ltd and its partners.

BW Energy entered into a farm-in agreement for a 56% operating interest in early 2017, with NAMCOR NAMIBIA holding a 44% joint venture interest. In 2021, BW Energy signed a farm-up agreement with NAMCOR, increasing the company's interest to 95% in the licence. Their revised integrated development plan aims to supply competitive power to the growing African market, holding significant upside potential.





Portuguese Company Galp Discovers Oil in the Mopane-1X well, offshore Namibia

their drilling campaign with upcoming activities in the Mopane-2X well.

Galp reports that the discovery, made in reservoir-bearing sands of high quality, prompts the company to initiate an assessment of the reserves' commercial viability through a planned drill stem test in the coming weeks.

Namibia has reached another milestone in its exploration journey, with Portuguese multinational energy corporation Galp announcing the discovery of light oil at the Mopane-1X exploration project – located in Petroleum Exploration License (PEL) 83 in the Orange Basin, offshore Namibia.

The Mopane-1X is the sixth commercial

oil and gas discovery in Namibia, following hydrocarbon discoveries made by TotalEnergies in PEL 56 and Shell in PEL 39. The Galp discovery further elevates Namibia's status as a frontier oil and gas market.

Recognizing the immense potential of Mopane-1X and Namibia's Orange Basin for world-class discoveries, Galp and its partners – Namibia's national oil company (NOC) NAMCOR and Custos Energy – are extending

The discovery of light oil at Mopane-1X further demonstrates the commercial potential of offshore oil and gas in Africa.

With six discoveries made in less than two years, Namibia is a testament to the role and future oil and gas plays in Africa.

Chevron targets Multi-Well Drilling Campaign in Namibia's Orange Basin

...Supermajor may spud first exploration well in October 2024.

Chevron is preparing the ground to drill up to 10 exploration and appraisal wells in a highly promising block in Namibia's exciting Orange basin, directly north of TotalEnergies' multibillion-barrel Venus discovery, according to Upstream Online report.

Chevron farmed in to Block 2813AB last year, shortly after Tullow Oil exited and Venus was discovered, eventually acquiring all of the interest held by Australian junior Harmattan Energy and part of the stake held by local player Trago Energy.

It has been reported that recently, Chevron contracted SLR Environment Consulting to

undertake an environmental and social impact assessment for an oil exploration project in the Orange Basin.



The impact assessment project leader, Nicholas Arnott, says the exploration project will continue to the development phase should the company find a substantial deposit of hydrocarbons in block 2813B.

"The proposed exploration project is intended to inform the extent, nature, and economic feasibility of pursuing the production of hydrocarbon resources.

"The purpose of the project is to drill exploratory wells to assess the potential to develop oil and gas resources," he says.

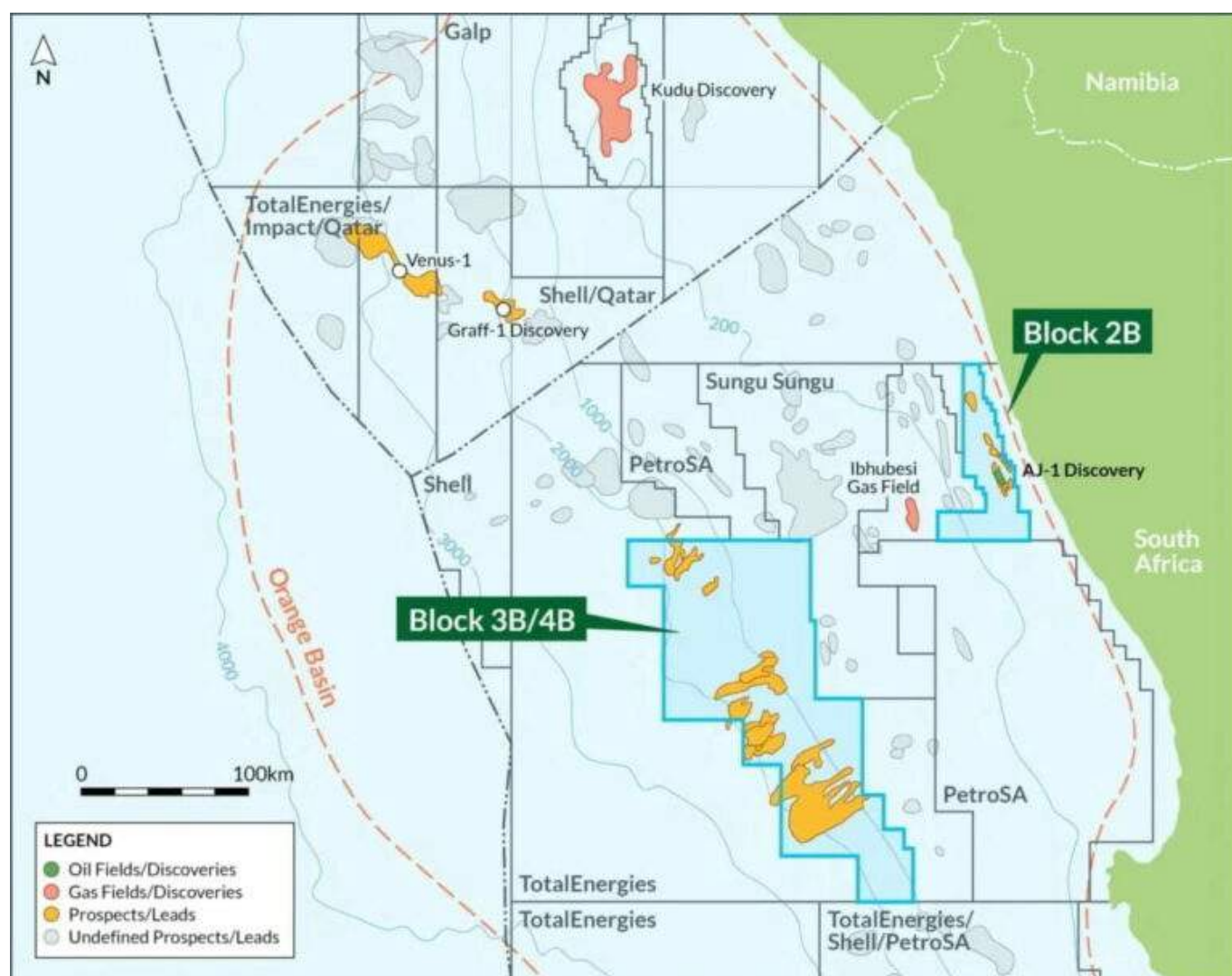
Africa Oil Corp Sets the Stage for Exploration Activities, Signs LOI to Increase Stake in South Africa's Orange Basin

As part of the company's business model, Canadian oil and gas company Africa Oil Corp. has officially announced that it has made the final approval for the acquisition of additional interest in a block it operates in the Orange Basin offshore South Africa while setting the stage for offshore exploration activities on this block.

Africa Oil announced a legally binding letter of intent (LOI) with Azinam Limited, a wholly owned subsidiary of Eco (Atlantic) Oil & Gas, on Tuesday, July 11, 2023. The acquisition was expected to enable the firm to boost its operated working interest with an additional 6.25% in Block 3B/4B in the Orange Basin offshore South Africa. The block covers an area of 17,581 square kilometers and is on-trend with TotalEnergies' Venus-1 and Shell's Graff-1, La Rona, and Jonker-1 oil discoveries.

As the final approval from the South Africa Department of Mineral Resources and Energy (DMRE) and the Petroleum Agency South Africa (PASA) has been received, Africa Oil made a payment of \$2.5 million to Eco. Consequently, the Canadian player now holds an operated 26.25% interest in Block 3B/4B with Eco retaining a 20.00% interest and Ricocure (Pty) Ltd with a 53.75% interest.

An independent review of the prospective resources and probability of geological success of the exploration prospects within Block 3B/4B has reported total unrisks gross P50 prospective resources of approximately 4 billion barrels of oil equivalent with the



probability of success ranging from 11% to 39% over the 24 prospects identified.

Furthermore, Africa Oil and its Block 3B/4B partners are progressing with plans to conduct a drilling campaign on the block and are in discussions with potential partners to farm out a share of their working interests. In addition, efforts are being made with an environmental consulting firm in conducting an environmental and social impact assessment process, in preparation for permitting and drilling activity on the block.

Dr Roger Tucker, Africa Oil Chief Executive Officer, commented: "I am pleased we have

received final approval for the increase of our interest in Block 3B/4B. Africa Oil has a significant opportunity set in the Orange Basin, probably the most sought-after new petroleum region globally.

We are excited about the large prospect inventory in Block 3B/4B; the prospects are all based on 3D seismic and are of similar age and type to the discoveries announced by Shell and TotalEnergies in the Orange Basin."

Africa Oil has identified a large opportunity set of exploration prospects, with the majority of the prospects lying in about 1,500 m of water.

About Africa Oil Corp.

Africa Oil Corp. is a Canadian oil and gas exploration company with producing and development assets in deep-water offshore Nigeria. The Company also has a portfolio of exploration assets in Guyana, Namibia, Nigeria, South Africa and in the Senegal Guinea Bissau Joint Development Zone ("AGC"). The Company holds its interests through direct ownership interests in concessions and through its shareholdings in investee companies including Prime Oil & Gas Coöperatief U.A. ("Prime"), Africa Energy Corp., Eco (Atlantic) Oil & Gas Ltd. and Impact Oil and Gas Ltd.

Eni launches a major gas development project in Libya



Tender process: Eni chief executive Claudio Descalzi (left) and NOC chief executive Farhat Bengdara shaking hands in Tripoli, Libya in January 2023. Photo: REUTERS/SCANPIX

Eni, an Italian multinational energy company headquartered in Rome, has launched a major gas development project in Libya. Eni CEO, Claudio Descalzi, and the CEO of the National Oil Corporation of Libya (NOC), Farhat Bengdara, agreed on the development of “Structures A&E”, a strategic project aimed at increasing gas production to supply the Libyan domestic market as well as to ensure export to Europe. The agreement was signed in the

presence of the Prime Minister of Italy, Giorgia Meloni, and the Prime Minister of the Libyan Government of National Unity, Abdul Hamid Al-Dbeibah.

“Structures A&E” is the first major project in the country since the early 2000. It consists of the development of two gas fields, namely Structures “A” and “E”, located in the contractual area D, offshore Libya. The combined gas production from the two structures will start in 2026 and reach a plateau

of 750 million of standard gas cubic feet per day. Production will be ensured through two main platforms tied-in to the existing treatment facilities at the Mellitah Complex.

The project also includes the construction of a Carbon Capture and Storage (CCS) facility at Mellitah, allowing a significant reduction of the overall carbon footprint, in line with Eni’s decarbonization strategy. The overall estimated investment will amount to 8 billion USD, with significant impact on the industry and the associated supply chain, allowing a significant contribution to the Libyan economy.

Eni CEO Claudio Descalzi stated: “This agreement will enable important investments in Libya’s energy sector, contributing to local development and job creation while strengthening Eni’s role as a leading operator in the country.”

Eni is the leading international gas producer in Libya, with a share of 80% of the national production (1.6 bscfd in 2022).

The company has been operating in Libya since 1959 and currently has a large portfolio of assets in exploration, production and development. Operations are run through the joint company Mellitah Oil and Gas BV (Eni 50%, NOC 50%). The average equity production was 165,000 barrels of oil equivalent per day in 2022.

TotalEnergies to Restart Mozambique LNG Project in 2024, Publishes Security Report and Action Plan

TotalEnergies has officially announced that it will resume its Mozambique LNG project in first quarter (Q1) of 2024, according to Reuters report.

Work on the project has been halted since 2021 when a violent insurgency led by Islamic State-linked militants threatened the Cabo Delgado site, leading to TotalEnergies declaring force majeure and halting construction.

In a statement obtained by The Energy Republic, Chief Executive Officer at TotalEnergies, Patrick Pouyanne, said the company planned to restart the project before the end of this year, as the security situation improved with the support a regional military force including Rwanda.

The scope of the project includes development of the Golfinho and Atum fields at the nearby Offshore Area 1 concession that will tie back to an onshore LNG production facility.

In 2023, TotalEnergies published a humanitarian report outlining an action plan to boost local aid and restart the project.

The report by humanitarian action expert Jean-Christophe Rufin observed that danger zones were located south and west of the project site.

It also recommended an action plan including making payments to displaced families, building new houses, improving access to fishing, renegotiating terms with local

defence groups and establishing a local foundation with a multiannual budget of USD\$200 million.

TotalEnergies will invest \$200 million to expedite resettlement and compensation for affected communities, provide solar PV systems to all households in Quitunda, enhance livelihood support, construct and rehabilitate schools and roads, install street lights, and establish agriculture activities in neighboring villages.

Mozambique LNG is a \$20 billion liquefied natural gas (LNG) development targeting the extraction of approximately 65 trillion cubic feet of recoverable gas reserves leveraging a two-train LNG platform with the capacity to produce 43 million tons of LNG per annum.

Jan De Nul and Egypt partner to Construct Underwater Interconnection Cable for Exporting Green Energy to Europe



Caption picture: Wim Dhont, Offshore Cables Manager at Jan De Nul Group, and Salah Ezzat, Vice Chairman of EETC, signed the Memorandum of Understanding in the presence of Egyptian Prime Minister Mostafa Madbouly, Egyptian Energy Minister Mohamed Shaker El-Marqabi and engineer J.P.J. De Nul, CEO of Jan De Nul Group (Source picture: www.zawya.com).

The Egyptian Electricity Transmission Company (EETC), on behalf of the Egyptian government, has signed an agreement with Belgian civil engineering firm Jan De Nul Group, to co-conduct a feasibility study for the construction of an undersea cable connecting the north African country with Europe.

In a press statement made known to The Energy Republic, Jan De Nul Group will now carry out a financial and technical study with the ultimate intention of participating in the development of the export project.

The study covers project financing, the production of green power, the installation and production of transmission systems such as cables, up to finding partners to connect to the existing grids in Europe.

The interconnector will transport more than 2 gigawatts of solar and wind power from Egypt to Europe via an undersea power cable of about 1,000 km long. The current longest interconnector cable between Denmark and Britain measures 765km. To make it even more challenging, water depths along the cable track run up to 3,000m.

Philippe Hutse, Director Jan De Nul Offshore Energy said: "We are extremely happy with the conclusion of this agreement. Egypt recognises our expertise to install ever longer export cables on and in the seabed. We recently ordered a new next-generation cable installation vessel, the Fleeming Jenkin, which is twice the size of any existing cable-laying vessel in the world. We are building this ship for exactly this type of project: long distances, great depths. Something in which we absolutely stand out within the cable installation market. Egypt is clearly a pioneer in energy transition for the African continent and we look forward to supporting it in this."

The start of the actual project execution is scheduled for 2027.

Libya exports first crude oil shipment of 600,000 barrels from Erwin field

The Libyan National Oil Corporation (NOC) has announced exporting an inaugural shipment of 600,000 barrels of Erwin's crude oil.

"This significant achievement marks the first export of crude oil from the Erwin oil field, produced by Zallaf, an esteemed exploration and production entity in the oil and gas sector," said NOC.

"The shipment was dispatched through Az-Zawiah's port, underscoring a milestone in Erwin's



المؤسسة الوطنية للنفط
National Oil Corporation

oil production and the N.O.C's strategic export initiatives," according to the Corporation.

The crude oil had been exported through oil and gas exploration company, Zallaf Libya Oil and Gas. The shipment was dispatched through Az-Zawiah's port, underscoring a milestone in Erwin's oil production and the NOC's strategic export initiatives.

According to the company, the shipment was estimated at 600,000 barrels and was exported through the Port of Zawiya in northwestern Libya.

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FG OFFICIALS, NNPC, STAKEHOLDERS DURING AN INSPECTION TOUR AT PORT HARCOURT REFINERY

NNPCL Achieves Mechanical Completion of Port Harcourt Refinery, Seeks Operators to Manage Refinery

The Nigerian National Petroleum Company (NNPC) Ltd. has achieved the mechanical completion of rehabilitation work for Port Harcourt Refinery. This was confirmed in a press statement released on Thursday by Olufemi Soneye, Chief Corporate Communications Officer, NNPC Ltd, and obtained by The Energy Republic. Rehabilitation work has been ongoing at the Refinery for over two years and the NNPC Ltd. had pledged to complete Phase One of the project (mechanical completion and flare start-up) of Old Port Harcourt Refinery (Area 5) by 31st December 2023. Speaking during an inspection tour of the rehabilitation project, which also coincided with the 15th Refineries' Rehabilitation Steering Committee Meeting, the Group Chief Executive Officer, NNPC Ltd., Mr. Mele Kyari, said as of December 15th, 2023, 84.4% of Area 5 Plant, a key component of the Refinery, and 77.4% of the entire rehabilitation project have been completed.

"In our quest to ensure that this refinery is re-streamed to continue to deliver value to Nigerians, we made a promise that we will reach a mechanical completion of phase one of the rehabilitation project by the end of December and get

the other plants running in 2024. Today, we have kept those commitments," Kyari stated.

The GCEO commended the NNPC Ltd.'s staff and the EPCIC contractors for doing a great job in ensuring that the refinery achieved that significant milestone.

In his remarks, the Chairman of NNPC Ltd Board, Chief Pius Akinyelure described the milestone as "historic", stressing that the board was proud of the staff and management of the refinery.

"We are just starting. We want to be at the highest level of production so that we will keep the prices of petroleum prices in the country stable in order to give comfort to our people and generate more revenue for our country," Akinyelure noted.

Also speaking, the Honourable Minister of State for Petroleum Resources (Oil), Senator Heineken Lokpobiri, said the milestone is another landmark of the renewed hope agenda of President Bola Ahmed Tinubu, GCFR.

In his address, the Minister of State for Petroleum (Gas), Rt. Hon. Ekperikpe Ekpo, said re-streaming the Refinery will herald a good omen for the nation's Liquefied Petroleum Gas (LPG) industry, as LPG, also known as cooking gas, is a major by-product of the Refinery. Also speaking, the Managing Director of Tecnimont Nig. Ltd., Fabio Del Cioppo, one

By Ndubuisi Micheal Obineme

of the EPC Contractors of the Rehabilitation Project, said his company remains committed to fulfilling the terms of the contract.

The PHRC rehabilitation project, which costs about \$1.5bn, is an EPCIC project that covers Engineering, Procurement, Construction, Installation, and Commissioning phases. For Area 5, the Engineering, Procurement, Construction, and Installation have all been completed. The mechanical completion signifies the closure of the Construction and Installation phases.

More importantly, the milestone was achieved under an excellent Health, Safety and Environment (HSE) record, which stood at over 9.5 million manhours with zero Loss Time Injury (LTI).

In another development, NNPCL is seeking a company to provide operations and maintenance (O&M) work for the Port Harcourt Refinery. The company issued a tender seeking a partner to provide services. The aim, NNPC said, was to secure a credible company to "ensure reliability and sustainability" in meeting Nigerian energy demand.

The criteria for prospective operators includes \$2bn of minimum turnover since 2019, a current credit rating and experience in refinery management.



EGINA Oil Spill: 3000 Barrels of Crude Oil Spill in Nigerian Waters, NOSDRA Reveals ‘Horse Failure’ as Root Cause

The National Oil Spills Detection and Response Agency (NOSDRA) has said that the TotalEnergies EGINA Oil Spill of 3000 barrels were due to an operational issue resulting from the failure of an export hose.

The National Oil Spills Detection and Response Agency (NOSDRA) has said that 3000 barrels of oil lost at TotalEnergies Egina FPSO were due to export hose failure.

The EGINA oil spill occurred in the early hours of November 15, 2023, while crude oil was being loaded from the Egina FPSO to a vessel.

In a terse message obtained by The Energy Republic, TotalEnergies confirmed the leak, stating that the oil spill was a minor one and had been contained with appropriate remedial measures.

“This is not a massive leak and the sheen has been treated with the appropriate response that resulted in a reduction of most of it.

“No shoreline or communities have been impacted,” Dr. Charles Ebereonwu TotalEnergies E&P Nigeria Limited, Country Communications Manager said, affirming that crude oil production at the 200,000 barrels per day capacity facility, with a storage capacity of 2.3 million barrels of crude, “was not affected by the incident.”

Speaking in a media chat with journalists, the Director-General of the National Oil Spills Detection and Response Agency (NOSDRA), Idris Musa, said that the spill was not a minor one, noting that the agency including TotalEnergies and other industry players are on the ground in tracing and tracking the oil slick and supervising response efforts.

However, this revelation contradicts TotalEnergies’ claims of minimal impact, saying: “This is not a massive leak, and the sheen has been treated with the appropriate response that resulted in a reduction of most of it,” thereby underscoring the need for greater transparency regarding information on such issues.

By Ndubuisi Micheal Obineme

KEY FACTS ABOUT EGINA FPSO

- 1** TotalEnergies EGINA FPSO is Nigeria’ flagship offshore project driving Nigerian Content Growth
- 2** The FPSO is connected to 44 subsea wells 1,600 meters deep and will produce 200,000 barrels of oil per day.
- 3** The Egina field is the second development in production on the Oil Mining Lease (OML) 130
- 4** Many scopes of the Egina FPSO project were executed in local yards in Nigeria
- 5** Weighing close to 220,000 metric tons and measuring 330 meters long by 60 meters wide, the Egina FPSO is the largest ever built by TotalEnergies
- 6** The FPSO is built by Samsung Heavy Industries of Korea at a cost of \$3.3 billion, while the entire Egina field development project, including the FPSO cost \$16 billion



Mr. Idris Musa, the Director-General/Chief Executive Officer of NOSDRA



Initially discovered in 2003, the Egina oil field is the second development in production on the Oil Mining Lease (OML) 130 following the Akpo field, which started-up in 2009.

EGINA is one of TotalEnergies most ambitious ultra-deep offshore projects, operated by TotalEnergies with a 24% interest, in partnership with Nigerian National Petroleum Company Limited (NNPCL), South Atlantic Petroleum - SAPETRO Ltd. (15%), CNOOC E&P Nigeria Limited, a wholly owned subsidiary of CNOOC Limited (45%) and Petrobras Oil and Gas BV (16%).

TotalEnergies has been present in Nigeria for over 50 years, both in upstream and downstream activities.

The Group's production in the country was 267,000 barrels of oil equivalent a day in 2017.

TotalEnergies operates five production licenses (OML) on the 34 leases in which the Group has interests (including two exploration licenses).

In addition to OML 130 where the Akpo, Egina and Preowei fields were discovered, TotalEnergies operates other offshore assets such as OML 99 (40%) where the Ikike discovery is located, OML 100 (40%) and OML 102 (40%) where the Ofon 2 project was completed in 2016.

In Nigerian Onshore, TotalEnergies is the operator of OML 58 (40%) under its joint venture with Nigerian National Petroleum Company Limited (NNPCL).

The Company is also developing Liquefied Natural Gas (LNG) activities with a 15% stake in the Nigeria LNG Ltd company, which operates six LNG liquefaction trains on Bonny Island.

In summary, TotalEnergies is a broad energy company that produces and markets fuels, natural gas and electricity. Active in more than 130 countries, with over 100,000 employees worldwide.

According to NOSDRA, the agency deployed high-level personnel and activated the National Oil Spills Contingency Plan to contain the spill, adding that NOSDRA and TotalEnergies are working hard to tackle the pollution to minimize its environmental impact.

Mr Musa explained that TotalEnergies took steps that made the response swift and effective, adding that other agencies and industry players assisted in the cleanup process.

He stressed that the oil spill cleanup process required a collaborative response from oil industry players, noting that they have deployed aircraft including five vessels in the application of 15,000 liters of liquids also known as a dispersant to mop up the spilled crude oil in the Nigerian waters.

"Since the incident happened, our men have been liaising with other organs of government to ensure the pollution is effectively controlled and managed, to protect the marine environment and the communities close to the incident point," NIMASA chief Bashir Jamoh said.

"Accidents do happen, it's what we do thereafter that matters, and I believe that the IOC Total, working with NIMASA, NUPRC, and NOSDRA and collaborating with international service providers, will surely ensure proper management of the spill."

Furthermore, NIMASA disclosed that a reconnaissance survey of the impacted area shows the shoreline communities of Andoni, Qua-Iboe terminals, Bonny Island, Opobo/Nkoro, and Eastern Obolo, which are closest to the Egina oil field, are not affected so far.

The Oil Spill Response Limited from the United Kingdom is also assisting with pollution control measures. NIMASA's Director General underlines that the agency is working in tandem with all stakeholders to control pollution and put in place measures to prevent such occurrences in the future, in line with provisions of the MARPOL Convention.

Based on our findings, The Egina oil field is located approximately 150km off the coast of Nigeria in the Gulf of Guinea, at a water depth of more than 1,500 meters, 200 kilometers offshore from Port Harcourt.

The project is based on a subsea production system connected to an FPSO (floating production, storage, and offloading vessel) designed to hold 2.3 million barrels of oil.

Weighing close to 220,000 metric tons and measuring 330 meters long by 60 meters wide, the Egina FPSO is the largest ever built by TotalEnergies.

The FPSO is connected to 44 subsea wells 1,600 meters deep and will produce 200,000 barrels of oil per day.

Environmental Impact of Oil Spillage in Nigeria's Petroleum Sector: Assessing the PIA 2021 and Other Regulatory Measures

By Sandra Osinachi-Nwadem



Sandra Osinachi-Nwadem, Environmental, Oil and Gas Lawyer

The Nigerian Petroleum sector consists of interdependent activities, which include exploration, production, transportation, refining, and marketing. Whereas the sector, no doubt, provides the engine for significant economic growth through contributions to national revenue, virtually all the activities in this sector are prone to pollution. Blessed with abundant oil reserves, Nigeria ranks 1st in Africa and 11th globally.

However, oil spillage, a persistent issue since the discovery of oil in Oloibiri, Delta State, in 1956, has become an ongoing crisis. Oil spillage may result from breaks in aging or poorly maintained infrastructure during exploration, production, and development operations, or accidents, vandalism, and other incidents. When it occurs, large volumes of oil are released into the environment, especially if caused by a well blow-out.

Crude oil is known to contain heavy metals and oil spills contaminate the environment and can result in human exposure to heavy metals. As the seat of crude oil activities, the Niger Delta region experiences the highest rate of oil spills in Nigeria, with about 3.1 million barrels of crude oil spilled from 1976 to 2014 in this region.

Each year, several post-impact assessment studies are carried out to assess the impact of hazards caused by oil activities and spills on the physical and social environments. Several of these studies have reported the negative socioeconomic impacts of oil spills, such as a decrease in agricultural productivity, pollution of traditional fishing grounds, and destruction of aquatic life, as well as the multiple adverse health effects, most of which are due to heavy metal toxicity.

In the past 10 years, several spills have also been caused by oil theft, also known as bunkering. This is where oil is stolen from pipelines and then shipped to local or international markets. There has also been an increase in artisanal refining when camps in the mangrove refine

crude for local or other needs. These are unregulated and so can cause serious pollution.

The National Oil Spill Detection & Response Agency (NOSDRA) is the Nigerian Federal Government agency responsible for monitoring and responding to oil spills and their cleanup in Nigeria, and it does this through its zonal offices. NOSDRA acts between oil companies and communities at the local and state levels.

Based on NOSDRA's Oil Spill Data Summary, there were 4 major spills, 8 medium spills, and 371 minor spills with 231 spills uncategorized in 2022, with the majority of the IOCs accounting for these spills. These spills occurred in inland waters, land, swamp, shoreline, and open sea, and resulted in the loss of 45,709.435 barrels of oil, the equivalent of 229 oil tanker trucks full of oil.

The NOSDRA Act empowers the Agency to make regulations for monitoring compliance and enforcement of the applicable laws and regulations in the upstream, midstream, and downstream sub-sectors of the Nigerian Petroleum sector. The Act specifically mandates owners of facilities engaged in onshore and offshore petroleum exploration, production, and development to undertake spill prevention control measures as prescribed under the relevant regulations.

There is also the National Environmental Standards and Regulations Enforcement Agency (NESREA) established by the NESREA Act 2007 (as amended). The Act empowers NESREA to enforce compliance with the provisions of international agreements, protocols, conventions, and treaties on the environment, including climate change, biodiversity, conservation, desertification, forestry, oil and gas, chemicals, hazardous wastes, ozone depletion, marine and wildlife, pollution, sanitation and such other environmental agreements as may from time to time come into force.

However, the NESREA Amendment Act amends paragraph 7© by deleting the NESREA to enforce compliance with the provisions of international agreements, protocols, conventions, and treaties on Oil and Gas.

The foregoing as well as the removal of the representative of the Oil and Gas companies from the NESREA governing council seem to suggest that the legislators intend to limit, NESREA's control over oil and gas companies regarding environmental matters.

The Petroleum (Drilling and Production) Regulations require licensees and lessees to adopt precautions to prevent pollution and dispose of waste from petroleum operations in accordance with applicable regulations, as may be approved by the regulators.

The Role of PIA

The enactment of the Petroleum Industry Act (PIA) in August 2021 has also done much to strengthen the foregoing Federal legislation. The PIA empowers the Nigerian Upstream Petroleum Regulatory Commission (the Commission) and the Nigerian Midstream & Downstream Petroleum Regulatory Authority (the Authority) to ensure compliance with all applicable laws and regulations governing petroleum operations in the upstream, midstream, and downstream sectors. The Act specifically saddles the regulators with the responsibility to promote healthy, safe, efficient, and effective conduct of petroleum operations in an environmentally acceptable and sustainable manner.

The Act also makes it mandatory for a licensee or lessee engaged in upstream and midstream operations to within one year of the grant of the applicable license or lease submit an Environmental Management Plan (EMP) in accordance with the extant environmental Acts for approval by the Commission or Authority.

A financial contribution to an Environmental Remediation Fund (ERF) established by the Commission is a condition for the grant of a license or lease before the approval of the licensee or lessees EMP.

The Upstream Petroleum Environmental Regulations 2022 provides amongst others that it is the responsibility of an upstream operator, licensee, or lessee to within six months, contain and recover any spill discovered within its operational area, whether or not its source is known,



Sandra Osinachi-Nwandem

and the cost for this remediation is to be defrayed from the Environmental Remediation Fund.

The operator is required to submit its Oil Spill Contingency Plan (OSCP) containing a description of the operator's areas of operation to the Commission within the first quarter of the year for review. The OSCP shall contain an Environmental Sensitivity Index Map where the operator identifies all the sensitive areas that should be protected in the event of an emergency. The OSCP is to be submitted to the Commission for approval before the commencement of operations.

The operator is mandated to make a report to the Commission within twenty-four (24) hours from the occurrence of a spill in the Oil Spillage and Notification Reporting Format. Within 24 hours of such notification, a Joint Spill Investigation Team (JSIT) is set up to conduct a joint investigation visit to the spill site as soon as is practicable. The JSIT is comprised of the operator, the community where such a spill occurred, and any third party responsible for the spill where known. The operator is required to keep a register to record the daily events from the time a spill is first noticed until clean-up operations are completed.

The Commission makes it mandatory for the operator to conduct a 'Post Impact Assessment' within three (3) months of the spillage. This is done to adequately evaluate the biological sensitivities of the impacted area as well as to determine the extent of damage done and the estimated time for a complete recovery of the area.

In the same vein section 28 of the Midstream and Downstream Petroleum Environmental Regulations 2023 makes it mandatory for a licensee or permit holder carrying out

midstream operations to report a spill or release of refined and unrefined petroleum, natural gas industry chemicals and products to the Authority within 24 hours of such spill in accordance with its Spill or Release Contingency Plan (SRCP) in the Spill or Release Notification Reporting format prescribed in the guidelines issued by the Authority.

It is of extreme importance for upstream and midstream oil and gas operators to carry out operations in compliance with the Commission's and Authority's prescribed standards in cases where a spill occurs, as failure to: place adequate measures to avoid spillages, report a spill incident within time, cleanup impacted area after conducting a post-impact assessment, convene a JSIT and effect agreed compensation all attract sanctions, fines and administrative penalties prescribed in the PIA and its regulations.

In addition to applicable federal legislation, a number of Nigerian states have enacted environmental laws that impose penalties on erring operators.

Nigerian courts have also awarded special, exemplary, and general damages in actions arising from environmental pollution. These actions are brought under the common law principles of the torts of nuisance, trespass, negligence, and strict liability.

About the Author

Sandra Osinachi-Nwandem is a certified oil and gas industry expert with in-depth knowledge in acting for and advising on legal issues of Oil & gas/Energy laws and policies, Environmental laws and policies, and regulatory compliance for players in the Petroleum Industry.

Sandra holds a Master of Laws Degree with a specialization in Oil & Gas, Environmental, and Corporate Commercial Law.

One of her dissertations titled "**Marginal Fields Operation in Nigeria Under the PIA: Lessons from Other Jurisdictions,**" has been recognized as the most well-researched work.

The project provided key recommendations aimed at improving marginal field operations in Nigeria, as well as strengthening the country's petroleum sector.



Wael Sawan, Shell's Chief Executive Officer.

Shell sells Nigerian onshore oil business for \$2.4 billion

British energy giant, Shell has reached an agreement to sell its Nigerian onshore subsidiary, Shell Petroleum Development Company of Nigeria Limited (SPDC) to Renaissance Africa Energy Company Limited, a consortium of five companies comprising four exploration and production companies based in Nigeria and an international energy group.

In a press statement obtained by The Energy Republic, Shell will sell the SPDC for a consideration of \$1.3 billion, while the buyers will make an additional payment of up to \$1.1 billion relating to prior receivables at completion.

The buyer, the Renaissance consortium comprises ND Western, Aradel Energy, First E&P, Waltersmith, all local oil exploration and production companies, and Petrolin, a Swiss-based trading and investment company.

However, Shell will retain a role in supporting the management of SPDC JV facilities that supply a major portion of the feed gas to Nigeria LNG (NLNG), to help Nigeria achieve maximum value from NLNG.

"This agreement marks an important milestone for Shell in Nigeria, aligning with our previously announced intent to exit onshore oil production in the Niger Delta, simplifying our portfolio and focusing future disciplined investment in Nigeria on our Deepwater and Integrated Gas positions," said Zoë Yujnovich, Shell's Integrated Gas and Upstream Director.

"It is a significant moment for SPDC, whose people have built it into a high-quality business over many years. Now, after decades as a pioneer in Nigeria's energy sector, SPDC will move to its next chapter under the ownership of an experienced, ambitious Nigerian-led consortium.

"Shell sees a bright future in Nigeria with a positive investment outlook for its energy sector. We will continue to support the

country's growing energy needs and export ambitions in areas aligned with our strategy."

Shell pioneered Nigeria's oil and gas business beginning in the 1930s. It has struggled for years with hundreds of onshore oil spills as a result of theft, sabotage, and operational issues that led to costly repairs and high-profile lawsuits.

Speaking at the World Economic Forum in Davos, Shell CEO, Wael Sawan said the risks involved in the Company's operations in the Nigerian onshore areas as well as balancing its return on investment have become a major challenge and Shell would no longer continue working in the onshore areas in Nigeria.

"We are committed to doing business in Nigeria. We will be focusing on our gas value chain businesses in Nigeria. We are committed to growing and investing in our businesses in the country," Sawan added.

Completion of the transaction is subject to approvals by the Federal Government of Nigeria and other conditions.

Shell has three other main businesses in Nigeria that are outside the scope of this transaction:

- ◀ Shell Nigeria Exploration and Production Company Limited (SNEPCo), which produces oil and gas in the deepwater Gulf of Guinea;
 - ◀ Shell Nigeria Gas Limited (SNG), which provides gas to domestic industrial and commercial customers; and
 - ◀ Daystar Power Group, which provides integrated solar power to commercial and industrial businesses across West Africa.
- ◀ In addition, Shell holds a 25.6% interest in NLNG, which produces and exports LNG to global markets. Shell's interest in NLNG is also outside the scope of this transaction.



We are Shell

\$1.36B.



In corporate taxes and royalties paid by SPDC and SNEPCo to the Federal Government of Nigeria in 2022.

220



Nigerian beneficiaries of Shell LiveWire entrepreneurship programme.

3,500



University grants and 990 cradle- to-career scholarship grants awarded by SPDC JV, SNEPCo and SNG since 2016.

\$34.29M.



Direct social investment made by SPDC JV, SNEPCo and SNG in 2022.

\$79.77M.



Paid by SPDC and SNEPCo to the Niger Delta Development Commission (NDDC) in 2022.

\$1.9B.



Contracts awarded to Nigerian-registered companies by Shell Companies in Nigeria in 2022.

\$200M.



Committed to support All On for renewable energy impact investments.

\$1M.



Donated by Shell for relief to people impacted by the flood disaster in 2022.

2,500



Employees (97% are Nigerian nationals) & 10,000 contractors supporting operations.

\$106.3M.



Disbursed by SPDC JV to communities through GMOUs since 2017.

92,000+



People benefited from CHIS (Community Health Insurance Scheme) since 2010

\$15M.



Educational infrastructure projects in Lagos and Bayelsa states.

\$23.6M.



In investment committed to be paid to All On's renewable energy company.

\$15M.



Funding for All On for the expansion on DART programme.

Powering Progress in Nigeria





NNPC Ltd Woos South Korean Investors for Gas Projects, Attends Commissioning of Alfred Temile 10 Vessel

The Nigerian National Petroleum Company Limited (NNPC Ltd.) has held talks with a South Korean consortium led by Daewoo E & C on the development of gas projects in Nigeria.

The discussions which held in Seoul, South Korea, yesterday were aimed at deepening NNPC Ltd.'s drive to tap into the nation's vast gas resources to be a supplier of clean and affordable energy to the global market.

South Korea is a major destination for Liquefied Natural Gas exports and the consortium, in collaboration with the Korean Export-Import Bank, has expressed interest in advancing discussions on investing in greenfields and other gas development opportunities.

The talks will pave the way for the execution of a Memorandum of Understanding (MoU) that will unlock strategic foreign direct investment in line with the President Bola Ahmed Tinubu administration's policy of making Nigeria a prime destination for global investors.

GCEO, NNPC Ltd., Mele Kyari has also congratulated Temile Development Company, an indigenous player in the gas sector, on the commissioning of its 23,000-cubic-metres ultra-modern Liquefied Petroleum Gas (LPG) Carrier in Ulsan, South Korea today.

According to the GCEO, the vessel named Alfred Temile 10, represents a significant stride towards deepening the utilisation of gas in-country and growing gas revenues.

"It is great that Temile Development Company is able to complete the construction of 23KT LPG vessel. This will go a long way in improving access to LPG in the domestic market and provide cleaner fuel in our country. Nigeria's objective is to ensure that everyone has access to clean energy and particularly walk away from biomass as a source of energy. We know this is good and that is why we will continue to support it".

He disclosed that NNPC Ltd., alongside its partner West Africa Gas Ltd. (WAGL), was building its own vessels which will boost LPG supply in Nigeria with a view to saturating the market.





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