

- **◆ Shell Wins Court Appeal For GHG Emissions**
- **◆ SAIPEC 2025 Returns to Lagos in Feb 2025**

THE ENERGY REPUBLIC

A SPECIAL EDITION FOR GLOBAL GAS SECTOR FEATURING COP29 | NOV - DEC EDITION 2024

SPECIAL FEATURE

'How Nigeria's First \$5bn FLNG Project Will Impact Domestic, Africa, Global Economy' -Julius Rone, UTM CEO

A B D

Page 18

#COP29

FEATURES
PATHWAYS
OPPORTUNITIES
FOR ENERGY
TRANSITION

ISSN 2705-2052

Page 05

EXCLUSIVE INTERVIEW

WITH VERDE I LGE FRANCE GAZ

A <u>& D</u>

Page 67



STRENGTHENING THE GLOBAL ENERGY INDUSTRY

THE ROLE OF NATURAL GAS FOR A JUST ENERGY TRANSITION

Page 58



Join us at SAIPEC 2025

Get ready to connect with industry leaders and decision-makers at Africa's premier oil, gas, and energy event

Strategic and Technical Conferences

Delivered by leading voices from the oil, gas, and energy sectors

Networking Opportunities

Connect with global professionals and decision makers

International Exhibition

Showcasing the latest innovations in oil, gas, and energy

Let's drive Africa's energy future together

Register now and secure your place



Contact Us

mohamed@saipec-event.com



Visit Website www.saipec-event.com

Hosted by

Strategic partners 2025











Eko Convention Centre | Lagos, Nigeria | #SAIPEC2025









Published by:

The Energy Republic Marketing and Communications Limited (RC: 1919406)

Editorial Director

Bako Ambianda (USA)

Managing Editor

Ndubuisi Micheal Obineme

Editor

Tobi Owoyimika

Legal Counsel

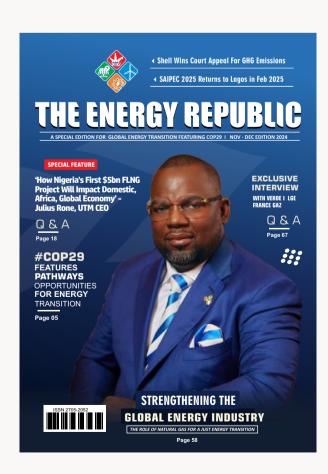
Barr. Jackson Olagbaju

Correspondents:

Genevieve Aningo Ifeoma Ofole Samson Binutiri

The Energy Republic (TER) is published by The Energy Republic Marketing and Communications Limited. TER provides an in-depth analysis about the oil industry, and opportunities around clean energy sources such as Natural Gas, Hydrogen, Ammonia, Solar Energy, Wind Energy, Hydro Energy, Geothermal Energy, Biomass Energy, among others.

Email: info@theenergyrepublic.com oilandgasrepublic@gmail.com



EDITOR'S NOTE

Dear Industry Stakeholders,

Season Greetings from all of us at The Energy Republic!

The global energy industry is set for growth in this era of energy transition triggered by the population growth rate worldwide, which also requires more energy to complement the global population growth and provide much-needed energy to the people. According to published reports, three-quarters of a billion people in the developing nations are suffering from energy poverty as they have no access to electricity and nearly 2.5 billion people have no clean cooking solutions.

However, industry experts have said that accelerating the renewables-based transition to meet the growing energy demand is far from being on track, and the world needs more energy to address issues around energy poverty in developing nations as well as mitigate disruptions caused by geopolitical shocks, and supply chain challenges.

While the oil and gas industry has been linked to climate change issues across the world, there is also significant progress made on emission reduction targets by industry operators and energy producers.

This edition is focused on 'The Role of Natural Gas For A Just Energy Transition', featuring stakeholders' and experts' commentaries on how natural gas could fill the gap in the global energy demand and supply, while also addressing issues around greenhouse gas emissions (GHG).

In this edition, we also featured a summary of the outcome of COP29 held in Baku including exclusive interviews with a German investor known as Dr. Stefan Liebing, Conjuncta CEO, who provided insights on strategies needed to drive German investments into the African energy sector, coupled with an interview with Ernie Miller, Verde Clean Fuels CEO, about his company's innovative technology for clean energy production.

Notably, we had an opportunity to interview Ewa Abramiuk, General Manager of Liquid Gas Europe, about the role of liquid gases in Europe's energy mix and the potential of renewable liquid gases to reduce emissions to 90%.

Lastly, we featured several interesting industry content that provides the latest updates about ongoing developments in the global energy landscape as well as the impacts of US President-Elect Donald Trump in the energy sector.

Enjoy your read and feel free to share your comments or contributions with us via email.

Best regards,

Ndubuisi Micheal Obineme Managing Editor The Energy Republic Markeng and Communications Limited

EDITORIAL CONTENTS

THE ENERGY REPUBLIC

CREATING GLOBAL OPPORTUNITIES

20	Victor Tivane Launches New Book for Mozambique
29	Local Content Development in Oil, Gas Sector

Francegaz Predicts Natural Gas to Contribute 20% in French Energy Mix by 2030

Study shows Asia Needs more US LNG supply to curb surging coal use

Rystad Energy Forecasts LNG Growth Opportunities Under Trumps' Presidency

Rystad Energy Forecasts LNG Growth Opportunities **Under Trumps' Presidency**

67 "Verde Technology Converts Stranded Resources into Fuel" - Ernie Miller, Verde Clean Fuels CEO

Why Singapore maintains a prominent position for business and trade development globally – Ivan Tan Shell Awards \$1.98 Billion Contracts to Nigerian Companies in 2023

TotalEnergies' 2024 Outlook highlights paths for global energy system

CWP Global, Conjuncta joins 600 MW Green Hydrogen Project Consortium in Angola

SAIPEC Returns to Lagos in February 2025

Global African Hydrogen Summit Delivers On Pledge To Fuel Africa's Green Industrialisation...

"Renewable Liquid Gases Can Reduce Emissions to 90%, Contribute to Europe's Climate Neutrality Ambitions" - Ewa Abramiuk, Liquid Gas Europe GM

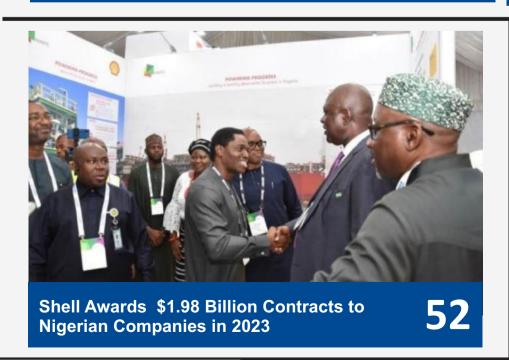
Burford Capital Report Reveals how Businesses are Preparing for Increased Global Energy **Transition Disputes**



"Derisking Investment, Govt Guarantees, 36 Key to Drive German, African..." - Stefan



"How Nigeria's First \$5bn FLNG Project Will 47 Africa, Global Economy" - Julius Rone









COP29 Baku Azerbaijan

COP29 UN Climate Conference Agrees To Triple Public Finance To \$300 Billion Annually In **Developing Countries**

he UN Climate Change Conference (COP29) held in Baku, Azerbaija, concluded with a new finance goal to help countries to protect their people and economies against climate disasters, and share in the vast benefits of the clean energy boom.

With a central focus on climate finance. COP29 brought together nearly 200 countries in Baku, Azerbaijan, and reached a breakthrough agreement that will:

- ◀ Triple public finance to developing countries, from the previous goal of USD 100 billion annually, to USD 300 billion annually by 2035.
- ◆ Secure efforts of all actors to work together to scale up finance to developing countries, from public and private sources, to the amount of USD 1.3 trillion per year by 2035.
- ◀ Known formally as the New Collective Quantified on Climate Finance (NCQG), it was agreed after two weeks of intensive negotiations and several years of preparatory work, in a process that requires all nations to unanimously agree The International Energy Agency expects on every word of the agreement.

"This new finance goal is an insurance policy for humanity, amid worsening climate impacts hitting every country," said Simon Stiell, Executive Secretary of UN Climate Change. "But like any insurance policy - it only works - if premiums are paid in full, and on time. Promises must be kept, to protect billions of lives."



Simon Stiell, Executive Secretary of **UN Climate Change**

"It will keep the clean energy boom growing, helping all countries to share in its huge benefits: more jobs, stronger growth, cheaper and cleaner energy for all."

global clean energy investment is set to exceed USD 2 trillion for the first time in 2024.

The new finance goal at COP29 builds on significant strides forward on global climate action at COP27, which agreed an historic Loss and Damage Fund, and COP28, which delivered a global agreement to transition away from all fossil fuels in energy systems swiftly and fairly, triple renewable energy and boost climate resilience.

By Ndubuisi Micheal Obineme

COP29 also reached agreement on carbon markets – which several previous COPs had not been able to achieve. These agreements will help countries deliver their climate plans more quickly and make faster progress in halving global emissions this decade, as required by science.

Important agreements were also reached on transparent climate reporting and adaptation as summarized below.

Stiell also acknowledged that the agreement reached in Baku did not meet all Parties' expectations, and substantially more work is still needed next year on several crucial issues.

"No country got everything they wanted, and we leave Baku with a mountain of work to do," said Stiell. "The many other issues we need to progress may not be headlines but they are lifelines for billions of people. So this is no time for victory laps, we need to set our sights and redouble our efforts on the road to Belem."

The finance agreement at COP29 comes as stronger national climate plans (Nationally Determined Contributions, or NDCs) become due from all countries next year. These new climate plans must cover all greenhouse gases and all sectors, to keep the 1.5°C warming limit within reach. COP29 saw two G20 countries – the UK and Brazil - signal clearly that they plan to ramp up climate action in their NDCs 3.0, because they are entirely in the interests of their economies and peoples.

"We still have a very long road ahead, but here in Baku we took another important step forward," said Stiell. "The UN Paris Agreement is humanity's life-raft; there is nothing else. So here in Baku and all of the countries represented in this room we're taking that journey forward together."



COP29 Notable Achievements Brings Carbon Market, Sustainability Reporting, Others Into

Action

notable achievement during the past two weeks was the progress made on carbon markets. After nearly a decade of work, countries have agreed on the final building blocks that set out how carbon markets will operate under the Paris Agreement, making country-to-country trading and a carbon crediting mechanism fully operational.

On country-to-country trading (Article 6.2), the decision out of COP29 provides clarity on how countries will authorize the trade of carbon credits and how registries tracking this will operate. And there is now reassurance that environmental integrity will be ensured up front through technical reviews in a transparent process.

On day one of COP29, countries agreed standards for a centralized carbon market under the UN (Article 6.4 mechanism). This is good news for developing countries, who will benefit from new flows of finance. And it is particularly good news for least developed countries, who will get the capacity-building support they need to get a foothold in the market.

This mechanism, known as the Paris Agreement Crediting Mechanism, is underpinned by mandatory checks for projects against strong environmental and human rights protections, including safeguards that ensure a project can't go ahead without explicit, informed agreement from Indigenous Peoples. It also allows anyone affected by a project to appeal a decision or file a complaint.

Under the text agreed on Article 6.4, there is a clear mandate for the UN carbon market to align with science. It tasks the Body getting this market up and running to consider the best available science across all work going forward.

The work on carbon markets doesn't stop in Baku. The Supervisory Body setting up the new carbon crediting mechanism has been handed a long 2025 to-do list by Parties and will continue to be accountable to them.

Transparency

Transparent climate reporting made big strides forward in Baku, building a stronger evidence base to strengthen climate policies over time, and helping to identify financing needs and opportunities.

To date, 13 Parties have now submitted their first Biennial Transparency Reports (BTR) – due from all Parties by the end of the year.

Andorra, Azerbaijan, the European Union, Germany, Guyana, Japan, Kazakhstan, Maldives, Netherlands, Panama, Singapore, Spain, and Türkiye have led the way on transparent climate reporting, and set an example for others to follow. The list of received BTRs is continuously being updated here.

In addition, all transparency negotiating items concluded successfully at COP29, with Parties expressing their appreciation for the timely completion of the Enhanced Transparency Framework (ETF) reporting tools, the technical trainings, and the support provided to developing countries for reporting under the ETF that took place in 2024.

A total of 42 events were organized under #Together4Transparency, a UNFCCC collaborative initiative that promotes climate transparency with Parties and non-Party stakeholders.

These events emphasized the vital role of transparency in preparing NDCs and net-zero pathways, as well as in recognizing climate action from non-Party stakeholders. Events included high-level sessions, mandated events and training sessions to prepare countries for their BTRs, as well as to equip technical experts for the upcoming review process.

The critical role of REDD+ was recognized through a £3 million pledge by the UK International Forest Unit to support UN Climate Change's work over four years. This funding will bolster REDD+ activities in many countries, enabling the secretariat to create dedicated spaces for REDD+ experts to engage in technical dialogue.

These efforts are expected to enhance the transparency and implementation of REDD+, in line with the Global Stocktake objective to halt and reverse deforestation and forest degradation by 2030.

By Ndubuisi Micheal Obineme

Adaptation

COP29 was an important moment for adaptation, with the delivery of several key outcomes. The COP decision on matters relating to the least developed countries (LDCs) contains a provision for the establishment of a support programme for the implementation of National Adaptation Plans (NAPs) for the LDCs. Parties extensively discussed the second five-year assessment of progress to formulate and implement NAPs, and will continue that in June 2025.

A High-Level Dialogue on National Adaptation Plans convened ministers from least developed countries and small island developing States, financial experts and international donors to address the growing urgency of climate adaptation. Their discussions focused on innovative financing, technical support, and accelerated action to meet the 2025 submission deadline for NAPs. The event concluded with a strong call to action to expedite NAPs and translate plans into tangible outcomes.

The outcome on the global goal on adaptation sets a clear path forward on the road to COP30 for the indicators work programme, providing a process for experts to continue their technical work before passing the baton to Parties. COP29 also launched the Baku

Adaptation Road Map and Baku high-level dialogue on adaptation to enhance the implementation of the UAE Framework. Finally, the outcome raises ambition by agreeing to continue unpacking transformational adaptation moving forward.

COP29 took a decisive step forward to elevate the voices of Indigenous Peoples and local communities in climate action, adopting the Baku

Workplan and renewing the mandate of the Facilitative Working Group (FWG) of the Local Communities and Indigenous Peoples Platform (LCIPP). The adopted decision acknowledges the progress made by the FWG in fostering collaboration among Parties,

Indigenous Peoples and local communities, and underscores the leadership of Indigenous Peoples and local communities in addressing the climate crisis.



Gender and climate change

Countries agreed a decision on gender and climate change, extending the enhanced Lima

Work Programme on Gender and Climate Change for another 10 years, reaffirming the importance of gender equality and advancing gender mainstreaming throughout the convention.

They also agreed to develop a new gender action plan for adoption at COP30, which will set the direction for concrete implementation.

Civil society participation, children and youth

World leaders at COP29 were joined by civil society, sub-nationals, business, Indigenous Peoples, youth, philanthropy, and international organizations. More than 55,000 people attended COP29 to share ideas, solutions, and build partnerships and coalitions.

The decisions taken at COP29 also reemphasize the critical importance of empowering all stakeholders to engage in climate action; in particular under Action for Climate Empowerment (ACE). Parties recalled the importance of integrating ACE elements into national climate change policies, plans, strategies and action, and noted the secretariat's compendium of good practices for integrating ACE elements into NDCs.

COP29 marked a significant milestone as dedicated spaces were created to ensure the meaningful participation of children within the Youth-led Climate Forum for the first time. Four children, including the youngest at just 10 years old, took on roles as moderators and speakers, engaging directly with Parties and observer organizations.

Their participation highlighted the importance of inclusivity and intergenerational collaboration in driving climate action.

In parallel with the formal negotiations, the Global Climate Action space at COP29 provided a platform for governments, businesses and civil society to collaborate and showcase their real-world climate solutions.

The High-Level Champions, under the Marrakech Partnership for Global Climate Action, launched their 2024 Yearbook of Global Climate Action at COP29, showing that climate action by non-Party stakeholders, including businesses, investors, subnational actors and civil society, is driving progress towards the goals of the Paris Agreement, and that their engagement is more crucial than ever.

COP29 PHOTOS







Source: UN Climate Change





FEATURED CONETNT

Jon Ødegård Hansen Head of Energy Scenarios

Rystad Energy



COP29: Pledges, challenges and the crossroads of global energy transitions By Jon Ødegård Hansen

he 29th Conference of the Parties (COP29) in Baku, Azerbaijan concluded last week, with lengthy and challenging negotiations yielding an eleventh-hour deal on tackling climate change. At its core was a groundbreaking pledge by wealthy nations to provide \$300 billion annually in climate finance by 2035—a tripling of the current target, but significantly lower than what is needed to support emerging and developing economies.

Last year, energy end-users spent a staggering \$10.5 trillion, with \$6.3 trillion borne by non-OECD countries. The \$300 billion pledge, while significant, represents just 5% of the annual energy bill for developing nations—a seemingly modest sum. Yet, if allocated strategically, its transformative potential is enormous. For example, investments targeting energy infrastructure in Africa, South Asia, and Latin America could lead to the installation of 1,500 gigawatts (GW) of solar, 500 GW of wind, and 300 gigawatthours (GWh) of battery storage by 2035, aligning with the climate goals of countries in those regions and advancing global decarbonization efforts.

Despite decades of climate talks, global carbon dioxide (CO2) emissions have continued to rise. Achieving the 1.5-degree Celsius target—which refers to a target for an average global temperature rise above pre-industrial levels— under the Paris Agreement demands unprecedented reductions

in emissions, a goal requiring swift, transformative action.

The commitments made at COP29 could help steer the global energy system toward the necessary trajectory—but only if implemented with precision. The divergence between the 1.5-degree and 2-degree pathways underscores the urgency of narrowing the policy gap to avoid catastrophic climate outcomes.

Emerging economies require \$1.3 trillion annually by 2030 for energy transition efforts, adaptation, and resilience. While the \$300 billion pledge at COP29 is a critical step, it covers only a fraction of these needs. Private investment and development banks must play a central role in bridging this gap. Additionally, geopolitical factors, such as the withdrawal of the US from the Paris Agreement under Donald Trump, have complicated global cooperation, as has the shifting economic landscape, with emerging economies such as China taking center stage in global emissions and growth.

Beyond finance, COP29 emphasized the importance of methane reduction. Methane, with its warming potential estimated at between 30 and 80 times greater than CO2, presents a fast-acting solution to curb global warming. Cutting methane emissions by 50% over the next three decades could reduce global temperatures by 0.2 degrees—a critical buffer in the fight against climate change.

Simultaneously, countries are preparing to submit revised nationally determined contributions (NDC), which are pivotal to setting the trajectory of global emissions. Aligning

ambitious goals with actionable policy frameworks will be critical to turning NDCs into meaningful progress.

Another milestone from COP29 was the operationalization of Article 6 under the Paris Agreement, which establishes a global framework for carbon credit trading. While promising, challenges remain, such as transitioning legacy projects and ensuring the integrity of credits. The next few years will determine whether Article 6 can deliver scalable and transparent carbon markets.

The outcomes of COP29 could significantly reshape energy markets, particularly in developing regions. Strategic deployment of climate finance, scaled renewable manufacturing, and methane-reduction initiatives are vital to managing a just energy transition.

COP29 has set the stage for transformative change, but the focus must now shift to execution. Whether through targeted financing, aggressive methane reductions, or enhanced NDCs, the race to net-zero emissions requires actionable policies grounded in robust frameworks. The time for ambition has passed—action is now the ultimate test.





The Oil & Gas Decarbonization Charter publishes latest report to track progress on emissions reductions

OGDC THE OIL & GAS DECARBONIZATION CHARTER



he Oil & Gas Decarbonization Charter (OGDC) published on November 11, 2024 its Baseline Report, setting a foundation to help prioritize and track progress on emissions reductions made by the 54 oil and gas companies - representing almost 45% of the global oil production, that have signed up to the Charter's ambitions.

net-zero operations by 2050, near-zero upstream methane emissions and zero routine flaring by 2030 in addition to measuring and publicly reporting progress towards meeting OGDC's goals.

The publication of the Baseline Report is a key milestone for OGDC that sets out the initiative was launched at COP28.

established a governance framework and signatories' emissions reduction ambitions and implementation plans to set a baseline to track future progress. OGDC has also implemented a Collaborate & Share program to disseminate solutions, promote peer-topeer collaboration and encourage the adoption of best practices to reduce momentum, the initiative has also attracted three new members, with Oil India Limited, PetroChina and Vår Energi joining.

"We are proud of the 54 companies that increase investments. have already signed up to the Charter and are encouraged by the extent of their Bjorn Otto Sverdrup, the head of the OGDC engagement in this first major piece of work that helps to establish a base on three CEO Champions and founding members - Abu Dhabi National Oil Company (ADNOC) CEO Sultan Al Jaber, Aramco CEO Amin Nasser and TotalEnergies Chairman and CEO Patrick Pouyanné, said in a joint statement.

"Each company is at a different phase of the decarbonization journey. For some, the Charter reflects existing commitments and aligns with pledges already made via other initiatives. For others, it marks their first steps toward climate action."

"The diverse nature of our signatories is an opportunity as well as a challenge. Each company brings different experiences, These ambitions include to work toward capabilities, stakeholders and national circumstances. Signatories will have the opportunity to learn from the best practices and insights of peers from a wide range of backgrounds and from across the globe," the CEOs said.

OGDC's Charter Baselining Survey found that the majority of signatories are already work achieved in the first year since the consistent with the Charter's ambitions for net zero operations by 2050, and goals to reduce methane emissions to near zero and eliminate In the past 12 months, OGDC has flaring by 2030. Gaps identified in the survey will help prioritize support and knowledge launched a survey to determine transfer from companies with relevant experience.

> The survey also found that a majority of the signatories already report on their greenhouse gas emissions, though there is a need for common standards and methodologies to establish a robust reporting framework for the

According to the survey, most of the emissions. In a sign of a positive signatories are already investing in the energy systems of the future, including renewable energy, energy storage, low-carbon fuels, hydrogen, methane abatement, carbon capture utilization and storage (CCUS) and carbon removals technologies, and plan to

Secretariat said: "A survey of oil and gas industry climate performance has never been which to build future success," OGDC's attempted on this scale. Participants ranged from companies that pioneered decarbonization decades ago to those still in the early phases – all with different capabilities and reporting methods. The lessons learned will be used to improve reporting visibility and data quality and to create more targeted programs."

This baselining survey sets the foundation for the collective work ahead: over the next year, OGDC will focus on providing the resources and guidance the signatories need to reduce their GHG emissions, methane emissions and flaring. OGDC will also help signatories to shape their net-zero roadmaps and develop emissions reporting to ensure progress can be tracked and to demonstrate how collective action can deliver positive climate impact on a global scale.

About OGDC

The Oil & Gas Decarbonization Charter (OGDC) is one of the landmark initiatives launched at COP28. It is a global industry effort dedicated to speeding up climate action and achieving highscale impact across the oil and gas sector.

The Charter outlines a series of climate ambitions for signatories, which will be supported by a sustained program of knowledge sharing and collaboration to accelerate action.

With its broad geographical reach, targeting producing nations in developing economies, the OGDC has the potential to deliver tangible outcomes in support of the world's move to a netzero greenhouse gas emissions future.

The OGDC is a key initiative under the Global Decarbonization Accelerator (GDA), a series of landmark initiatives launched at COP28 to speed up the energy transition and drastically reduce global emissions.

Mission:

The initiative aims to continue motivating oil and gas companies to decarbonize, achieving broad geographical reach and impact, to speed up actions and to encourage learning.

We recognize action is essential, and collaboration is necessary, and that no company or country should be left behind. We recognize that companies have different starting points, stakeholders and roles, making it imperative that individual companies set their own ambitions so they can be realistically achieved within the context of their operating environments.

The Charter reflects the principles that the oil and gas sector believes will contribute to achieving the aims of the Paris Agreement.



TotalEnergies, bp, Equinor and Shell join forces to help increase access to energy

otalEnergies, bp, Equinor and Shell has made a commitment to invest in support of the UN Sustainable Development Goal 7 (UN SDG7), which aims to ensure access to affordable, reliable, sustainable, and modern energy for all. The four energy majors have come together with a \$500 million joint investment commitment, intended to create positive energy access impact for people in key regions over the coming years.

access to electricity and clean cooking

Despite ongoing efforts, progress towards universal energy access has stalled, particularly amidst recent macroeconomic shocks and rising energy prices. In 2022, the number of people without access to electricity globally increased by around 10 million to 685 million. Additionally, approximately 2.1 billion people, primarily in sub-Saharan Africa and Southeast Asia, lack access to clean cooking facilities, disproportionately impacting women and girls who often bear the brunt of domestic responsibilities.

Joint efforts to support energy access in Sub-Saharan Africa, South and **Southeast Asia**

bp, Equinor, Shell and TotalEnergies decided to join forces to help

address the challenges of energy access. With \$500 million of committed capital, the joint investment seeks to support promising, highimpact projects, primarily in Sub-Saharan Africa, South and Southeast Asia, aiming to help millions of people in underserved communities gain access to electricity and improved cooking conditions. Their shared intent is for the committed capital to be invested in a broad range of solutions, including solar home systems, mini/metro grids, clean cooking solutions, and enabling technologies (such as e-mobility, energy A growing number of people without storage and management solutions). Over the coming years this has the potential to support UN SDG 7 while also generating co-benefits like job creation and improved health outcomes.

> A global private equity firm with a strong track record in impact investing, has been selected to manage the joint investment. Their expertise will support the investments being strategically directed to create both social impact and financial returns, while engaging with governments, international organizations, financial institutions, the private sector, civil society, and philanthropies. This includes sharing learnings, providing technical assistance, and addressing market barriers.

> Patrick Pouyanné, Chairman and CEO of TotalEnergies commented: "At TotalEnergies, we are deeply committed to making energy accessible to all. Around a third of our development in electricity in the coming years

will be in emerging countries, which will enable about 40 million people to benefit from access to electricity. Furthermore, we are committed to investing 400 million dollars in Liquefied Petroleum Gas facilities to develop clean cooking solutions in Africa and India, which will help 100 million people access healthier, more sustainable and more reliable energy. With this new joint initiative with our peers, we are activating another lever to contribute to high-impact local projects to help achieve the United Nations Sustainable Development Goal 7 by 2030."

Murray Auchincloss, CEO of bp commented: "It is early days, but we hope that by jointly investing, we will be able to contribute to wider efforts to tackle the very real challenge of access to energy. Over time, we believe it can help to create a more inclusive energy future for some of the many millions of people who lack that access today."

Anders Opedal, President and CEO of Equinor commented: "This joint investment brings together four leading energy companies investing in emerging countries. We believe this effort will help close some of the energy access gaps, which is a key part in reaching the global ambition of a just and equitable energy transition."

Wael Sawan, CEO of Shell commented: "We want to support accelerated progress towards universal energy access as we believe it has the power to transform lives. This joint investment will help to do that. By working collectively to overcome key energy access challenges we can achieve sustained impact and drive real change."





TotalEnergies CEO Patrick Pouyanne Says Oil, Gas **Industry Making Progress on Emission Reduction**

...re-emphasized the industry's "continuous progress" in addressing the issues around climate change.

atrick Pouyanne, the CEO of French oil giant Total Energies, has said the oil and gas industry but re-emphasized the industry's process. improvements, according to News of global oil and gas production. Central Africa report.

owned oil company Socar and transparency to tackle emissions. representatives from the Environmental Defense Fund.

immediately. "We mustn't think that in six at all of its operated Upstream sites.

months, a year, everything will stop," he said, pointing to the continued demand for gas in

are making progress in reducing He underscored that progress in the energy emissions, while also acknowledging the transition would come "step by step" and that sector's contribution to climate change all stakeholders must be involved in the

"continuous progress" in addressing the TotalEnergies and Socar announced plans to issue. Speaking on the sidelines of collaborate on reducing methane emissions, a "Energy Day" at the UN COP29 climate potent greenhouse gas often released from gas talks in Azerbaijan, Pouyanne admitted extraction sites. More than 50 oil and gas that the oil industry is "part of the companies, including TotalEnergies, have problem," but stressed that it was pledged to achieve "near-zero" methane committed to making ongoing emissions by 2030, accounting for 45 percent

Pouyanne is among several oil executives Pouyanne argued that by taking action, these attending the COP29 discussions, and his companies could set a positive example for day began with a panel at Azerbaijan's others, including state-owned oil firms that pavilion alongside the head of the state- may lack the necessary resources and

As part of its ambition to aim for near-zero TotalEnergies CEO highlighted an methane emissions by 2030, TotalEnergies agreement reached at COP28 in Dubai to announced recently that the Company is going transition away from fossil fuels, calling it a step further in the monitoring and reduction an "important signal" but cautioned that of its methane emissions with the deployment such a shift would not happen of continuous, real-time detection equipment

In a statement obtained by The Energy Republic, TotalEnergies will install the technology on both its existing facilities and projects under development, such as the GranMorgu FPSO in Suriname, which will enable real-time identification of methane emissions, both fugitive and stationary, and immediate corrective actions to stop them. This continuous detection plan will be fully implemented by end-2025 and will use existing and proven technologies such as IoT2 sensors, InfraRed cameras, flowmeters and Predictive Emissions Monitoring Systems on combustion sources.

"Slashing down methane emissions is a shortterm priority to contribute to the fight against climate change. Continuous, real-time detection will enable our operators to act in an even more decisive manner in order to reduce our methane emissions and to repair leaks to achieve our nearzero methane emissions ambition. As a champion of the Oil & Gas Decarbonization Charter (OGDC), I am proud that TotalEnergies is leading the way in deploying such equipment at large scale and we will continue to work with the industry to share best practices in measuring and fighting methane emissions", said Patrick Pouyanné, Chairman and CEO of TotalEnergies.



TotalEnergies, Oil India Join Forces to Collaborate on Methane Emissions Detection and Measurement

otalEnergies and Oil India Limited (OIL) signed a Cooperation Agreement to carry out methane emissions detection and measurement campaigns using TotalEnergies' pioneer AUSEA technology at OIL sites in India.

State-owned enterprise OIL recently joined the Oil and Gas Decarbonization Charter (OGDC), a global industry initiative launched at COP28, co-chaired by TotalEnergies' CEO. The OGDC's ambition is to work towards net-zero operations by 2050, as well as near-zero upstream methane emissions and zero routine flaring by 2030. Moreover, OGDC members are committed to measuring and publicly reporting progress.

In line with the OGDC's principle of sharing good practices, TotalEnergies makes this technology available to other operators among the signatories, as an effective and recognized tool to detect, measure and eventually abate methane emissions on their own assets.

AUSEA, a one-of-a-kind technology by TotalEnergies

Mounted on a drone, the AUSEA gas analyzer, developed by TotalEnergies and its R&D partners, consists of a dual sensor capable of detecting methane and carbon dioxide emissions, while at the same time identifying their source.

This technology marks a step change in methane emissions detection and measurement compared to traditional techniques. By allowing access to hard-to-reach emission points, on all types of industrial facilities, both offshore and onshore, AUSEA is reputed as one of the most accurate technologies in the industry.

"We are delighted that OIL has joined the growing list of national companies we are collaborating with by making our AUSEA technology available. This is a clear demonstration that the Oil & Gas Decarbonization Charter launched at COP28 has gained momentum, thanks to the promotion of industrial best practices. Today, AUSEA performs campaigns on every continent and contributes to the OGDC signatories' ambition to aim at near-zero upstream methane emissions by 2030", said Patrick Pouyanné Chairman and CEO of TotalEnergies.

Commenting on the pact, Dr. Ranjit Rath, Chairman & Managing Director of OIL, said "By joining our peers in the OGDC, OIL reiterates India's commitment to the global community, while underscoring OIL's dedication to reducing emissions. OIL is pleased to be collaborating with TotalEnergies, an industry pioneer in methane emissions detection and measurements".



H.E Eng. Mohamed Hamel, GECF Sec-Gen

GECF Sec-Gen Advocates Balanced Approach to Energy Transition

he Gas Exporting Countries Forum, GECF, Secretary General, H.E Eng.
Mohamed Hamel has called for a balanced approach to the global energy transition agenda, noting that the natural gas sector plays a crucial role in driving economic growth, improving living standards, reducing household pollution, enhancing urban air quality, and lowering greenhouse gas emissions.

Hamel made this known while delivering his statement at the just concluded COP29 event held in Baku, explaining that natural gas plays an essential role in global food security, serving as the primary feedstock for fertilizer production.

He said, "Natural gas fulfills 23% of the world's primary energy needs. As the world's population grows, the economy expands, and human living conditions improve, the world will need more natural gas, not less.

"Natural gas is a partner of intermittent renewables, providing backup and stability when the sun is not shining, the wind is not blowing, or hydropower faces limitations due to drought. Through cost-competitive blue hydrogen, it offers a viable pathway to decarbonize hard-to-abate industries."

Speaking further, GECF Sec-Gen called for timely investment, unhindered financial flows, access to technology, and knowledge transfer in a non-discriminatory manner.

"The outcome of COP29 should facilitate financing for natural gas projects and scaling up cleaner technologies such as carbon capture, utilization, and storage. This is crucial for ensuring just, inclusive, and orderly energy transitions that leave no one behind," he added.





GECF, OPEC Strengthen Collaboration on Climate and Energy Issues at COP29

he Gas Exporting Countries Forum (GECF) and the Organization of the Petroleum Exporting Countries (OPEC) convened their third coordination meeting on 19 November 2024, during COP29 in Baku, Republic of Azerbaijan. The meeting underscored the ongoing cooperation between the two organizations and highlighted the significance of their collaboration in addressing the challenges of climate change and energy security.

The meeting was co-chaired by His Excellency Eng. Mohamed Hamel, Secretary General of GECF, and His Excellency Haitham Al Ghais, Secretary General of OPEC.

In his opening remarks, HE Eng. Mohamed Hamel emphasized, "The GECF and OPEC are like-minded intergovernmental organizations, and it is vital to provide a platform for our members to exchange views and expertise on the critical negotiating streams of COP29. The outcomes of these negotiations hold profound implications for their socio-economic development."

HE Haitham Al Ghais reiterated the importance of collaboration between the two organizations, stating that "these meetings continue to allow us to coordinate together, giving our interventions increased impact and clarity. We value this cooperation, as OPEC continues to support

its members on several fronts during the UNFCCC processes," adding, "We hope that our meeting today will add to the collaborative spirit and the goals of fairness and equality."

The meeting centered on key topics related to sustainable development, energy and climate change. Participants acknowledged the importance of advancing critical issues under the Paris Agreement framework, which are particularly relevant to developing countries, including climate finance, mitigation, adaptation, loss and damage, the just, realistic and equitable energy transitions, technology transfer and capacity building.

Participants reaffirmed the pivotal role of oil and natural gas in driving global economic growth, alleviating poverty and enhancing prosperity. Together, these energy sources currently account for over half of the global energy mix.

members to exchange views and **The discussion included a review of** expertise on the critical negotiating **negotiations on:**

- ◆ Climate finance, with a focus on the New Collective Quantified Goal (NCQG).
- ◀ The Mitigation Ambition and Implementation Work Programme.
- ◆ The Work Programme on Just Transition Pathways.
- ◆ Unilateral trade measures and the adverse impacts of response measures.
- ◆ Cooperative approaches under Article 6 of the Paris Agreement, including market and non-market mechanisms.

Delegates emphasized the need for an equitable, inclusive, realistic and balanced outcome from COP29 that addresses climate change while safeguarding sustainable development, energy security and affordability. They stressed that no one should be left behind in energy transitions.

The meeting reaffirmed the importance of continued collaboration between GECF and OPEC member countries in engaging effectively in climate negotiations and addressing shared challenges. Both organizations recognized that cooperation is essential to ensuring their member countries' interests are upheld while contributing meaningfully to global climate goals.

The meeting concluded with a shared commitment to strengthening ties between GECF and OPEC, including at the technical level, as they navigate the complex intersections of energy, climate and development.



AFRICAN ENERGY STORIES











Global African Hydrogen Summit Delivers On Pledge To Fuel Africa's Green **Industrialisation As It Witnesses Multi** Million Euro Deal Signings In Namibia





African Energy Chamber Commends AJERAP for Committing to Just Energy Transition in Africa

frican Energy Chamber, AEC, has commended the African Association of Energy Journalists and Publishers, AJERAP, for its commitments and reportage to a just energy transition in Africa.

NJ Ayuk, Chairman of the African Energy Chamber, made this remark during a recent One-on-One engagement webinar, with AJERAP members, held on Wednesday 9th October 2024, and co-hosted by media consultant Camara Sanna, based in The Gambia, and Allen Atwiine, Managing Partner at Surprise Africa.

Speaking at the webinar, Ayuk commended the AJERAP for its significant contributions to the African energy sector, referring to its members as "African truth seekers and freedom fighters."

He emphasized that their work has been instrumental in driving growth and development across the continent, even though it is often underreported and unrepresented.



NJ Ayuk, Chairman of the African **Energy Chamber**

"You are the true voice of our continent, speaking truth to power even when it's inconvenient," Ayuk stated, acknowledging the vital role of the media in raising critical justice.

Highlighting the purpose behind the African

By Genevieve Aningo

Energy Chamber's formation, Ayuk explained that it was created to advocate for African businesses in the energy sector.

He noted that, historically, international companies dominated the industry, while African stakeholders were sidelined.

Instead of resorting to protests, the Chamber focused on lobbying and collaborating with governments to create policies that fostered greater involvement of African businesses and professionals in the energy sector.

Ayuk also underscored the need for gender inclusion, calling attention to the fact that women are often the "last hired and the first fired" in the energy sector, a practice he strongly condemned.

issues such as energy poverty and climate He advocated for policies that would create a more enabling environment for women, positioning them as key contributors to progress in Africa's energy industry.

AFRICAN ENERGY STORIES



In addition to promoting gender equality, international partnerships. Ayuk emphasized the importance of youth engagement in the energy sector.

Africa's energy, oil, and gas industries.

and offer training programs aimed at energy sector development. building capacity among Africa's youth.

energy sectors of African countries.

business-friendly environment that threat to Africa's energy prosperity. attracts international investment, with a countries like Russia, the UAE, and China, to boost Africa's energy sector.

including governments and investors, to increase their efforts in combating energy poverty across the continent.

commitment to unlocking Africa's

potential in the energy sector by advocating for inclusive policies and fostering

NJ Ayuk, Chairman of the African Energy Chamber, highlighted the signing of He highlighted the African Energy Week approximately USD 26 billion in deals during as a platform dedicated to developing previous editions of the African Energy Week.

He underscored the significance of projects The Chamber, according to him, is actively like the East African Crude Oil Pipeline (EACOP) working with energy companies across for Uganda and Africa as a whole, noting their the continent to create job opportunities potential to contribute to the continent's

Ayuk emphasized East Africa's position as a key Furthermore, Ayuk spoke about the hub for energy project development, with Chamber's efforts to combat corruption countries such as Senegal and Namibia also and reduce bureaucratic hurdles in the presenting vast investment opportunities.

He expressed concerns over the global energy He stressed the importance of fostering a transition agenda, viewing it as a potential

focus on building relationships with Despite Africa's minimal contribution to climate change—less than 3%, Ayuk advocated for climate justice, urging that Africa be allowed to leverage its oil and gas resources to In conclusion, Ayuk urged stakeholders, alleviate energy poverty and promote development.

He noted that while financing constraints in Africa's oil and gas industry pose challenges, He reaffirmed the Chamber's they also present an opportunity for Africans to invest in their resources.

Ayuk called for an enabling environment, driven by sound government policies, to attract both local and international investors to the African energy sector.

He described African Energy Week as more than an event—calling it an African movement that showcases the continent's immense energy opportunities to the global energy sector and investors.

He emphasized that the platform provides a space for all industry players, including women and youth, to participate in and contribute to Africa's energy growth.

He revealed that the upcoming African Energy Week is expected to attract 10,000 participants from around the world and will focus on pressing issues such as climate change, renewable energy,

In addition, Ayuk stressed the importance of Africa's industrialization, stating that the continent must harness its abundant oil and gas resources for its development.

In another development, the African Association of Energy Journalists and Publishers (AJERAP) paid tribute to Uganda as the nation marked its 62nd independence anniversary.

AJERAP, committed to promoting accurate reporting on energy, sustainability, and environmental issues from an African perspective, praised Uganda's progress in the energy sector and its contributions to the continent's development.

Capacity Building, Local Manufacturing to Foster Growth in Africa's Renewable Energy Sector - Stakeholders

frica must expand its renewable energy manufacturing capabilities and leverage its critical minerals to foster growth in its renewables sector, according to James Mackay, Managing Director at the Energy Council of South Africa.

Speaking on a panel discussion during African Energy Week: Invest in African Energies' Pre-Event Technical Workshops, Mackay said the high cost of renewables in Africa could be lowered by enhancing local manufacturing capacity, making vital technologies more accessible for project developers.

"Egypt is currently leading in solar manufacturing, but other African governments should work to attract investments and implement policies that incentivize manufacturers to establish

operations on the continent," stated Mackay.

Carlos Torres Diaz, Senior Vice President & Head of Gas and Power Markets Research, Rystad Energy highlighted Africa's youthful workforce as a strategic advantage in developing innovative solutions required to harness the continent's 30% share of global critical minerals. According to Diaz, the focus is no longer solely on replacing fossil fuels but on integrating all energy resources and using digital tools to stabilize the power grid.

"Gas-to-power solutions remain essential for stability alongside renewables," he noted.

Despite holding 40% of the world's total solar potential, Africa currently utilizes only 35% of its capacity, according to Nivedh Das Thaikoottathil, Senior Analyst – Renewables

& Power at Rystad Energy. Thaikoottathil pointed out that Africa's ability to add value to its critical minerals will shape its potential to produce over 100,000 TWh of solar energy annually, potentially increasing the share of solar and wind from 8% today to 60% by 2040.

Commenting on high-growth renewable energy markets in Africa, Thaikoottathil said South Africa, Morocco, Egypt, Iunisia, Mauritania and Mozambique are the key players.

"We are seeing growing financing for renewable projects and new interconnectors between North Africa and Europe, with 24 GW of proposed capacity aimed at linking the regions," he said.



Africa to Account for Major Oil, Gas Discoveries in

Next 30 Years – Rystad Energy



Per Magnus Nysveen, Senior Partner and Head of Analysis at Rystad Energy

er Magnus Nysveen, Senior Partner and Head of Analysis at Rystad Energy has said that Africa discoveries by 2060. rounds to exploit its huge untapped potential.

Workshop Day during the African Energy 2024, noting that Africa stands a chance

to supply the growing global energy demand and will become the last frontier for new

will host the majority of new oil and gas In the past three to five years, Nysveen said, discoveries over the next 30 years the African continent has introduced 300 compared to other regions, underscoring million barrels of oil every year and replaced the need to introduce more licensing 10% of existing production with new projects.

"We underestimate the resources Africa has. Risk is overestimated by global investors and Nysveen made this known in a panel there are little licensing activities. Africa needs discussion held at the Pre-Event to capitalize on the massive capital being brought in by the small E&P firms, as well as by Week (AEW): Invest in African Energies the majors to unlock its full potential," stated Nysveen.

Furthermore, Ibitola Ukabam, Associate Vice-President, Natural Resources (Oil & Gas and Mining) at investment firm Africa Finance Corporation, added that 85% of growth within the oil and gas sector will emerge outside developed economies, with Africa holding a large share.

Ian Cloke, COO at upstream oil and gas firm Afentra, added that unlike in the North Sea where investment has increasingly become unfeasible in the past 15 years due to transition policies, Africa is prioritizing a just energy transition, hence new investments coming in.

Expanding on the origin of the majority of growth in Africa, Cloke added that "Angola has the most stable fiscal terms. The creation of enabling environments onshore in Nigeria, Libya, and South Sudan can fast-track project rollouts."

Pranav Joshi, Vice President of Rystad Energy, added that "TotalEnergies' FID on the Venus prospect in Namibia, as well as Mozambique's Area 4 project, will drive new FIDs and production growth in Africa in the next few years."

With deepwater projects and supply proving secure globally, Ukabam reiterated the need for global majors to invest in local infrastructure, adding that this will enhance Africa's potential to source offshore resources to meet local demand. Ukabam said that majors must not continue making slow decisions to develop local infrastructure, to match their export agenda.

Afreximbank Signs Landmark Deals at African Energy **Week 2024**

he African Export–Import Bank (freximbank) signed multiple landmark deals at the African Energy Week: Invest in African Energies deal-signing ceremony in Cape Town, South Africa.

Among these was a \$100-million revolving back-to-back letter of credit facility for oilfield equipment provider JE Energy Ltd. The facility is designed to finance the purchase and sale of Guyana's crude oil production to international buyers.

Another major deal included a \$16.8million asset finance facility for marine services provider Global Links Ocean Streams Ltd., enabling the acquisition of a



product tanker for crude oil evacuation in Nigeria. The facility aims to support indigenous ownership of tankers and enhance revenue retention in Africa's maritime sector.

A \$10-million revolving trade finance facility for Dorman Long Engineering Ltd. was signed by Peter Olowononi, Head of Client Relations for Anglophone West Africa at Afreximbank, and Dr. Timi Austen-Peters, Chairman of Dorman Long Engineering.

The ceremony also featured the renewal of an exclusive partnership between the African Energy Chamber (AEC) and S&P Global Commodity Insights as Strategic and Technical Partners of AEW: Invest in African Energies. The agreement, signed by AEC Executive Chairman NJ Ayuk and Dr. Atul Arya, Senior Vice President and Chief Energy Strategist at S&P Global, reinforces their shared commitment to advancing Africa's energy sector through meaningful dialogue and innovative solutions.



Africa can become a Gas Powerhouse, Competing with the United States, Qatar, and Australia - Inglis, Kosmos Energy CEO



Andy Inglis, Chairman & CEO of Kosmos Energy

frica holds more than 620 trillion cubic feet (TCF) of proven gas reserves, and accounts for 8.5% of global proven reserve. The Continent is gradually turning into a big gas market in the world and the development of African gas resources can address its electricity deficit, bring power to major industries, unlock billions of dollars of investment, generate long-term economic growth, and create employment opportunities, including a major preferable supplier of gas to European countries.

According to the BP Statistical Review of World Energy (2019), Africa held the world's fourth-largest proven reserves of natural gas behind the Middle East, the Commonwealth of Independent States (CIS), and the Asia Pacific region. The report revealed that Africa has the

world's largest production lifespan of technically recoverable gas resources, estimated at 673 years and ahead of Latin America (508 years) and Eurasia (296 years).

At the just concluded African Energy Week 2024 held in South Africa, Andy Inglis, Chairman & CEO of Kosmos Energy, emphasized Africa's deep gas potential and the need for stability, stakeholder alignment and cost-effective strategies to advance new oil and gas projects.

Kosmos Energy highlighted the untapped potential of Africa's "deep gas resources" and strategies to maximize this potential during the opening ceremony of African Energy Week (AEW): Invest in African Energies 2024.

Kosmos Energy, a company specialized in the deepwater exploration and production, is actively involved in several major oil and gas

projects across Africa, focusing on developing cost-competitive gas for local economies, as well as LNG facilities to facilitate exports. In Senegal and Mauritania, Kosmos is leading the flagship Greater Tortue Ahmeyim LNG project, as well as working closely with Petrosen on the development of the Yakaar-Teranga gas project offshore Senegal.

Speaking at a panel session at the African Energy Week 2024, Chairman & CEO of Kosmos Energy, Andy Inglis said, "Africa has the right to become a gas powerhouse, competing with Australia, Qatar and the U.S. It has the resources to do it, and it can do so by ensuring gas is used domestically to create affordable power."

According to Inglis, the key factors for greenlighting new oil and gas projects in Africa include delivering clarity and stability, as well as aligning with key stakeholders across NOCs, IOCs and government ministries to identify and advance projects that are cost-effective and efficient.

"There is strong support for a just energy transition – it's at the core of Kosmos' strategy. Our backers want to see projects in countries where there is stability in fiscal regimes, clarity in purpose, and predictability in regulation."

Kosmos has a strong track record of delivering innovative projects, including taking the Jubilee field in Ghana from discovery to first oil in just 40 months. The project employed a fast-tracked development model, utilizing an FPSO conversion and proven technologies.

"It was a simple concept, with a supportive environment both in terms of the government and partnership in the field. It enabled the cash flow to come to Ghana."





3RD ANNUAL ASSEMBLY INTERNATIONAL CONFERENCE

"Empowering Africa - Strengthening
Welding Capacity for
Regional Integration and Global Competitiveness"

14th - 16th April, 2025. Haile Grand Hotel, Addis Ababa, Ethiopia.

FEATURING:

- * TWF Annual Assembly Meeting
- * Technical/Plenary Sessions
- * TWF Continental Welding Competition
- * TWF Technical Committee Meeting
- * Innovative Welding Workshop on National Strategies

make a reservation today@ www.twfassembly2025.org











AEW 2024 Panelists Outlines Strategies for Africa's Farm-In and Farm-Out Deals

panel of experts at Africa Energy Week (AEW): Invest in African Energies 2024 emphasized the critical importance of stakeholder engagement and legal considerations in farm-in and farm-out agreements during a workshop titled, 'Mastering Energy Investment Transactions in Africa'.

Moderated by Zion Adeoye, CEO and Managing Partner of CLG on Monday at the AEW: Invest in African Energies 2024 pre-conference session, the panellists shared insights into essential contractual arrangements in the oil and gas industry for facilitating exploration and development activities and allowing companies to share resources, risks and expertise.

Speaking during a Mastering Energy Investment transaction in Africa: a critical guide for general counsel masterclass, Jude Kearney, managing partner of Asafo & Co noted that there were several critical factors that played a role in allowing for meaningful engagement in farm-in farm-out agreements. "There are literally a thousand considerations a farmor or farmee must make before entering a transaction, but they must realize that they are not alone in their decision-making."

"It is crucial to engage with local stakeholders — government, prospective service providers, potential employees — early to understand the market dynamics and expectations. This includes assessing local content requirements and corporate social responsibility expectations. The government is your ultimate

stakeholder, as they hold the authority to approve or deny transactions," Kearny added.

Participants underscored the necessity of thorough legal due diligence before entering negotiations. This includes understanding local laws, tax obligations and regulatory requirements to avoid potential pitfalls. Grace Yella, CLG director for tax and legal in Cameroon, emphasised starting with due diligence to lobby for favourable responses from government administrations.

Kearny concurred, "Consider policies that exist in some of the countries, such as Nigeria and South Africa, which have very strong local content regulations. If you are not aware of these regulations, and have not considered them, then your contract is not perfect," he added.

CLG Equatorial Guinea managing partner Manuel Oliveira agreed, adding that meeting these regulations were no longer a box-ticking exercise. "Local content is critical for these transactions, there are obligations regarding training local people and to give opportunities to local entities to participate in the economy," he said, adding that local advisors were also able to navigate the complexities of legislation of this nature.

Tax considerations were also a focal point of the discussion. Daoudou Mohammad, Congo director of CLG, noted that understanding tax



obligations is crucial, especially as regulations can change rapidly. Engaging tax consultants early could ensure compliance and identify potential exemptions.

As case study, Mohammad cited the oil and gas taxation decree in the Republic of the Congo having undergone several revisions, which significantly impacts how companies approach their investments and compliance strategies. In 2001, a decree was issued that provided tax exemptions for oil and gas activities, which were included in the terms and conditions of various contracts.

However, subsequent changes in government policy led to the issuance of a new decree that made these activities taxable. This shift raised concerns among investors about the stability and predictability of the regulatory

environment. The decree was later suspended following constructive dialogue between government officials and tax operatives, indicating a willingness to find a compromise between government revenue needs and the interests of oil and gas entities.

Similarly, changes in Ghana's oil and gas laws that affected previously favourable tax terms have also changed. "The new Production Sharing Contract focuses more on tax implications than legal terms, highlighting the need for tax experts to be involved in negotiations to avoid unexpected costs," said Onyeka Ojogbo, CLG deputy managing partner.

"This evolving nature of tax regulations necessitates that companies remain vigilant about compliance to avoid unexpected liabilities, especially given that VAT is now applicable to oil and gas companies, although some activities may still be exempt," concluded Mohammad.

Tan disclosed that the strategic agreement between Singapore and Ghana on carbon credits collaboration will allow Singaporean companies to invest in carbon credits from Ghana for offsets in Singapore especially in sectors such as clean cooking, renewable energy, electric mobility, and forestation.

"In July 2024, Enterprise Singapore brought about 20 Singapore-based companies to Ghana, working with the Ghanaian government to share with them the framework and do business with Ghanaian companies on carbon credit projects. This is a win-win business initiative.

"More than 30 Ghanaian project developers with existing carbon credit project proposals in Ghana participated in a business matching session with the Singapore companies.

"Singapore companies can now use the carbon credits to offset its emissions. The offtake agreement will help to also attract more investments in Ghana.

Speaking about the requirements for strategic partnerships with Singapore on carbon credits, he said Singapore needs to sign an agreement with the African country interested in exploring opportunities in Singapore's carbon credits before both parties can venture into carbon trading.

He noted that the agreement must correspond with both country's deliverables.

He stated that Enterprise Singapore has more than 35 overseas centers around the world and three overseas centers in Africa, which include South Africa, Ghana, and Kenya.

"Our role in the overseas centres is, promoting trade between Singapore and Africa and attracting African companies to come to Singapore for trade and business development. Some of the African companies that we work with are Sahara Energy and Sasol.

"We also bring Singapore companies to invest in Africa. One of the new things we are working on with Africa is carbon credits," he added.

Singapore Looks to Africa for Carbon Trading, Strategic Partnership

ingapore looks to explore opportunities in the African Carbon Market as it signs an implementation agreement with Ghana to collaborate on carbon credits.

The agreement, signed under Article 6 of the Paris Agreement, underscores Singapore's interest in promoting sustainable development, generating benefits for local communities, creating jobs, improving energy security, and reducing environmental pollution.

Commenting on this development, Ivan Tan, Director of Trade at Enterprise Singapore, said carbon credits are part of the government's investment focus in Africa, highlighting the agency's readiness to facilitate partnerships between Singapore and African companies in the carbon credit value chain.

He made this known in an interview with The Energy Republic, outlining the



ongoing discussions between Singapore and Ghana to support carbon credit projects.

According to him, Singapore has a carbon tax rate of \$25 Singaporean dollars (SGD) per ton, with a target of reaching \$\$50 to \$\$80 per ton by 2030.

In Singapore's carbon tax regime, he said large emitters are liable for the carbon tax and they may use high-quality international carbon credits to offset up to 5% of their taxable emissions.



SAIPEC Returns to Lagos in February 2025

he Sub-Saharan Africa International Petroleum Exhibition and Conference (SAIPEC) organised by the Petroleum Technology Association of Nigeria (PETAN) will take place at the Eko Convention Centre in Lagos from 11-13 February 2025. This marks its significant 9th edition, which is strategically partnered with the Nigerian Content Development and Monitoring Board (NCDMB) and over 30 national oil companies and regulators from Sub-Saharan Africa.

SAIPEC 2025 will showcase multi-billiondollar project opportunities across Africa and offer a vital platform for advancing the continent's energy, oil and gas ambitions. With local content again as a attract over 6,000 industry stakeholders, 50 countries.

The three-day programme promises concluding golf day event. robust engagement with keynote energy future, plans for economic growth and SAIPEC's African Content Series, Equality and Inclusion initiatives, underscoring the importance of inclusive growth across Africa's energy landscape. Notably, the SAIPEC Future Generations



foundational theme, the conference will Conference will return, inspiring the next generation of African energy leaders, while including representatives from National SAIPEC Technical sessions and the prestigious Oil Companies, International Oil SAIPEC Awards will highlight leading innovations Companies, government bodies, service and achievements in the sector. Networking providers and regulators from more than remains central to SAIPEC, with numerous sessions held, designed to foster partnerships, including exclusive receptions and PETAN's

addresses from industry leaders, A centrepiece of the event, the international showcasing countries and exploring exhibition will feature a dynamic showcase of pivotal themes such as driving Africa's technology, innovations and services across the energy value chain. With exhibitors from around the globe, the exhibition will highlight hosted by the NCDMB for the 5th advancements in drilling, exploration, digital consecutive year. Further sessions and technology and sustainability. Attendees will have panels will tackle critical subjects the opportunity to engage directly with leading including African gas strategies and suppliers, service providers, and technology opportunities, finance and the Diversity, developers driving the evolution of Africa's energy

> This year, host PETAN proudly celebrates its 30th anniversary, marking three decades of

leadership and innovation in Africa's oil and gas sector. Mr Ibe Chubby Ibe, PETAN/SAIPEC Conference Chair commented; "SAIPEC 2025 stands as a testament to our commitment to driving Africa's energy transformation, creating sustainable growth, and fostering inclusive partnerships across the continent. This year's program is our most ambitious yet, showcasing innovative strategies, regional collaborations, and groundbreaking advancements in Africa's oil and gas sector. We are excited to bring together industry leaders, experts and future visionaries to shape a prosperous and energy-secure future for Sub-Saharan Africa."

The full programme is now available to download via the SAIPEC website, where attendees can explore the comprehensive schedule and prepare for an impactful 9th edition of this premier African energy conference.

For more details, visit www.saipecevent.com.







ExxonMobil, bp Reiterate Commitments to Invest in Africa's Energy Sector

lobal energy majors ExxonMobil and bp affirmed their in forging new partnerships to capitalize on rising energy demand during keynote addresses at the African Energy Week: Invest in African Energies conference.

Rovuma LNG project in Mozambique, investments in Africa and is anticipated to produce 18 MTPA of LNG. According to ExxonMobil Mozambique, the company to scale." is targeting a final investment decision by early 2026.

perspective, and will significantly reduce construction phase will boost local businesses, create thousands of jobs and promote local skill development," said Kretschmer.

ExxonMobil estimates that 15 million

BTUs per person per year are needed to ensure access to clean cooking, electricity and the commitment to oil and gas elimination of energy poverty. Global gas investment in Africa, expressing interest demand is expected to rise by 20% by 2050, driven by population growth and economic development in emerging markets.

"All energy scenarios require a full suite of energy solutions. Delivering continued access ExxonMobil is currently spearheading the to affordable energy and reducing emissions is the end equation. With our new low-carbon which represents one of its largest solutions, we are paving the way for a new carbon reduction industry," said Kretschmer. "Our goal is to build a resilient, competitive Frank Kretschmer, General Manager of upstream portfolio, and to do so, we will invest

Meanwhile, bp's investments center around the Greater Tortue Ahmeyim (GTA) project in "Rovuma LNG is a concept that is Senegal and Mauritania, a groundbreaking outstanding from a technology offshore LNG development set to produce 2.3 MTPA over the next 20 years. The project is greenhouse gas emissions. The currently moving from the construction and commissioning phases to first operation, eyeing a successful start-up later this year. The GTA LNG project represents a significant engineering achievement, featuring an FPSO with an area the size of two football fields and

one of the deepest subsea systems in the industry and on the continent.

"The GTA project is complex, but innovative and full of opportunity. We had two sets of regulations to harmonize, but with the support of our partners, governments and regulators, we are working together to find practical solutions," said Dave Campbell, Senior Vice President at bp, Mauritania and Senegal.

"We see first gas as the first step on a much longer journey. There's no denying Africa's importance in the energy system, both today and in the future."

The GTA LNG development also serves as a key avenue for advancing local content, shaping the future of bp's activities in the region.

"As we continue to build our relationships in Senegal and Mauritania, we focus on capacity building and finding the right opportunity to use local contractors.

"Today, we have 47 Mauritanian and Senegalese" technicians participating in a bespoke four-year training program with bp, preparing them to be the next generation of engineers."

Chevron to Increase Gas Supplies to Angola LNG

hevron will supply 600 million standard cubic feet of gas per day to the Angola LNG (ALNG) facility by the end of the year.

This comes as the Sanha-Lean Gas Connection (SLGC) Project – developed by Chevron's local subsidiary and set to deliver lean gas to the ALNG onshore plant – prepares for first production by Q4 2024.

The announcement was made by Chevron's Managing Director of the Southern Africa Strategic Business Unit Billy Lacobie during an "In Conversation with" session at the Angola Oil & Gas conference in Luanda on Wednesday.

"It's very exciting as you go forward and look at the immense opportunities when talk about energy security, [gas] is one of the key enablers."



Billy Lacobie, Chevron's Managing Director of the Southern Africa Strategic Business Unit

you go into gas," said Lacobie. "When you According to Lacobie, Chevron's gas production increase will be driven by the installation and tie-in of the SLGC Project to the existing Sanha Condensate Complex, which features pipelines connecting Chevron-operated Blocks 0 and 14 to ALNG.



After Years of Neglect, Nigeria's Port Harcourt **Refinery Commences Operation** By Tobi Owoyimika

he Nigerian Port Harcourt Refinery has officially resumed operations after being inactive for over 20 years. The Nigerian National Petroleum Company (NNPC) Limited, announced on Speaking during a brief ceremony to mark the first trucks began loading petroleum in Nigeria's energy sector.

Olufemi Soneye, the spokesperson for the and economic growth for the country. Nigerian National Petroleum Corporation (NNPC) Limited, on Tuesday.

has fulfilled its pledge of re-streaming the ensure energy security for the country. Port Harcourt Refining Company (PHRC), signaling the commencement of crude oil Kyari also expressed deep appreciation to the petroleum products into the market.

include Premium Motor Spirit (PMS) or

petrol, Automotive Gas Oil (AGO) or diesel and Household Kerosene (HHK) or Kerosene, while other product slates will be dispatched as well.

Tuesday 26th November, 2024 that the commencement of products loading at the Refinery in Port Harcourt, the Group CEO of products, marking a significant milestone NNPC Limited, Mr. Mele Kyari described the commencement of the loadout activities as a monumental achievement for Nigeria which This development was announced by signifies a new era of energy independence

The GCEO particularly thanked President Bola Ahmed Tinubu, GCFR, for his unwavering In the statement obtained by The Energy support and understanding towards the Republic, NNPC Limited said the company rehabilitation project and for his persistence to

processing from the plant and delivery of NNPC Ltd. Board of Directors and the entire staff for their support and commitment, which crystallized into the streaming of the refinery. NNPC confirmed that trucks has began He also commended the contractors for doing loading petroleum products which a great job in ensuring that the refinery is delivered despite all challenges.

The GCEO further thanked Nigerians for their patience and for the legitimate expectations on the Company to deliver on the other refineries.

In his remarks, the Chief Executive of the Nigerian Midstream & Downstream Petroleum Regulatory Authority (NMDPRA), Mr. Farouk Ahmed congratulated the NNPC Ltd. for the milestone and assured of his agency's continued support towards the completion of rehabilitation work at the other refineries.

The PHRC rehabilitation project, is an Engineering, Procurement, Construction, Installation & Commissioning (EPCIC) project that is aimed at restoring the refinery to full functionality and renewal. It has achieved over 16 million manhours with zero Loss Time Injury (LTI).





Shell Nigeria Gas in Numbers



Shell Nigeria Gas Limited







Ed Ubong, Coordinating Director, Nigerian Decade Of Gas

Gas-driven industrialisation'll create millions of jobs, boost SMEs growth – Ubong By Genevieve Aningo

oordinator, Decade of Gas Initiative, Ed Ubong has stressed the need to embrace a gas-driven economy, highlighting its benefits to the entire populace.

According to him, it will create jobs for millions of Nigerians, boost the growth of small and medium sized enterprises (SMEs) and stabilise the economy.

Ubong stated this while delivering his keynote address during the second Panel at the NAEC Annual Strategic International Conference 2024, hosted by the Association of Energy Correspondents of Nigeria (NAEC) at Eko hotel, Victoria Island, Lagos.

Speaking on the topic— Actualizing the Decade of Gas: Powering Nigeria's Energy Sufficiency, Industrialization, and Economic Prosperity, he noted that the Decade of Gas Initiative seeks to leverage the country's abundant natural gas resources for economic development.

"With an estimated over 206 trillion cubic feet, Nigeria is regarded as the largest holder of gas reserves in Africa and 9th in the world. These reserves are not only a national asset but a global one, as it provides the foundation for energy security, industrialization, and economic growth.

"The Decade of Gas initiative, launched in 2021 by the Federal Government of Nigeria,

represents a concerted effort by the government and private sector to leverage the country's abundant natural

gas resources for economic development and energy transition with a view of powering the country into development and economic growth over the next decade, anchoring on energy sufficiency,

industrialization, and economic prosperity," he stated.

The Initiative Coordinator stated that gas is not just a fuel, but also an industrial feedstock which can help to herald the country's electrical generation capacity, cut energy costs, and make electricity supplies more reliable to households, businesses, and industries.

He called for investment in gas pipelines and gas-fired power plants, saying "the industrialisation of Nigeria lies solely on creating a robust domestic gas market for the sustenance of industries like petrochemical plants, fertilizer plants, and manufacturing plants. By using gas as an engine for industrialization, we will attract new investments, create jobs, and see a diversified economy away from our dependence on crude oil.

"The role of governments, the private sector, and the media is critical in actualizing this vision through partnership, innovation, and investment in gas-related projects.

"The ongoing construction of OB3, AKK, ELPs, etc., and investments in LNG facilities as well as gas processing plants are game changers for Nigeria's energy landscape.

"We will need to ensure that we strengthen regulatory frameworks, deepen partnerships between international energy companies, and strive toward the goal of creating an enabling investment environment that attracts investment and builds investors' confidence."



Nigeria's energy independence relies heavily on leveraging its vast gas reserves - PETAN Chairman



Wole Ogunsanya, PETAN Chairman

he Chairman of Petroleum Technology Association of Nigeria utilization, addressing its challenges, and create jobs. leveraging opportunities, and implementing strategic initiatives that sufficiency.

This he urged the government and other critical stakeholders in the energy sector independent and improve its economy.

Limited spoke during the first panel expertsaid. session titled 'Actualising Nigeria's Energy International Conference, organized by the naira. the Association of Energy hotel, Victoria Island, Lagos.

advocates for a cleaner energy.

He said expressed that with the nation's abundant gas reserves, approximately 200 (PETAN), Engr. Wole Ogunsanya trillion cubic feet of proven gas, affirms that has reiterated that Nigeria's energy domestic gas utilization can reduce reliance on independence hinges on effective gas imported fuels, generate significant revenue

"Today, the United States is the highest will propel it towards energy self- producer of oil and gas. They produce more than Saudi Arabia. They invest in their renewable energy, solar.

"This is what Nigeria needs, we don't have the to focus on gas more as Nigeria does not technology to produce battery powered cars, have enough energy in circulation, hence not that we will not do it in future, but right needs gas to become energy now. If we don't produce our oil and gas and ensure that the value chain is sustained within the country. Gas is supposed to be a more The PETAN Chairman who is also the efficient and less carbon form of energy. Managing Director of Geoplex Drillteq Nigeria needs to focus more on that." the oil

Transition: Driving Investment, Energy Engr. Ogunsanya further stressed the need to Security and Sustainable Development' increase the nation's production capacity, in at the 2024 NAEC Annual Strategic order to reduce imports which will strengthen

Correspondents of Nigeria (NAEC) at Eko His words: "we must understand the basic economic principle that your balance of trade is the difference between what you produce He noted that gas ought to be a more and what you import. We have always been efficient and less carbon form of energy, negative in the balance of trade. When you adding that the world currently import more than what you are producing, you

By Ndubuisi Micheal Obineme

have a negative balance of trade, this makes your currency suffer. This is what Nigeria is going through today.

"We want to power our economy and ensure the country has enough foreign earnings that can be deployed to develop infrastructure and create jobs for the people.

"Essentially, when you talk about sustainable development, you need that oil and gas revenue to invest in infrastructure, then you can have an economy that will thrive."

About PETAN

Established in 1994, Petroleum Technology Association of Nigeria (PETAN) is an association of Nigerian Indigenous Technical Oilfield service companies in the upstream and downstream sectors of the Oil industry. The association was formed to bring together Nigerian Oil & Gas entrepreneurs to create a forum for the exchange of ideas with the major operators and policy makers.

PETAN has been promoting the development of the oil and gas industry in Nigeria through the organization and participation of Nigerian Entrepreneurs in conferences, seminars, workshops, and creating opportunities for Nigerian companies to project themselves in the competitive industry.

Since 2005, PETAN has been solely responsible for organizing the Nigerian Pavilion and the exhibition of Nigerian companies at the Offshore Technology Conference (OTC), which holds in Houston, Texas every year.

PETAN, companies and their contractors employ over 20000 Nigerians of which over 60% are Graduates. This has a beneficial "domino" effect on the economy through use of Local-Inputs, growth of local expertise and know-how (reduce costs and maintain standards).

In December 2024, PETAN is celebrating 30th anniversary of exceptional service delivery in the energy, oil and gas industry since its established in 1994.

PETAN is the initiator of Local content in Nigeria and has been championing the quest for increased local participation in the Nigerian Oil and Gas industry.





AEW 2024



Olu Verheijen

Special Adviser on Energy to the President of Federal Republic of Nigeria

By Genevieve Aningo

Improved Workforce for Women and Youth Inclusion Will Drive Africa's Industrialization – Verheijen

lu Verheijen, Special Adviser on Energy to Nigeria's President, has called for an improved workforce for women and youth inclusion to address critical issues surrounding energy poverty and drive Africa's industrialization.

She made this known in her opening address at the African Energy Week in Cape Town, South Africa, on Tuesday, November 5, 2024, while speaking on the theme "The Future of Energy: Shaping the Workforce of Tomorrow".

In her words, Verheijen underscored the need for African leaders to look beyond traditional hiring practices and instead attract individuals who are not only skilled but also driven by the boldness and creativity needed to confront the sector's challenges in the 21st century.

She explained that such a workforce could ensure that energy in Africa transitions from being a constraint to a powerful tool for driving industrialization and sustainable development across the continent.

According to her, it will take credible amounts of human energy and a diversity of talent and expertise to enable Africa to adapt to these rapidly evolving and often unpredictable scenarios and circumstances.

She said, "We are the ones who will determine the outcome of the delicate balance between energy security, affordability, and sustainability for this continent.

Verheijen further expressed conviction that one of the most important ways in which African leaders can shape tomorrow's African energy workforce is to welcome a new crop of talent, especially women, and young people, who are equipped with the fresh perspectives and bold energy to design and implement radical new solutions to lingering problems.

"While efforts to attract women into STEM and the energy sector are important, attraction alone isn't enough, retention and advancement to senior levels are equally crucial.

"The real differentiator for women breaking through from mid-level to executive roles is sponsorship. Women need powerful advocates who actively support their growth and position them for opportunities and ensure their representation at the highest levels," She noted.

Speaking further, Verheijen shared a personal story that highlights the bold approach Nigeria's President, Bola Ahmed Tinubu, has taken toward leadership and reform.

"When President Tinubu assumed office on May 29, 2023, he was determined to reshape Nigeria's future through transformative governance. Known for his bold reforms as Governor of Lagos State, Tinubu assembled a team that reflected his vision for innovation and inclusivity.

"In a significant departure from convention, I was appointed—an unconventional choice for a cabinet-level position as Special Adviser on Energy.

"President Tinubu's choice defied the traditional

Nigerian approach, which typically favors more experienced, older, and politically connected men for such roles.

"Instead, he entrusted a young technocrat with global experience and a background in renewables, oil, and development finance, to spearhead critical energy reforms," she explained.

Verheijen further stated that her unique perspective, shaped by her experience in an international oil company, renewable investments across Africa, and board-level work in a \$14-billion development finance institution, exemplifies Tinubu's belief in doing things differently to drive impactful change.

"My story", she noted, "is a testament to the power of sponsorship—a veteran leader recognizing and empowering new talent to bring fresh solutions to Nigeria's energy sector."

According to her, as a professional in energy himself, Tinubu took a bold step, empowering a young woman to head one of the most ambitious reform agendas Nigeria's energy sectors has seen in decades.

Verheijen said, "That opportunity goes beyond symbolism; it is a responsibility they embrace with urgency and determination, striving to position this administration as the most impactful in Nigeria's recent history.

"Because of this landmark bet on us, we are determined and pour everything into ensuring that this Presidency ends up far more consequential in reforming and repositioning



presidential administration since people across Africa. democracy returned to Nigeria twentyfive years ago."

because of superior qualification but due to entrenched networks," Verheijen noted.

set before them, knowing their success

Nigeria's energy sector, than any other could open doors for more women and young

Special Adviser on Energy to Nigeria's President also explained that the "That sponsorship has long enabled male opportunities that she and her team have been leaders to dominate top roles, not granted will hopefully pave the way for countless young women across Africa who are ready to step forward and demonstrate their capabilities.

She added that with the President's She emphasized that if similar stories are strong backing, her team is working replicated across the continent, with leaders tirelessly to meet the ambitious targets offering women and young professionals equal

opportunities to drive change, the longstanding gender gaps will be significantly narrowed, driving progress in every sector.

Verheijen revealed that integrating the perspectives, skills, and drive of women—who make up half of Africa's population—is essential for building the continent's future.

"To realize the Africa we dream of, we must bring women fully into the fold," she said. "Our countries will be better for it, and our societies stronger."

Petrosen Targets Final Investment Decision for Yakaar-Teranga Project in 2025, Seeks Third-Party Partner

he Yakaar-Teranga project – situated offshore Senegal – is expected to make a Final For Mauritania, GTA represents just the start of Investment Decision (FID) in 2025, with production starting between 2028 and 2029, said Petrosen Director General Thierno Ly.

Speaking at a Technip Energiessponsored Invest in MSGBC Energies panel discussion at African Energy Week: Invest in African Energies, Ly explained that the project focuses on producing gas for the domestic market.

Kosmos Energy [on the project]. We are in looking for a partner to join us to bring us," Ly stated.

Senegal achieved a milestone in 2024 bring new players to the market. with the start of production at the Sangomar oilfield development. Serving "We are busy exploring and one of the critical to start operations shortly.

country," said Papa Samba Ba, Director of Hydrocarbons, Ministry of Petroleum and that we can supply affordable, accessible Lamin and sustainable energy to

of the government."

its energy ambitions. The country is also home to the 13 trillion cubic feet (tcf) BirAllah development, is offering 15 offshore blocks for exploration in 2024 and is promoting investment in renewable energy and mining.

"Building on three elements - namely, gas, mining and renewables – we have set up an integrated energy vision that aims to position the country as a major exporter. Our vision it to have universal access to electricity by 2030 and "We are working with our partner we need all these energies to do this," said Moustapha Bechir, Senior Advisor: Upstream, the final stages of the project and are Mauritania's Ministry of Petroleum & Energy.

added value to this project. By end of Beyond Senegal and Mauritania, neighboring year, we anticipate a third-party to join countries in the MSGBC region are promoting offshore block opportunities. Guinea-Conakry, The Yakaar-Teranga project is just one of for example, is currently finalizing the terms of many underway across the region. a 22-block bid round, which is expected to

as the country's first offshore oil project, things we want to highlight is that this is the the \$5.2 billion project has a capacity of moment to invest in the petroleum sector in 100,000 barrels per day. Senegal also has Guinea. Our geological position within the 16 offshore blocks available for tender MSGBC basin is optimal. This allows you to and expects the first phase of the Greater connect your investments with other countries Tortue Ahmeyim (GTA) LNG development in the region," said Lanciné Conde, Director General of Guinea Conakry's NOC Société Nationale des Pétroles.

"Sangomar was a major milestone for the The Gambia also has potential for major discoveries offshore. The country's Blocks A2 and A5 lie in proximity to the 230-million-Energies, Senegal. "This project means barrel Sangomar field in Senegal. According to

its population. This is a top priority and vision Camara, Permanent Secretary, Government of The Gambia, "We have seen developments taking place in Mauritania and Senegal and continue to accelerate our exploration. We have changed our strategy, and are now in direct negotiations with players to explore resources."

> Major operators such as Golar LNG, AGL Group and Technip Energies continue to drive projects forward across the region.

> "FLNG is scalable and enables access to export markets. There is a commercial flexibility that it holds. There is a technology available to the basin which fits both large-scale projects and smaller start-ups. Those two aspects married together, will increase the likelihood of a commercial discovery," said Anthony Barker, EVP-Commercial, Golar LNG.

> Dominique Gadelle, Vice-President Early Engagement, Gas & Low Carbon Energies Business Line, Technip Energies, explained that "There is no single solution when we look at the MSGBC region. We see projects with massive reserves and some with smaller reserves, and these might not have the same development model. There is a fit-for-purpose solution for all these developments."

> AGL Group sees an opportunity for local companies to enhance their role in the emerging MSGBC oil and gas industry. According to Sidi Ahmed Abeidna, CEO, SOGECO SA, AGL Group, stated that "We play the role to drive local content, supporting local companies integrate their services and bring their expertise to international standards. AGL is investing around EUR 500 million in 45 countries across various projects."



Victor Tivane Launches New Book for Mozambique Local Content Development in Oil, Gas Sector L Main National Objectives

By Ndubuisi Micheal Obineme

ictor Tivane, a geologist and ENH local content director, has announced the launch of a new book titled 'Local Content in the Oil and Gas Sector & Sustainable Development of Mozambique — a Collection of the country's Hydrocarbon Resources, opportunities, and Local Content Development across the oil and gas value chain in the country.

Tivane's book captures the current state of the Mozambique oil and gas industry while offering leadership advice for the government in creating the right policies for developing local companies, increasing local skills, and accelerating technology transfer for economic and sustainable development in Mozambique.

"A new opportunity is opening in Mozambique, which is the discovery of large reserves of natural gas that needs to be properly managed. It is important to mention that the challenge for developing countries, such as Mozambique, is to create strategies to make the most of the exploitation of this important resource to benefit the growth of other sectors of the economy," Tivane stated.

Speaking in an interview with The Energy Republic about the content in the book, he revealed that the content published in the book is of maximum interest to the Mozambique authorities, industry players, and academia.

The Book, according to him, comprises 275 pages, with eight chapters covering:

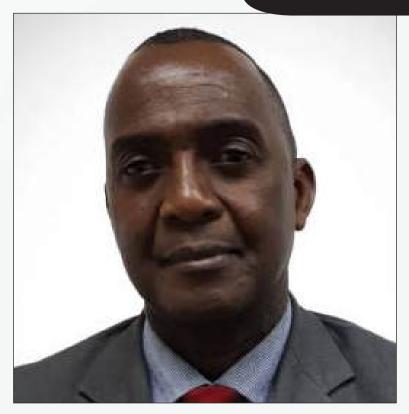
- I. Main National Objectives of Mozambique;
- II. Hydrocarbon Geology, Exploration, Development and Production;
- III. Principles of Hydrocarbon Management;
- IV. The Hydrocarbons Sector in Mozambique;
- V. Country's Commitment to Local Content;
- VI. Structure and Specificity of Local Content;
- VII. Global Initiatives and Local Content Lessons; and
- VIII. Local Content and the Roadmap for its Development.

"This book, I believe would provide the required tool that can expose the Mozambique oil and gas industry in such a way that in the next 30-50 years, the country could make a big difference if its oil and gas resources are managed with excellence.

"The content in the book also provides more insight into the risks that may arise, leading to political tensions, including economic and social instability if the resources aren't managed efficiently.

"My book also features my contributions on the strategies and business model options that can be followed so that the extractive industry sector can contribute positively to leveraging other sectors of the economy while focusing on Local Content.

"The digital copy of the book has been published on Amazon, while the hard copies will be published in November 2024," he added.



Victor Tivane, the local content director of Empresa Nacional de Hidrocarbonetos (ENH)

To download the digital copy of the book, please visit the link below for details:

https://t.ly/NtP4y

About the author

Victor B.L. Tivane was born on March 13, 1965, in Mozambique. He has a degree in geology from Eduardo Mondlane University (UEM) in Mozambique and a degree in business management from South Africa University (UNISA).

He also took various medium and short-term training courses given at Universities and Training Centres located in Europe (Dublin, Aberdeen, and London), the USA (Silicon Valley and Denver), Latin America (São Paulo, Rio de Janeiro, and Brasilia), Africa (Johannesburg, Cidade da Praia and Cairo) which led training in subjects ranging from the Local Content Development in the Oil and Gas Sector, Techniques for Attracting Investments, Schemmes for Training Small and Medium — size companies and Development of Industrial Parks. Still, it is also important to reveal his participation in several International Oil and Gas Forums, either as Speaker or participant.

His professional experience, which exceeds more than 15 years, includes the Promotion and the Development of Local Content in the Oil and Gas Sector, Development and Operationalization of initiatives to train Small and Medium-size companies and their connection with economic sectors (Linkages) as well as the Promotion of Foreign Direct Investment including Industrial Free Zones and Industrial Parks.



Local Content in the OIL AND GAS SECTOR & Mozambique

Sustainable Development

The book author dives into the depths of the oil and gas (O&G) industry with the aim of bringing to the surface the technical secrets, policies and management of the industry as well as the strategies for achieving successful national participation. Although Mozambique is the focus of the book, it can be useful for any O&G sector emerging country, as well as potential investors.





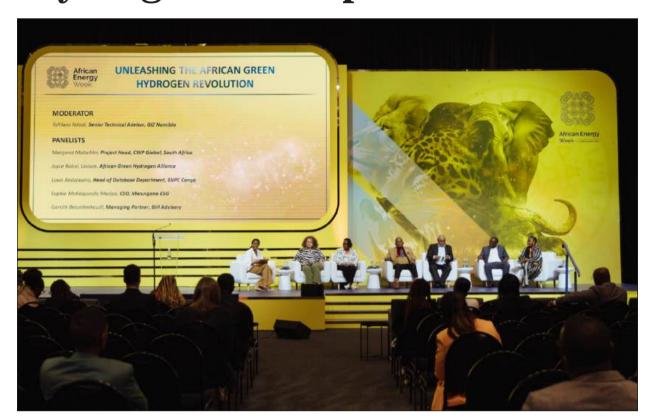
Victor B. L. TivaneBook Author

BUY NOW AT AMAZON

https://t.ly/NtP4y



Industry Stakeholders Advocates Regional Collaboration for Hydrogen Development in Africa



(Source: African Energy Chamber)

...as Egypt, Mauritania, South Africa, Morocco, Namibia and Kenya form part of the Africa Green Hydrogen Alliance group.

frica's abundant energy potential, coupled with Europe's ambitious production and import goals, have resulted in the development of a burgeoning global green hydrogen economy. Africa currently has 125 GW of hydrogen capacity with major contributors including Egypt, Mauritania, South Africa, Morocco, Namibia and Kenya – a group of nations that form part of the Africa Green Hydrogen Alliance group.

A dedicated panel session titled, Hydrogen Summit: Unleashing the African Green Hydrogen Revolution, at this year's African Energy Week: Invest in African Energies 2024 conference explored the significant role that hydrogen plays in the future of African energy. The panel noted that the EU market represents the largest commercial opportunity for hydrogen projects on the continent, with international collaboration being highlighted as a key strategy towards driving the sector forward.

"We need to see more countries establish key terms to create a platform for knowledge sharing," stated Africa Green Hydrogen Alliance liaison Joyce Kabui, adding,

"The support here depends on the scale of collaboration in the green hydrogen space."

Mauritania has emerged as one of the world's top green hydrogen investment destinations. The country has effectively captured 1.5% of the global hydrogen market with 3 of its major hydrogen developments – the 30 GW AMAN development, 35 GW Megaton Moon project and 10 GW Project Nour development by renewable energy developer Chariot Energy Group, which collectively contribute to the country's objective of producing 12.5 million tons of green hydrogen annually by 2035.

"In Mauritania, we've managed to prove renewable resources and understand energy profiles available from natural resources to supply the value chain," stated CWP Global Vice President of Project Development Africa, Margaret Mutschler, adding, "We've conducted environmental studies and baseline studies in countries like Mauritania that is relevant in other countries as well."

Meanwhile, South Africa's government has recognized green hydrogen as a key aspect of the country's just energy transition. It has introduced the Hydrogen Society Roadmap to serve as the industry's framework to facilitate large-scale investments in the sector.



"If you look at hydrogen as a source, it's underpinned by the hydrogen roadmap that the government has begun to drive," stated General Manager of Energy Projects at South Africa's state-owned Central Energy Fund, Sifiso Msabala. "There is a focus on hydrogen in this country and we understand the issues that are inhibiting progress. We know that South Africa is a great country to contribute to the global hydrogen industry."

Louis Andzouono, Head of Database Department at the Republic of the Congo's state-owned Société National des Pétroles du Congo (SNPC), expressed his country's commitment to driving a sustainable green hydrogen sector. The parastatal company received authorization from the government last year to explore the development of a green hydrogen market in the country.

"The SNPC is confident that its promotion of green hydrogen will succeed and thrive," Andzouono stated, adding, "We assume the missions and projects of the state will guarantee a serene future for the Congolese people through structure and eco-friendly projects."

The panelists noted that supportive policies and international collaboration will bolster Africa's green hydrogen economy, potentially attracting investments and improving resource capacity.



Global African Hydrogen Summit Delivers On Pledge To Fuel Africa's Green Industrialisation As It Witnesses Multi Million

Euro Deal Signings In Namibia

rom its international soft launch at COP28 UAE in Dubai last December the 'Road To Namibia' campaign in support of the Global African Hydrogen Summit has evolved into a movement to fuel Africa's green industrial revolution.

Following nine months on the road across Africa and around the world advocating, lobbying, and raising awareness, the 'Road to Namibia' campaign rolled into its final destination (Windhoek) last week from 3 – 5 September to host the Global African Hydrogen Summit that convened the global hydrogen industry in Namibia.

Guest of Honour Her Excellency Netumbo Nandi-Ndaitwah, Vice President, Republic of Namibia greeted over 1,000 attendees at the official opening ceremony of the Summit where she stated that "Namibia is honored to have been chosen to host the Global African Hydrogen Summit. It is encouraging for me to witness such a diverse gathering of brilliant minds from around the world who have convened here to help us curate rich conversations on these vital topics. Namibia offers a rich and welcoming environment that is well suited to host an impactful green industrialization eco-system."

Themed From Ambition to Action: Fuelling Africa's Green Industrial Revolution the inaugural Global African Hydrogen Summit received resounding praise from governments, public sector agencies, developers, investors, and the private sector for having achieved the objectives of all stakeholders.

The Summit's sectoral patron Hon. Tom Alweendo, Minister of Mines and Energy, Republic of Namibia had earlier remarked that the "Global African Hydrogen Summit will be the first platform of its kind to be leveraged by African governments, by investors, financiers, scholars and the public, to unlock additional opportunities for our continent and its partners. It will also provide a platform for the global players in the hydrogen value chain to showcase their projects, their plans, and technologies to the African continent."

KEY DEALS SIGNED AT GAHS 2024:

- **1** €25 million in grants from the European Union to support the Namibian Green Industrialisation Agenda.
- Zhero announced the launch of a green ammonia gigawatt-scale project in Namibia, aiming to produce 500,000 tonnes annually from 2029.
- GreenGo Energy signed an MoU with local Namibian developer InnoSun Energy Holdings.
- GreenGo Energy announced the signing of a MoU with Lodestone.
- The Namibian cabinet approved the signing of MoU on cooperation on renewable energy, clean energy, and hydrogen between Namibia and the USA.
- 6 IEA to collaborate with Namibia on Renewable Energy Opportunities for Namibians.
- Africa Practice and Environmental Defense Fund forge strategic partnerships to advance climate action in Africa.
- Green Maritime Corridors announcement to be launched at COP29 in Azerbaijan.
- Green Hydrogen Organisation and UN High-Level Climate Champions commit to bi-annual dialogue with CSOs.
- Green Hydrogen Business Alliance launches 'Localizing Green Industries in Namibia'.

As a catalyst for driving change, the Global African Hydrogen Summit witnessed ten MoU announcements, partnership declarations, and deal signings including:

- 1. €25 million in grants from the European Union to support the Namibian Green Industrialisation Agenda. The initiative, which includes commitments from Germany and the Netherlands, will be channeled via the SDG Namibia One financing vehicle for green hydrogen investment in Namibia including technical assistance to support long-term energy planning, renewable energy generation, and grid integration in collaboration with key Namibian stakeholders including the Namibian Green Hydrogen Programme (NGH2P) and Namibian Standards Institution (NSI).
- 2. Zhero announced the launch of a green ammonia gigawatt-scale project in Namibia, aiming to produce 500,000 tonnes annually from 2029 with codevelopers Envision Energy.
- 3. GreenGo Energy signed an MoU with local Namibian developer InnoSun Energy Holdings to co-develop solar and wind projects dedicated to green hydrogen production at scale.
- 4. GreenGo Energy announced the signing of a memorandum of understanding (MoU) with the local Namibian iron mining company, Lodestone. This collaboration will explore innovative solutions to integrate green hydrogen into the steel production process.
- signing of a memorandum of understanding (MoU) on cooperation on renewable energy, clean energy, and hydrogen between Namibia and the United States of America.
- 6. International Energy Agency to collaborate with the Ministry of Mines and Energy of Namibia and the Namibian Green Hydrogen Programme (NGH2P) on Renewable Energy Opportunities for Namibia.
- 7. Africa Practice and Environmental Defense Fund forge strategic partnerships to advance climate action in Africa.



- 8. Green Maritime Corridors announcement to be launched at COP29 in Azerbaijan.
- 9. Green Hydrogen Organisation and **UN High-Level Climate Champions** commit to bi-annual dialogue with CSOs.
- 10. Green Hydrogen Business Alliance launches 'Localizing Green Industries in Namibia'.

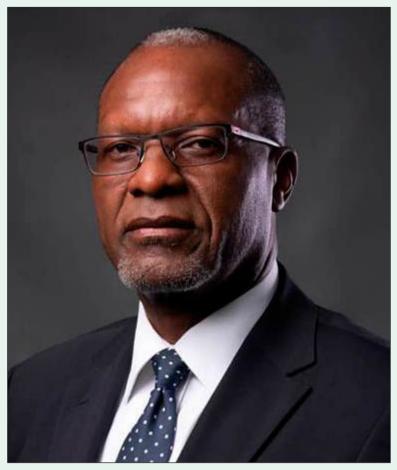
The Summit unlocked the potential of the hydrogen opportunity in Africa and harnessed its projected impact on achieving a sustainable and equitable energy transition globally.

James Mnyupe, Presidential Economic Advisor and Head of Programme, Namibia Green Hydrogen Programme (NGH2P) summarised that "the Summit was a huge success and will come back to Namibia next year from 9 - 11 September 2025."

About The Global African Hydrogen Summit (GAH2S) 2024

In its inaugural edition that was hosted in Namibia, the pioneering three-day Global African Hydrogen Summit convened heads of state, 5. The Namibian cabinet approved the government agencies, industry business leaders, project developers, investors, thought leaders, technologists and end users from across Africa and around the globe to drive partnerships for and critical investments and financing into bankable green energy projects of strategic and national importance across Africa, spanning the hydrogen, renewables, agriculture, mining, power, infrastructure, transportation, mobility and hard to abate sectors.

> As a pioneering and innovative investment platform, the Global African Hydrogen Summit provided a



Hon. Tom Alweendo, Minister of Mines and Energy, Republic of Namibia

variety of engagement opportunities including CPD accredited educative masterclasses, high level leadership dialogues, a world class strategic conference, project investment roundtables, and an international exhibition and innovation zone.

Participation from across the global energy value chain included and contributed to:

- 1 High-Level Ministerial Meeting
- 1 Leadership Roundtable
- 2 heads of state
- 5 country pavilions
- 7 Global African Hydrogen Awards
- 10 deal and MoU signings
- 20 African & Global ministers
- 30 bankable African green energy projects
- 35 partners
- 60 countries represented from around the globe
- 75 international exhibitors
- 100 youth participants
- 125 expert industry speakers
- 700 conference delegates
- 1,485 attendees



PHOTO STORIES:

Some Featured Photos of Global African Hydrogen Summit Held in Namibia in September 2024













CWP Global, Conjuncta joins 600 MW Green Hydrogen Project Consortium in Angola









WP Global, Sonangol, Gauff and Conjuncta have entered into an agreement at the Angola Oil & Gas conference in Luanda under which CWP Global will join the existing consortium of the three partners currently developing a green hydrogen project in Angola. The project is designed to utilize spare capacity from existing hydroelectric power generation to produce green hydrogen and derivatives, with the planned electrolysis capacity reaching up to 600 MW, aiming to be the first of its kind in Sub-Saharan Africa.

The current plan is for the green hydrogen produced to be synthesized with nitrogen to make green ammonia for export. Green ammonia can be used to decarbonize hard-to-abate industries, for example as a low-carbon fuel for international shipping, or to act as a carrier for hydrogen energy to be transported to market.

Ammonia production from Phase 1 of the project is expected to reach 400,000 tons annually, with the scope for increasing the capacity in future phases. Leveraging established power generation, port and grid infrastructures, and available land for downstream facilities, the project's rapid development timeline ensures Angola is well positioned to become a key supplier of green ammonia before the end of the decade.

With the global push to scale-up green hydrogen production to meet targets required for achieving net zero emissions by 2050, this project has the potential to not only accelerate the clean energy transition, but also to establish Angola as a new hub for sustainable

industrialization in Africa. Working in partnership with Sonangol, Gauff and Conjuncta and the Angolan Government, the project is aligned with Angola's own development aspirations,

including the country's long-term "Angola Vision 2050" development strategy, and the current National Development Plan (2023-2027).

CWP Global's CEO for Hydrogen, Mike Scholey, attended today's PDA signing and highlighted the significance of the new venture.

Scholey said: "This project marks a milestone not just for Angola but for the African continent, which has the potential to play an outsized role in the global energy transition.

"By leveraging Angola's abundant zeroemissions energy resources, we plan to supply vital green hydrogen and ammonia to the world, helping to meet critical gateways for industrial decarbonization strategies and targets in Europe and elsewhere.

"This project underscores our commitment to creating a sustainable and scalable green hydrogen industry, one that will contribute significantly to both local and global efforts to combat climate change."

Sonangol R&D CEO, Dr. Vladimir Machado, commented: "This agreement aims to reinforce the necessary partnership to allow the conclusion of one of the largest Green Hydrogen and Ammonia Synthesis Plant in the Sub-Saharan Africa.

"This project will also allow Sonangol to take a leadership position towards the Energy Transition, business portfolio diversification, social and economical development and the national productive sector.

Sonangol is very proud to continue working with its partners for the development of high impact green projects, positive for the environment."

Gauff Engineering's Managing Director, Stefan Tavares Bellow, commented: "Gauff is extremely proud of being part of this project since its inception, and is looking forward to being a key contributor to its launch. This project will greatly support Angola in diversifying its economy and contribute to its ongoing development for a greener industrial environment.

"With the signature of this agreement, the consortium reaches yet another crucial milestone, by partnering with a major international player in the Hydrogen Sector, bringing its unique expertise to this multidisciplinary team. Consequently, with all partners on board, we now look forward to establishing the SPV, and continuing with

the development of the FEED, having the target to implement the first large scale green ammonia project in the African market."

Conjuncta's CEO Prof Dr Stefan Liebing, added: "We are proud that an experienced developer like CWP Global will join our project and take the lead as a new shareholder in bringing it to a Final Investment Decision.

"As Angola offers a special framework and very good options for production of green hydrogen, we believe we have one of the most attractive projects that has a high likelihood of early implementation.

"Following successful completion of first phases of development, we are confident that with the experience of CWP Global, Angola can take a leading role in Africa in developing a new global green hydrogen industry."



Stefan Liebing, Conjuncta CEO, and Chairman of Rethinking Africa GmbH

"Derisking Investment, Govt Guarantees, Public-Private Sector Partnership Key to Drive Development in German, African Relations" – Stefan Liebing, Conjuncta CEO

Dr. Stefan Liebing is the CEO of Conjuncta GmbH and Chairman of Rethinking Africa GmbH, a German investor and project development company specialized in facilitating investments for projects in infrastructure, renewable and conventional energy production, grids, raw materials projects, and other major industries.

In this interview with Ndubuisi Micheal Obineme, Managing Editor of The Energy Republic, Liebing discusses the ongoing progress at Rethinking Africa GmbH, as well as the complex issues surrounding German-African relations in the energy sector and the need for a change in Germany's foreign policy in Africa. He also talks about his company's involvement in project development across the African continent.

Furthermore, Conjuncta GmbH has been part of a consortium from the beginning and now brought in a new co-investor who joined a few weeks ago to develop a 600MW green hydrogen project in Angola, making history by becoming the first German private sector investor to invest in large-scale green hydrogen production in the African continent. Excerpts:

TER: Firstly, Rethinking Africa GmbH (RTA), a German initiative, was established in 2023 as a Special Purpose Vehicle (SPV) to drive German investment into the African continent. Its objectives are to develop clean energy projects and create job opportunities across the renewable energy value chain in Africa. How far has Rethinking Africa progressed, and what are the latest developments you would like to share with us?

Liebing: We have had an extremely good first year. The idea of RTA has never been to develop projects but to support the development of new investments in Africa by connecting relevant parties and helping them to take the first steps. The small RTA team has been overwhelmed by very strong interest from African leaders. We have met with three heads of state just during the past three months. And it is our clear rule that we do not set up meetings if we do not have specific investment projects to discuss.

TER: Interestingly, we have seen how Rethinking Africa has been progressing, holding business discussions with several African leaders including the Prime Minister of Cameroon, the President of Mauritania, and the President of Kenya, which may lead to project investments in those countries. What's Rethinking Africa planning to do in these African countries? What specific projects have RTA identified as investment projects in their respective countries?

Liebing: We have also met with the President of Malawi and quite a few others. For each of these countries, we have discussed specific proposals in various sectors such as renewable and conventional energy, mining, IT, security, hydrogen, etc.

We got guidance on how to best bring these projects across the line. Since then we have put quite some effort into following up and moderating the process of these projects getting close to the final investment decision (FID).

TER: How is Rethinking Africa involved in the 50-megawatt solar farm investment project in Mzuzu, Malawi?

Liebing: One of our board members is planning to invest in this project. Rethinking Africa has identified the project, brought all required parties to the table, has presented the project to the Head of State, and is now helping with negotiations as we hope to come to the final investment decision in record time.

TER: Recently, your company-Conjuncta GmbH joined a consortium to develop a green hydrogen project in Angola, the first project in sub-Saharan Africa with an ambitious target to start exporting green hydrogen to Europe. What value will this project create between Angola, Germany, and Europe's hydrogen sector?

Liebing: Actually we have been a founding member of the consortium three years ago and have been able to develop this project in cooperation with Gauff Group from Nuremberg (Germany) and Angola's National Oil Company Sonangol.

AFRICAN ENERGY STORIES



We now brought CWP Global on board, a Dubai-based developer and investor and we expect to accelerate the development process. As you rightly put it, there are great advantages for Angola, Germany, and Europe.

Angola will most likely become one of the first countries in the world to use its renewable energy potential for the export of green energy products and complement its oil and gas exports.

Angola will generate significant revenue from another pillar of its energy export strategy and will therefore be in a good position to be a front-runner in building a hydrogen economy.

Germany and Europe will not be able to implement their ambitious climate targets if they can not switch their current of the most advanced in the world. The results situation.

Angola?

Angola. So this already demonstrates that **projects in Africa?** it is not just going to be a European investment in an African country.

maximize local content in these areas.

regulations in place that will guide us.

you highlighted that Conjuncta would way. soon become the first German and and hydrogen from Africa into Europe. What's the latest update on the project?

Liebing: As you will have seen from risk capital for investment. consortium.

are now about to kick off FEED. This makes the Angola hydrogen project one



Leibing meets with H.E the President of the Republic of Mauritania as both parties discuss various investment projects in Mauritania

imports of fossil fuels to green products. of FEED will determine the way forward and This is what I call a classic win-win give us a clear view of the expected construction time.

TER: In terms of the Angola hydrogen TER: Moving forward, you have also been a project development, are there plans to strong advocate for a change in Germany's work with indigenous companies in Foreign Policy in Africa, underscoring the Angola to develop the project? What is need for a new approach to dealing with the percentage of local content and skills Africa instead of foreign aid. What specific transfer this project will impact in areas do you think the German government needs to improve its relations with its African counterparts and how can the German Liebing: Currently fifty percent of the government provide support to Rethinking project is owned by Sonangol from Africa now that it is investing in energy

Liebing: Rethinking Africa is not looking for On the contrary, the project will have a support, we currently do our work with the significant local share and as we plan for means of founders and board members. the construction and operations phase, However, I think if we want to bring German we will of course also look at how we can activities in Africa to the next level, we need to completely reorganize our current approach to the continent.

As an oil-producing country, Angola has The German Government is much more very clear and ambitious local content focused on traditional development aid. I do not think this brings any significant development to Africa and my experience is **TER: Following our previous discussions,** that many African Governments also see it this

European investor to export Ammonia Instead of spending money on paternalistic projects, I would recommend using the development budget for guarantees. The main bottleneck at the moment is the availability of

recent announcements, we have just Many banks are still too conservative, in many agreed for a new partner to join the cases, they are forced to do this by regulatory requirements. We could help them by taking We have completed pre-FEED studies and over certain financing risks by the Government. This could make the difference for many projects that are in the pipeline but have trouble getting financing structured.

TER: What's your advice to German companies in terms of investing in Africa?

Liebing: The biggest business risk of investing in Africa is not to be there. In many parts of Germany, people still have an outdated view of Africa and therefore perceive risk to be too high. While the past few years with many crises have not left Africa out, there is still a lot of great opportunity.

However, I strongly recommend working with partners who have strong experience, as both business models, target investment destinations and financing are getting more complex following recent difficulties on the continent.

I would recommend German investors not to be afraid of working with Governments in Africa. My impression is that a Public-Private Sector Partnership (PPP) can be a very stable model as German investors can bring technology, knowhow, and access to financing, whereas local public partners can provide experience on how to work in the country, deal with regulatory requirements and help to create political stability for a project.

TER: What are the challenges you identified in investing and doing business in Africa? What can the African government do to create an enabling environment in driving more German investments into the African continent?

Liebing: As in many countries, bureaucracy is always a problem. It requires strong political will to accelerate bureaucratic processes and to bring together all authorities that need to be involved. This can sometimes take more time than we have. So streamlining bureaucratic requirements is certainly something that I can recommend this is also a big problem in Germany, by the way, and not unique to Africa.



L-R: President of Malawi, H.E Lazarus Chakwera, and Stefan Liebing, Conjuncta CEO, and Chairman of Rethinking Africa GmbH with other delegations witnessing the signing of an MOU for the construction of a 50-megawatt solar farm in Mzuzu, Malawi.

We will check and assess the doability of and are open to similar activities with any these and – if confirmed – invite German African country. partners and investors to the table to find a way to implement them.

Rethinking Africa GmbH and other country is most welcome. prominent African institutions such as AFCFTA, African Union, and ECOWAS, TER: How much has Rethinking Africa among others?

Liebing: At the moment, it is our Liebing: As explained before, we as a platform are handled on a national level. While we founders and board members do. are in exchange with multilateral national Governments and local private hydrogen. entrepreneurs.

only. Why is that happening? Any plans similar range. to expand investments into other regions such as West Africa, Southern For any project presented to us from the Africa, etc.?

Liebing: We do not have a regional focus

Recently, we have been active in Malawi, Kenya, Mauritania, and Cameroon. But we TER: Are there any ongoing discussions have also been discussing projects with many or partnership prospects between other countries behind closed doors. So any

invested in the African energy sector so far?

impression that many specific projects do not invest ourselves. In some cases, our

investment level, we currently focus on some multi-billion-dollars projects in

One of our fellow Directors is into solar PV TER: Notably, we discovered that investment. He has spent some 100 million Rethinking Africa is focused on investing dollars, and through Rethinking Africa, is in projects from East and North Africa currently looking at new investments in a

> African energy sector, we will look for German investors to implement them.

TER: Are there plans to establish Rethinking Africa's overseas offices in Africa?

Liebing: For the moment, we do not expect that a formal and permanent office is required. We work in a very slim way with only a few full-time resources in Germany and with our board directors working from different locations. My experience is that a combination of virtual meetings and traveling, in combination with strong local partners, can work very well.

TER: What is your outlook for Rethinking Africa investments in Africa in the next 5 years?

Liebing: Germany has a total investment volume organizations from time to time on an My own company for example is pursuing in Africa of around 13 billion Euros at the moment. I hope we can bring this to 20 billion Euros within five years from now, especially given the huge hydrogen projects in the pipeline.

> I hope ReThinking Africa can play a small role in making this happen.



Angola to Make FID on First Green Hydrogen Project by 2025

he final investment decision for Angola's inaugural green hydrogen project, a 600 MW development spearheaded by Sonangol in partnership with CWP, Gauff Engineering, and Conjuncta, is set for 2025 Vladimir Machado, R&D CEO of Angola's national oil company Sonangol said at Africa Energy Week (AEW): Invest in African Energies 2024.

The initiative aims to produce 400,000 tons of green hydrogen annually, with production anticipated to begin in 2027.

Speaking during a session titled Green Hydrogen Catalyst for Africa's Industrialization, he emphasized Angola's vast potential in the green hydrogen market. "Due to its existing energy infrastructure, such as refineries, ports and other projects like the Lobito Corridor, Angola has the potential to become a large green hydrogen exporter," Machado stated.



The project includes plans for a demonstration plant, which will serve as a training ground for future engineers. Highlighting green hydrogen's critical role in transitioning to a carbon-free economy, Machado explained its advantages: "Green hydrogen has direct applications in industry and serves as an excellent means for energy storage, especially to support periods of high energy demand."

Machado also addressed the anticipated surge in global hydrogen demand. "Between 2030 and 2050, the annual expected growth in demand for green hydrogen will be between 5 and 30 million tons per year," he noted. He underscored that while hydrogen currently serves as feedstock in chemical and refining sectors, high-energy-demanding industries like steel, aviation, and textiles will progressively shift toward green hydrogen.

Machado pointed to global trends, such as the European Union's ambitious green hydrogen targets and Germany's H2Global program, as opportunities for Africa to secure a leading position in the value chain. "Africa will have opportunities to dominate the value chain of green hydrogen," he affirmed.

Agip, STAC Marine Celebrates One-Year Successful Partnership, Signs New Agreement for Safety, Operational

Excellence

ni's subsidiary Nigerian Agip
Exploration Limited (NAE) and
STAC Marine celebrate one year of
successful collaboration for the operation
and maintenance of the Floating,
Production, Storage and Offloading
(FPSO) facilities located in the offshore
deepwater of ABO field.

In 2023, after several years of operation and maintenance by an international contractor, STAC took over responsibility for the FPSO. As of November 2024, STAC has successfully completed one year of safe, efficient, and smooth operations.

To further strengthen this achievement, along with the companies' commitment to Health, Safety and Environment (HSE), NAE and STAC also signed the "Pact for Safety and Environment". This agreement, developed by Eni's Safety Competency Centre, focuses on the critical role of the human factor in ensuring a safe and reliable workplace.



L-R: Mr. Fabrizio Bolondi, Managing Director of NAE in a handshake with Mr. Aminu Umar, CEO of STAC Marine after signing the "Pact for Safety and Environment"

The Pact, signed by the top management of both NAE and STAC, is a critical step towards achieving Eni's Zero Incident safety target by enhancing safety performance across all operations.

Eni has been operating in Nigeria since 1962, actively engaging in hydrocarbon exploration and production. Currently, Eni has a substantial portfolio of assets in exploration and production through the branches Nigerian Agip Exploration Limited (NAE) and Agip Energy Natural Resources Nigeria (AENR). The company also holds a participation interest in Nigeria Liquified Natural Gas Limited (NLNG).







AFRICAN ENERGY CHAMBER

THE VOICE OF AFRICA'S **ENERGY** SECTOR



Mr. Julius Rone, Group Managing Director/CEO, UTM Offshore Limited

"How Nigeria's First \$5bn FLNG Project Will Impact Domestic, Africa, Global Economy" - Julius Rone, UTM CEO

feet. Sadly, investment remains low in first inspiration for me. the gas space.

Mr. Julius Rone, Group Managing Director/CEO, UTM Offshore Limited, widely known as the 'Gas King' spoke on We are also number six in the world but Nigeria learned and expected impact on not only economy. Excerpts:

UTM Offshore Limited and embark on Nigeria's first \$5 billion floating LNG project?

Rone: Thank you very much for having me FID be taken? on your big and reputable platform to share insights into the UTM journey and Rone: All the engineering studies have been energy sector and Africa at large. As you said in your introduction, UTM Offshore on Nigeria's first floating LNG project.

I am from the Niger Delta of Nigeria, which is an oil-bearing area. I grew up to see exploration and production activities

Africa's natural gas reserves are around me. Therefore, I developed an interest estimated at 630 trillion standard cubic in Nigeria's energy sector early. That was the

I needed to demonstrate to the world that Speaking in a One-on-One interview indigenous companies can develop the with The Energy Republic and prominent resources. When we conceived the idea of members of the African Association of establishing UTM Offshore in 2007, it was Energy Journalists and Publishers, targeted at contributing to the development of AJERAP, drawn from 54 African nations, the industry. Nigeria is the leading oil and gas nation in Africa.

a wide range of issues, especially, the did not have a floating LNG. Africa's two inspiration behind the company's FLNG floating LNG plants are owned by international project, milestones achieved, lessons oil companies. We, therefore took it upon ourselves to work toward it. We believe that Nigeria but also Africa and global once we get it right, others will follow. It can be done in Nigeria. It can be done in Ghana. It can be done in Mozambique. It can be done in all AJERAP: What inspired you to establish other African nations. We are going to deliver the project based on international standards.

> How far have you gone on the project and when would the final investment decision,

what we have been doing in Nigeria's completed. It is like when you want to build a house, you identify the land, clear the site, and do your engineering studies. Once you finish Limited is known, globally for embarking the design, you prepare to get all your permits from the authorities.

> In our case, we have gotten approval from the regulator, which is the license to construct the first floating LNG plant in Nigeria that was i

ssued to us about three weeks ago by the Nigerian Downstream and Midstream Petroleum Regulatory Authority, NMDPRA and presented by the Minister of State for Petroleum Resources (Gas), Ekperikpe Ekpo.

We are now working toward taking the Final Investment Decision, FID. I just came in this morning from my trip, around the world where we had a couple of meetings, including the United Nations and the African Export-Import Bank, taking the lead in arranging the debt and equity of the project. We had a meeting with them in New York. We look forward to announcing the FID soon. We are very pleased with the level of aggregation of the debt and equity being arranged by the bank.

AJERAP: How will the eventual completion of your project impact Nigeria and the global economy?

Rone: The project would impact many stakeholders. Everyone - the community, the region, Nigeria, West Africa and the entire continent – would be positively impacted on completion of the project. It would culminate in reducing gas flaring.

Nigeria has signed into the United Nations Global Reduction of Emissions. The project would create 7,000 direct and indirect jobs across the value chain, which means a lot of people, not only Nigerians but all over the world, would participate in this project. It should be noted that during the construction phase alone, over 25,000 jobs would be created.

AFRICAN ENERGY STORIES



We would also take several Nigerian youths to different parts of the world where the construction and integration would take place for training.

They would understudy the process so that on completion, they would sail back with the floating LNG, and have the hands-on experience to manage and upgrade the plant of such nature offshore. Also, the project would support the demand for energy in Nigeria, which requires over two million tonnes of the Liquefied Petroleum Gas, LPG for domestic consumption. Currently, over 1.5 million tonnes are imported from the global market. The supply of our LPG in Naira would enhance the value of the local currency.

The impact would go beyond Nigeria as one offtaker is currently discussing the possibility of taking the LNG to South Africa with us. It would benefit the entire continent. By the special grace of God, this would be the flagship project to open AJERAP: What is your take on the global up that space for stranded gas offshore to be monetized through a technology that has been broken.

AJERAP: What do you think Nigeria and other African countries can do to conquer the energy poverty?

Rone: Like I said conquering energy property has to start from Nigeria. Once it starts from Nigeria, it moves back to other African countries. Today, Africa is in the complete deficit. The governments in African countries must play their parts for investors to come in because governments alone cannot take the continent out of energy poverty. The government must provide attractive physical incentives for public and private partnership. The government should provide access to funding.

they want, without any hindrances.

No investors want to tie their monies down. African countries must simplify encourage investments.

Also, there should not be double taxation. All investors want to be sure of the number of tax they are going to pay. It should be part of their financial models. Bringing up new taxes later usually affect



planning, execution and payment of dividends to shareholders.

Potential investors should be able to visit one website to see all taxes to be expected and plan toward paying them. The governments should not keep changing policies. There should be consistency. There should be security, safety and foreign exchange stability to attract, retain and protect investments.

energy transition and the quest for Africa's energy security?

Rone: Africa needs to develop its God-given resources. However, developed economies are talking about the energy transition. They have an uninterrupted power supply. I do not think that any part of Africa enjoys that kind of uninterrupted power. This is why African leaders have said it is not possible for them to abandon fossil fuel. The leaders and others have said they have to develop their countries before talking about the transition. They have identified gas as their transition fuel.

For example, Qatar has oil and gas. Qatar decided to use more of its gas than oil. In Nigeria, there is the Decade of Gas Initiative. An executive order also provides incentives to those who want to develop gas projects.

The government of Nigeria is also supporting Then, there should also be assurance of projects with funding to enable people to get free entry and exit, meaning that into the gas sector. Globally, there is still a investors that invest in African nations window for funding gas projects. So, this is the can also take their investments out, if time for African nations to wake up and encourage investors to bring in their funds to put into the energy sector using gas as their transition fuel.

their regulatory approval processes to AJERAP: Why has your organization been a strong supporter of the African Energy Week in Cape Town, South Africa?

Rone: Like I said earlier, our emphasis is on achieving energy security. Africa Energy Week is a platform that is propagating that message to African leaders. That is the reason why we continue to support the Africa Energy Week,

AEW. We believe that the AEW is committed to achieving this and other objectives.

Last year, some presidents and former African presidents attended the event.

In one of the sessions, former President Olusegun Obasanjo of Nigeria requested the late President of Namibia and others to work toward the creation of the African Leaders Energy Council to appropriately respond to global issues.

On my part, I suggested incorporating other leaders like presidents to have a session on Africa, while private businesses go on with their meetings.

We need to have a cleaner energy to save the environment. Well, luckily for us, we have gas, which is also cleaner and which we can use for our transition.

So, African Energy Week has created the right platform and we support it. The world has to listen to Africa because the continent cannot abandon its huge population to die in energy poverty.

AJERAP: What positive impact has the annual event made in the continent's energy space and why do you think the 2024 edition is important?

Rone: There are indications that the AEW has impacted businesses, investments, and Africa's economy in the past few years. Last year, we saw significant progress in terms of engagement and participation.

We believe that in 2024, it will become more robust because I had the opportunity to speak with, NJ Ayuk and his team recently during the Invest Africa Summit in Paris. Many attendees at that event agreed to meet again in Cape Town for this year's AEW.

The AEW team was in China discussing with the Chinese Development Bank and other financial institutions. It is easier to set up meetings with different stakeholders through the AEW instead of moving from one part of the world to another to meet them. In other words, the AEW provides a platform for business leaders to meet with the right people, and discuss projects.

AJERAP: What challenges do investors and potential investors in Africa encounter, and how can they be tackled?

Rone: There are many problems, including inadequate funding, inconsistent government policies and multiple taxes in African nations. Insecurity is being addressed in some nations, including Nigeria. There is also what I would like to call corruption perception in Africa.

AFRICAN ENERGY STORIES



Investors do not want to put their monies, where corruption perception is high. Good corporate governance is also desired. Potential investors would not put in their monies where there would not be checks and balances. Also, African governments need to ensure that all the regulators have processes for giving their approvals to investors and potential investors as seamlessly as possible.

Incentives are also required. If they want investors, they need to give them something like tax breaks or waivers.

Also, the method of payment should be made much easier for investors. Investors trading in multiple countries should have a single payment platform to quickly turn their investments around and distribute those services on the continent. First Impact is currently operational. We need more of such services.

Nigeria and trade with someone from Senegal without asking the person to pay in dollars. The money should pass platform. Payment is made in Naira and the other partner in Senegal receives equivalent in Senegalese currency.

AJERAP: What advice do you have for the operational? government and potential investors?

atmosphere for investors and potential and other issues.

companies registered should not take communities? long. It should get to a point where Rone: The Environmental, Social, and their certificates.

from the taxes while jobs are created.

AJERAP: What will you be speaking Week 2024?

experience.



Mr. Julius Rone, Group Managing Director/CEO, UTM Offshore Limited, and partners presenting the company's FLNG model to H.E President Tinubu at the Presidential Villa in Abuja.

I will be sharing the UTM Offshore experience, including lessons learned, and challenges encountered at the event. For oil and gas Investors should be able to sit down in investments, financing is key. We need to share this experience with others. We will stress the need for investors to have bankable projects. If they do not have banking projects, financiers through the payment settlement run away because they are investing other peoples' monies.

AJERAP: Do you have plans to work with the African Energy Bank when it becomes

Rone: We need an indigenous energy bank to fund projects and programmes for a reason. **Rone:** Generally, governments in African Most European banks are not funding projects nations need to provide a conducive in Africa. Already, member states have agreed that Nigeria should host the African Energy investors. All bureaucratic processes Bank and its offices are being set up. When the must be eliminated. Investors should be African Energy Bank is up and running, we can able to travel around Africa without visas consider working with the bank in our next project.

Currently, there is no direct flight from AJERAP: How integrated is your Nigeria to Angola. If there's a flight, it Environmental, Social, and Governance takes 24 hours or 48 hours to get to strategy and implementation process as well Angola or Mozambique. Getting as impact on stakeholders, especially

investors should fill out necessary forms, Governance, ESG, is a critical condition for submit required documents, and print assessing funding today in international and local banks. Without it, investors would not be It should be a win-win situation for both able to access funds. So, we take it very parties because the governments benefit seriously. At UTM Offshore we have two leading consultants to handle it. ESG forms a critical part of our development strategy.

about at the forthcoming African Energy AJERAP: In what ways are you committed to local content?

Rone: We have already agreed with the Rone: I will be speaking on financing and Nigerian Content Development and the difficulties of attracting investments Monitoring Board, NCDMB, regulating local into Africa, based on our UTM Offshore content issues that the youths would be sent for training.

They would learn a lot and get involved in the operations and how to run the plant.

AJERAP: Have you secured contract with offtakers in Europe or other continents outside Africa?

Rone: As I have noted earlier, the Final Investment Decision, FID would be taken soon. One of the conditions for the FID is the Sales and Purchase Agreement, SPA. We have a potential offtaker of international standards that will offtake the product to Europe and other parts of the world.

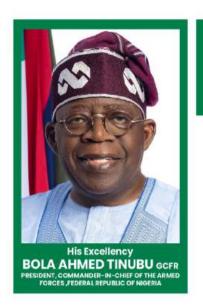
AJERAP: What are the challenges UTM Offshore has faced so far, and how are you tackling them, if any?

Rone: When developing a project of this nature, some challenges should be expected. Problems have been addressed because we engage reputable consultants in similar FLNG plants. It makes it easier for us because of the experiences they have acquired over the years. There are four open-sea floating LNGs in the world. One is in Mozambique; two in Malaysia and one in Australia.

We also hired a competent company to supervise what they are doing. We are happy because of the support from critical stakeholders, especially the federal government, Nigerian National Petroleum Company Limited, NNPCL, and communities.

AJERAP: In what ways will the project impact the domestic LPG market?

Rone: The project would boost the domestic supply of the Liquefied Petroleum Gas, LPG. Nigeria requires commercial quantity yearly. Currently, a large amount of the product is imported from the global market. The project would enhance domestic supply, reduce importation, and conserve foreign exchange. Also, it will reduce transportation costs because of the proximity to the market. This will also sufficiently reduce the price of LPG in the nation.



Addressing Fundamental Issues to Accelerate Nigeria Gas Development Over the Past Year

- Inauguration of President Bola Ahmed Tinubu: (May 2023).
- Formal Opening/Ribbon cutting of the Decade of Gas Secretariat (July 2023).
- Appointment of Minister of State Petroleum Resources (Gas) by the President for increased focus and accountability for Gas (August 2023)



Ensuring Adequate Supply

20 priority gas projects Identified by the decade of gas working group, with potential to supply 4.6 BCFD by 2030 NNPCL, SPDC, Seplat, Total Energies, Chevron, Sunlink, Amni, ExxonMobil.



NUPRC announces successful bidders for the Nigerian Gas Flare Commercialization Programme to process flare gas for domestic utilization (September 2023).



SPDC JV announced **ISENI Final Investment** Decision (FID). 100mmscfd will be supplied for Domestic utilization (January 2024).

President signed the **Executive orders** providing improved fiscals for onshore and shallow water Gas Investments (March 2024).



NCDMB in line with local content requirement approved waivers for 2 Shallow Water gas projects (May 2024).

Robust Economic Principles

PCNG Initiative was launched by the president in order to alleviate PMS subsidy removal and support automobile sector switch to Gas (2023).



President approved payment of 13 years old gas-to-power debt to improve investor confidence in the power sector (April 2024).

Pilot grassroots cooking gas adoption campaign has been launched to provide economic and health relief for rural homes and women. (May 2024).











Infrastructure **Build Out**

NNPC Ltd and Golar signed deal on joint development of gas fields using floating liquefied natural gas (FLNG) (August 2023) PDA signed (June 2024).

NMDPRA/NGIC Commenced daily reporting of Domestic Gas Supply & Demand for Improved transparency and balancing of the **Domestic Gas network** (December 2023).

President appoints the MDGIF governing council (January 2024). Council have identified over 50 Infrastructure projects (May 2024).

President commissioned major gas infrastructure projects (ANOH Gas **Processing Facility 100% Mechanical completion** (300mscfd), ANOH-OB3 **CTMS** pipeline (May 2024).

President also commissioned AHL's **GPP 2 Gas processing** Facility (200mscfd).

Source: https://www.decadeofgas.com.ng





























Principal Sponsor







PNC Forum 2024 Discusses The Next Frontier For Nigerian Content Implementation

agos, Nigeria — In a major development, ExxonMobil has billion in Nigeria's offshore oil operations. Meanwhile, the Nigerian National Petroleum Corporation (NNPC) is ofkeyassets. preparing to revive the Brass and Olokola Liquefied Natural Gas (LNG) projects, sector.

Monitoring Board (NCDMB), in line with its mandate through the NOGICD Act, Indigenous companies in the Nigerian oil significant capacity development within Nigeria while also creating opportunities to export some of these companies' For over 13 years, NCDMB's flagship event, the across Africa and beyond.

the President's vision of an investmentfriendly Nigeria, which aims to create an projects that advance local content, event focused on the NOGICD Act. encourage local knowledge transfer and year's Practical Nigerian Content (PNC) Forum will discuss these and many other critical topics. This year's edition, themed 'Defining The Next Frontier For Nigerian Content Implementation', is scheduled to take place from 2 - 5 December 2024 at Stakeholders will also discuss issues around the Nigeria Content Tower in Yenagoa, Bayelsa State.

thinking, reflecting the significant

shifts in the oil and gas industry. The ongoing divestment of assets from International Oil announced plans to invest \$10 Companies (IOCs) to indigenous companies highlights the effectiveness of local content policies, as more local players take ownership

The theme sets a clear vision for the future. signalling renewed momentum in the focusing on the need to further develop the capacity of indigenous companies, address gaps within the industry, and seize emerging The Nigerian Content Development and opportunities stemming from divestments, decarbonization, and offshore operations. It underscores the importance of expanding, continues to drive an unprecedented deepening, and evolving local content increase in the participation of strategies to ensure that Nigeria and its indigenous companies remain competitive and gas industry. This has created while maximising the country's vast energy resources.

competences, products, and services PNC Forum, has brought together industry stakeholders to discuss critical successes, issues and challenges regarding Nigerian These investment prospects align with Content development and implementation while also proposing solutions. PNC Forum, organised in partnership with dmg Nigeria enabling environment for transformative events and Levmora Services, is the foremost

increase the participation of indigenous The event presents an opportunity for industry stakeholders in the oil and gas sector. This players to engage in critical discussions aimed at deepening the implementation of Nigerian content in the face of growing energy demand and as the country looks forward to harnessing the benefits of abundant oil and gas resources.

overcoming investment and financing challenges for Nigerian content gaps in offshore projects and business solutions while This year's theme is timely and forward- also exploring the untapped benefits of the AfCFTA.

Additionally, the PNC Forum also provides a chance to deepen Nigerian content through impactful community engagement (CSR), highlighting the importance of collaboration and regional integration as key growth drivers.

Wemimo Oyelana, Portfolio Director - Africa & Country Director - Nigeria, dmg Nigeria events while speaking on the announcement of this year's theme, said, "The PNC Forum is the premier event that steers the conversation for deepening Nigerian Content across the energy sector. Nigerian Content must be at the heart of the transformations we see in the sector.

At this year's PNC, we anticipate robust conversations from industry leaders that will advance the implementation of Nigerian Content in the domestic gas utilisation space, increase in country valorisation within the manufacturing sector, and promote capacity development as the bedrock of local content – all to meet energy demand for socioeconomic development and growth."

PNC Forum 2024 is produced by dmg Nigeria events, a subsidiary of dmg events with over 80 Conferences and Exhibitions across the world such as ADIPEC, and Gastech. The 13th edition of the event will unite leaders, policymakers, regulators, and professionals from across the globe in the oil, gas and energy industry to advance Nigerian content implementation throughout the industry ecosystem, as well as emerging business opportunities within the country.

About the Practical Nigerian Forum

For over 13 years, the PNC Forum has provided an invaluable platform for connecting, engaging, and discussing innovative strategies with government and industry leaders across the value chain.



PNC Forum 2024: Nigerian Content in Oil, Gas Industry Hits 56% in 2024

he Nigerian Content performance level in the oil and gas industry has hit 56 percent in 2024, the Executive Secretary, Nigerian Content Development and Monitoring Board (NCDMB), Engr. Felix Omatsola Ogbe made this known at the Practical Nigerian Content 2024.

He spoke at the 13th Practical Nigerian Content (PNC) Conference and Exhibition holding at the NCDMB Conference Centre, Yenagoa, Bayelsa State, attended by top government officials including the Deputy Governor of Bayelsa State, Senator Lawrence Ewhrudjakpo, Minister of State for Petroleum Resources (Oil), Senator Heineken Lokpobiri and the Minister of State for Petroleum Resources (Gas), Rt. Hon. Ekperikpe Ekpo.

Other industry leaders in attendance included the Chairperson, Senate Committee on Local Content, Senator Natasha Akpoti-Uduaghan, chairperson, House of Representatives Committee on Nigerian Content Development and Monitoring, Hon. Boma Goodhead, the Secretary General of the African Petroleum Producers Organisation (APPO), Dr. Umar Farouk Ibrahim and chief executives of international and indigenous oil and gas companies and operating and regulatory agencies in the petroleum sector.

The Nigerian Content performance level is calculated on year-on-year basis by the Monitoring and Evaluation Directorate of the NCDMB and is anchored on the ongoing projects in the upstream, midstream and downstream segments of the oil and gas industry.

Data is aggregated from total amounts expended on projects and the Nigerian Content component of the annual spend. The data is mined from statutory reports submitted by companies and the integrity those data is verified during Nigerian Content performance reviews and workshops and they must sync with the Nigerian Content Compliance Certificates (NCCC) on projects approved by the Board.

The Nigerian Content level stood at 54 percent as at December 2022 and 2023, increasing significantly from 26 percent in 2016 before the introduction of the Nigerian Content 10-year strategic roadmap.

By Ndubuisi Micheal Obineme

The latest increase marks a significant milestone in the Board's march toward 70 percent Nigerian Content by 2027 as set out in its 10-Year Strategic Road Map (2017-2027).

The NCDMB boss also revealed that 312 Nigerian Content Plans have thus far been approved by the Board and that 402 Nigerian Content Compliance Certificates (NCCCs) were issued. Also, that the new Project Certification and Authorisation Directorate (PCAD) guidelines has reduced the Board's touchpoints from nine to five, and the contracting cycle cut to six months, he confirmed.

Engr. Ogbe and a representative of the Bank of Industry (Bol) used the PNC Forum to sign an agreement on the Revised Nigerian Content Community Contractors Financing Scheme. The Fund addresses a critical challenge faced by local contractors in accessing much-needed funds for contracts awarded by oil and gas companies.

Under the new product paper for the fund, N15 billion has been earmarked for the fund and "the single obligor limit has been increased from N20 million to N100 million," Ogbe hinted.

On the Nigerian Content Academy recently established by the Board for training to prepare Nigerians through a range of courses that cover every aspect of the oil and gas industry, from upstream exploration to downstream processing, he said new career paths and economic opportunities are being opened for local communities. The Academy was unveiled by the Ministers as part of activities marking the Forum.

AFRICAN ENERGY STORIES



The Executive Secretary gave insight into the Back-to-the-Creeks Initiative which focuses on taking Nigerian Content benefits to local communities, especially developing basic educational facilities in communities and equipping youths in host communities with the skills needed to meet industry demands, and thus directly supporting the local content drive.

In his address, the Minister of State for Petroleum Resources (Gas), Rt. Hon. Ekperikpe Ekpo, commended NCDMB for systematically aligning its local content policy initiatives with Federal Government's gas development agenda. The Minister listed the NCDMB's support for compressed natural gas (CNG) projects, modular gas processing plants, manufacturing plants for liquefied petroleum gas (LPG) cylinders, LPG depots, LPG terminals, LPG storage and bottling plants, gas gathering facilities, smart gas and detector alarm services, as critically important areas where the Board's strategic intervention has made huge gains for the country.

He disclosed that "in the last 12 months, two critical gas projects were completed," namely, SEPLAT Assa North and Shell Petroleum Development Company (SPDC) Ohaji South, with a combined capacity of 600 million standard cubic feet/day. Also, the 300 MMscfd Kwale Gas Gathering (KGG) Hub and Injection Facility, jointly executed by Xenergy Limited and the NCDMB, were commissioned within the same period.

While reiterating that "gas will be the mainstay of Nigeria's energy shift" as the world transits to renewables, he stated that Government is "giving local businesses a chance to engage in gas distribution, processing, and power generation."

With specific reference to the PNC Forum, he said the theme "Defining the Next Frontier for Nigerian Content Implementation" is "a call to action and a reaffirmation of Nigeria's commitment to leveraging our local capabilities to drive energy security, economic growth, and environment sustainability."

He charged the organisers of the Forum, namely, NCDMB and DMG Events Limited, to ensure that the event functions as "a spur for practical ideas that move our country closer to a



Engr. Felix Omatsola Ogbe, Executive Secretary of the Nigerian Content Development and Monitoring Board

promising and sustainable energy future."

Also speaking at the event, Minister of State for Petroleum Resources (Oil), Senator Heineken Lokpobiri, commended the NCDMB for organising the Forum and for significant milestones recorded thus far since its establishment in 2010. He revealed that wherever he has been across Africa for oil and gas-related events, other countries want to come to Nigeria to learn from its local content success story.

On divestments by international oil and gas companies (IOCs) in the country, he said there is no reason to be alarmed as indigenous operating companies have adequately filled the gaps and thus significantly increased the country's stake in the industry. He said the affected IOCs have not left the country but simply moved their investments and operations from onshore to deep offshore.

The Minister urged industry players to be strategic in their thinking, noting that "quality, standards and capacity developed have to be sustained" if the country is to be able to sustain the gains made so far.

With regard to strategies to deal with the decline in funding of oil and gas projects in Africa, in the wake of the global de-emphasis of fossil fuels, the Secretary General of the African Petroleum Producers Organisation (APPO), Dr. Umar Farouk Ibrahim, said the Africa Energy Bank (AEB) would be taking off in the second quarter of 2025, with the signing and ratification of the Establishment Agreement by the required number of countries. Its headquarters is to be located in Abuia.

In his remarks, the Bayelsa State Deputy Governor, Senator Lawrence Ewhrudjakpo, commended the NCDMB and industry stakeholders for putting together the event, and for the collaboration that has yielded remarkable developments in the petroleum industry.

He, however, reminded the industry captains that Bayelsa State accounts for about 60 per cent of the gas feedstock for the Nigeria Liquefied Natural Gas (NLNG) Project, Bonny, which has now progressed to Train 7, and thus deserves to have a train built within its territory.

In the Organiser's Welcome Address, Mrs Wemimo Oyelana, Country Director (Nigeria) and Portfolio Director (Africa), DMG Nigeria Limited, said the theme of the Forum was "designed to spark forward-looking and transformative discussions," and that "As the Nigerian energy sector continues to evolve, it is critical to address the next steps in advancing Nigerian Content."

Other speakers included the Chairperson, Senate Committee on Local Content, Senator Natasha Akpoti-Uduaghan, her counterpart in the House of Representatives, Hon. Boma Goodhead, the Minister of Power, Mr Adebayo Adelabu, the Group Chief Executive Officer of Nigerian National Petroleum Company Limited (NNPCL), Mallam Mele Kyari, Chief Executive Officer of the Nigerian Upstream Petroleum Regulatory Commission (NUPRC), Engr. Gbenga Komolafe, and his Nigerian Midstream and Downstream Petroleum Regulatory Authority (NMDPRA), Engr Farouk Ahmed.

For over 13 years, the PNC Forum has provided an invaluable platform for connecting, engaging, and discussing innovative strategies with government and industry leaders across the value chain.



PNC 2024 Ends As NCDMB Commits to Deeper Community, Industry Engagements

he Executive Secretary, Nigerian Content Development and Monitoring Board (NCDMB), Engr. Felix Omatsola Ogbe, on Wednesday in Yenagoa expressed profound gratitude to industry stakeholders, top-ranking vendors and staff of the Board for their contributions to the success of the Practical Nigerian Content (PNC) Forum 2024.

Speaking at the official closing ceremony of the four-day event at the Conference Centre of the Nigerian Content Tower (NCT), he said their active participation enriched discussions as the Board charts a pathway to the next frontier for Nigerian Content implementation.

Engr. Ogbe reiterated the Board's determination to deepen engagements with local communities and oil and gas industry players through sundry schemes newly introduced, such as the Back-to-the-Creeks Initiative, the Revised Nigerian Content Community Contractors Financing Scheme, Nigerian Content Academy, and creation of more conducive and befitting zonal offices to enhance service delivery by the Board.

According to him, the Back-to-the-Creeks policy is "designed to equip youths in our communities with the skills to meet industry demands" through improvement of basic educational facilities and motivation of teachers. In regard to the Contractors Financing Scheme, he explained that the Board has increased the single obligor limit from N20 million to N100 million.

"What that does," he noted, "is that it gives more opportunities for local contractors to be able to access higher figures" to enable them to secure and execute meaningful contracts in the oil and gas industry. In that way, the Scheme would serve as a mechanism "to bring the benefits of local content to communities."

The Executive Secretary, who was represented by the General Manager, Corporate Communications and Zonal Coordination, Barr. Esueme Dan Kikile, expressed joy that the Board's partnership with the Bank of Industry (BOI) is working well,



that "performance is at optimal level," and that the new funding scheme would be hugely beneficial to local contractors.

On the Nigerian Content Academy, he said NCDMB has the experience, the capacity inhouse, and "the understanding of what it means to practise Nigerian Content," having done that for 14 years, and that he believed the industry would take advantage of what the training facility has to offer.

Acknowledging the invaluable input of experts of diverse backgrounds in various panel discussions that held on Tuesday and Wednesday (3rd and 4th December), Engr. Ogbe requested the NCDMB partner, dmg events Limited, "to develop key actionable points" from the PNC Forum "that will guide the industry" as it moves to the next frontier of Nigerian Content implementation.

He assured all industry stakeholders that the Board would continue to collaborate with them to fulfil its mandate as set out in its enabling statute, the Nigerian Oil and Gas Industry Content Development (NOGICD) Act, 2010.

Earlier in the day, resource persons made presentations on the African Continental Free Trade Agreement (AfCFTA) and Marine Accelerator Programme (an initiative of the Oil Producers Trade Section, comprising the international oil companies), as well as a Spotlight on 'Youth Empowerment Pathways.'

The Senior Trade Policy and Law Expert at the Nigeria AfCFTA Coordination Office, Abuja, Mr. Olusegun Olutayo, who spoke on the topic "AfCFTA: A Panacea for Africa's Economic Rebirth," explained the potential benefits of the Agreement by throwing light on its eight Protocols, namely, Trade in Goods, Trade in Services, Rules and Procedures on the Settlement of Disputes, Intellectual Property Rights (IPRs), Investment, Competition Policy,

Digital Trade, and Women and Youth in Trade.

According to him, "It is within these Eight Protocols that that prosperity, that integration, that economic revolution, that industrialisation, actually comes," arguing that "AfCFTA is the way to go." AfCFTA came into force in 2018 after ratification in Rwanda in July 2028, with the aim of facilitating economic integration, trade and investment among African countries.

On the Marine Accelerator Programme (MAP), sponsored by the OPTS in conjunction with the NLNG Shipping and Marine Services Limited (NSML) and based in Bonny, Rivers State, the issue, according to the presenter, was: "A Quality Reassessment shows that the challenges in the marine services industry four years ago still persist." Definite measures were required to make offshore operations in the industry safer through MAP.

The pilot programme, consisting of seven modules, was launched in May 2025 and focused on priority vessels. With the remarkable success of the pilot phase, the OPTS is set to launch the next wave of the marine accelerator training in the first quarter of 2025.

The Spotlight on Youth Empowerment Pathway focused on "The YEP Model: A Unique Approach to Employment," and was presented by Mr. Tunji Idowu, Executive Director and Managing Trustee, PIND.

It dwelt on Workforce Development, which highlighted the imperative and strategies for bridging skills gaps, among other things, ecosystem strengthening, government engagement and partnerships, as well as YEP's future vision-scaling for sustainability.

Panel discussions in three different sessions dwelt on "Nigerian Content Beyond Borders," "Nigerian Content from the Grassroots: Community Capacity Building," and "From Policy to Practice: Strengthening Domestication for Economic Development."

Under "Nigerian Content Beyond Borders," sub-topics were "Examining the major barriers hindering cross-border value chains – regulations, documentation, logistics and supply chain, costs, etc.," "What steps are being taken to enforce standardization?



to further encourage the export of local implementation?" capacity and enhance Nigeria's presence in international markets?"

Technology Association of Nigeria Organisation of Nigeria (SON), and Dr. and Chief Executive Officer, Blue Seal Nigerian Content Development, Shell. Energy Group Inc. Moderator was Mrs. Association of Nigeria.

responsibility within host communities companies tap in? be structured to achieve increased production levels?" and

How Can we prove that Nigeria meets "How can research-based initiatives increase global standards," "What incentives exist the impact of CSR on local content

Panellists were Dr Ama Ikuru, Director, Corporate Services of NCDMB, Mr. Gorah The panellists were Alhaji Abdulmalik Adams Ayuba, Deputy Director, Community Halilu, Director, Monitoring and Development and Education, Federal Ministry Evaluation in NCDMB, Engr. Wole of Regional Development, Mr. Charles Epelle, Ogunsanya, Chairman of Petroleum Nigeria Liquefied Natural Gas (NLNG) Limited, Mr. Enar Otuks, Oilserv, Mr. Tunji Idowu, PIND, (PETAN), Mr. Paul Clement Pankes, Group and Engr. Obidike Uzu, Vice Chairman, PETAN, Head - Chemical Technology, Standards and Managing Director, Global Process Pipeline Services Limited. The moderator was Doyle Edeni, Group Managing Director Mr. Olanrewaju Olawuyi, General Manager,

Bukola Adubi, Chief Executive Officer, The final panel discussion, titled "From Policy MicCom Cables and Wires Limited, and to Practice: Strengthening Domestication for President, Cable Manufacturers Economic Development," had as subtopics "Outlining the limitations of the local supply chain, what funding and capacity building The second panel discussion, which strategies are required?" "What are the main centred on "Nigerian Content from the barriers to entry for manufacturers in the oil Grassroots: Community Capacity and gas space? How can the government Development," had as subtopics develop an enabling environment for local "Assessing the socio-economic impact of manufacturers to thrive?" "What local content on host communities," opportunities have the NCDMB's R&D "What enabling structures have been initiatives unlocked for the oil and gas sector built by the NCDMB to support the over the years?" "What local content growth of community contractors? What opportunities exist in the national adoption of gaps remain?" "Can shared asset CNG utilization? How can indigenous

Panellists were Mr. Ene Ette, General Manager, Planning, Research and Statistics, NCDMB, George Onafowokan, Managing Director, Coleman Cables and Wires, Engr. Tari Mayor-Bright, Sovereign and Subnational Coordinator, Presidential CNG Initiative, Mrs. Iroghama Ogbeifun, Managing Director and CEO, Starz Investments Company Limited, and Ms. Patience Ranami Abah, Director-General, Bayelsa Investment Promotion Agency. The Moderator was Dr. Timi Austen-Peters, Chairman, Dorman Long Engineering Limited.

The PNC 2024, ended on Thursday with site visit by oil and gas industry captains to First Marine and Engineering Services Limited (FMES) shore base facility in Yenagoa, is the 13th edition of the annual event, which is dedicated to deepening Nigerian Content across the energy sector to support the country's energy sufficiency goals.

Over the past eleven years, the Practical Nigerian Content Forum organised in Partnership with the Nigerian Content and Monitoring Board (NCDMB), has been developed alongside the Nigeria Oil & Gas Content Development Act (NOGICDA).

The PNC Forum will provide and opportunity for Nigerian oil and gas industry stakeholders to discuss the current challenges being faced within the market, explore solutions and define action points for the next 12 – 18 months.



The Must Attend Annual Forum On Nigerian Content

Why Sponsor PNC 2024?





Network with decision makers across the entire energy value chain



Launch new brands, products & services



Position your company as an industry expert and thought leader



Generate invaluable business leads





Scan To Download The Partnership Prospectus



For Sponsorship & Exhibition Opportunities, Please Contact:

Tiwalade Toki

Commercial Sales Lead - Nigeria M: +234 701 686 2503 E: info@pncnigeria.com

Benjamin Irekpita

Commercial Sales Manager M: +234 901 421 8872 E: info@pncnigeria.com

dmg::events







PHOTO: At the ongoing Practical Nigerian Content Conference & Exhibition in Yenagoa, Bayelsa State... Shell Companies in Nigeria General Manager Nigeria Content, 'Lanre Olawuyi, welcome the minister of state for Petroleum Resources (Oil), Heineken Lokpobiri to the Exhibition Booth of Shell.

Shell Awards \$1.98 Billion Contracts to Nigerian Companies in 2023

hell Companies in Nigeria said they awarded contracts worth \$1.98 billion to Nigerian companies in to the development of local content in the oil and gas industry.

The contracts, awarded by the Shell Petroleum Development Company of **Exploration and Production Company** from \$1.92 billion, recorded in 2022.

SNEPCO's Managing Director, Ron Adams, theme "Deepening the Next Frontier for Oil Company Limited (NAOC). Nigerian Content Implementation."

Fadahunsi told delegates at the PNC asynthetic-based drilling fluid. Forum that several benefitting companies had taken advantage of the

patronage to expand their operations and improve their expertise and financial strength.

2023 as part of their efforts to contribute He said: "Shell companies execute a large proportion of their activities through contracts with third parties, and Nigeria-registered companies have been key beneficiaries of this policy aimed at powering Nigeria's progress."

Nigeria Limited (SPDC), Shell Nigeria According to him, Shell companies also implemented projects under the Human Limited (SNEPCo), and Shell Nigeria Gas Capital Development Fund, including the Niger (SNG), indicated a three percent increase Delta University learning centre and digital library project and the Federal University of Technology Information Technology Hub. Both projects were inaugurated this year, in disclosed this at the 13th edition of the collaboration with SPDC Joint Venture partners Practical Nigerian Content forum in - Nigeria National Petroleum Company Yenagoa, Bayelsa State, which had the Limited (NNPC), TotalEnergies and Nigeria Agip

He said other projects included the University Adams, who was represented by Business Of Lagos Geosciences Centre Of Excellence, Opportunity Manager for SNEPCo's Nigeria Diving School and funding of ongoing Bonga South-West Aparo Project Olaposi research at the University of Ibadan to develop

By Ndubuisi Micheal Obineme

He added: "As we speak, beneficiaries of the 13th edition of the Niger Delta Post Graduate Scholarship awards are pursuing their studies in the United Kingdom. The employability rate of the scheme is high with over 98% of the graduates who won the awards securing employment in the oil and gas industry, academia and Information Technology, among other sectors, within one year of completing their studies. Nigerian content will continue to be an important part of Shell operations."

The four-day conference, hosted by NCDMB, with the theme "Deepening the Next Frontier for Nigerian Content Implementation" also reviewed progress on the development of Nigerian content pertaining to the implementation of the Nigerian Oil and Gas Industry Development (NOGICD) Act since it was enacted in 2010.



SHE \$751M.

SPDC fully funded its share of the

Ogoni Trust Fund.



\$1.09B.

In taxes and royalties paid to the Federal Government of Nigeria by Shell companies.



\$1.98B.+

In contracts awarded to Nigerian companies.



\$142.5M.

Paid by Shell companies to NDDC



\$42M.

Funded by Shell to 27 out of 33 community trusts (by end of 2023).



SINCE 2016...

3,450 secondary school grants, 3,772 university grants, and 1,062 cradle-to-career scholarship grants awarded



109

Students supported by Shell scholarships in the UK.



73

Businesses creating 97 jobs supported by Shell's LiveWIRE programme.



150

Ogun State youths received business skills training from Shell,



2,500+

Nigerians directly employed by Shell companies.



\$42.2M.

Spent by Shell companies on social investment programs.



Invested by Shell companies in education programs.



Donated by Shell and partners to aid conflict victims.



5,550

People in Yobe/Borno helped by Shell to start businesses.



People reached by Shell's mobile health programme.



People benefited from Shell's community health insurance.



NEW ENGINEERING CENTRE COMPLETED...

By Shell at the University of Benin.



Barrels of oil export achieved 🗀 in 2023 by The Bonga FPSO.



Digital learning Centre donated to Niger Delta University by SNEPCo and partners.



50 MEGAWATTS+

Of solar power installed by Daystar Power.



Invested by All On, connecting over **8,600 people** to clean energy in 2023.



Energy connections delivered by All On; 16.3 MWh installed capacity through its investee companies.



...Powering Lives in Nigeria



Navigating Nigeria's Marginal Fields: Legal Framework, **Operational Realities, and Future Prospects**



Oluwaseun Fapohunda, Senior Associate, Tope Adebayo LP (TALP)



Sandra Osinachi-Nwandem, Associate, Tope Adebayo LP (TALP)



Eyitayo Ajisafe – Associate, Tope Adebayo LP (TALP)

By: Aderemi Ogunbanjo, Oluwaseun Fapohunda, Sandra Osinachi-Nwandem, Eyitayo Ajisafe, Energy & Natural Resources (ENR) Practice

arginal field awards were initiated by the Federal Government of . Nigeria (FGN) in 1999 to expand Nigerians' participation in the oil and gas industry. By involving indigenous companies in the upstream sector, building local content capacity, diversifying investment sources, and increasing exploration efforts, Nigeria aimed to boost its oil and gas reserve base.

Marginal fields are fields on existing Oil Mining Leases (OMLs) left unattended, unproduced, or partially appraised for many years. These fields are periodically farmed out by the FGN to independent and indigenous companies. The first set of marginal fields was awarded in 2002, with only 17 out of 30 currently producing.

of several non-producing licenses. The was the first in 18 years and featured 57 fields. The largest 25 fields are expected to generate over \$9 billion in investment within the first five years and over \$38 billion in lifetime revenue.

The Chief Executive of the Nigerian which will continue into 2025. Upstream Petroleum Regulatory Commission (the Commission),



Aderemi Ogunbanjo – Partner, Tope Adebayo LP (TALP)

Engr. Gbenga Komolafe reported that out of Despite its potential advantages, the 665 entities that expressed interest, 161 programme has faced significant emerged as potential awardees. Signature challenges, including the lack of technical bonuses were fully paid for 119 awards, and financial capabilities among partially paid for 9 awards, and 33 awards awardees. This has led to the revocation remained unpaid. This situation, according to the Commission's Chief Executive, led to 2020 bid round, completed in May 2021, several challenges, including delays in the formation of Special Purpose Vehicles (SPVs) and unresolved equity participation issues, which hindered the close-out exercise.

> Sometime this year, the Commission began the conduct of a fresh bid round for marginal fields

In this bid round, the country is placing a strong emphasis on marginal assets, which have the potential to enhance efficiency in the sector, introduce new resources, and diversify the nation's exploration landscape.

This article examines the legal and commercial dimensions surrounding marginal fields within the framework of the Petroleum Industry Act (PIA) 2021. It identifies gaps observed during the transition of operations under the PIA and elucidates the initiatives undertaken by the Commission to facilitate the successful development of recently awarded marginal fields.

Marginal Field Operation Under the PIA

The Petroleum Act defines a marginal field as 'such field as the President may from time to time identify as marginal', whilst the PIA defines a marginal field as a field or discovery which has been declared a marginal field before 1st January 2021, or which has been lying fallow without activity for seven (7) years after its discovery before the effective date.

The definitions under the Petroleum Act and the PIA give validity to fields or discoveries already declared as marginal fields by the President before the passage of the PIA, while at the same time creating a new definition of marginal fields as a field or discovery that has been lying fallow without activity for seven (7) years after its discovery before the effective date.

The PIA therefore marks a significant end to the era of marginal field awards and consequently mandates that existing marginal fields be transitioned into the following categories:

AFRICAN ENERGY STORIES



Producing marginal fields; Non-producing marginal fields declared before 1 January 2021 which have been transferred to the Government and; Non-producing marginal fields that have not been transferred to the Government by the holder of an Oil Mining Lease (OML) within 3 years of the effective date of the PIA.

Producing Marginal Fields

Under this category, a holder of a producing marginal field is allowed to continue operations under the original royalty rates and the terms of existing farm-out agreements (FOA) made with the farmor of the marginal field (Farmor). However, the holder is required to convert to a PML within 18 months of the Effective Date (the "Conversion Period") to take advantage of the new fiscal regime under the PIA.

A Farmee may choose to convert to a PML at any time within the Conversion Period. However, if the Farmee does not elect to convert within this timeframe, the marginal field will automatically convert to a PML at the end of the Conversion Period.

Notably, early conversion to a PML is likely to be motivated by the more favourable economics of the new fiscal regime, which includes a reduction in headline tax rates from 85% to approximately 47.5%.

The 2020 Guidelines issued by the former Department of Petroleum Resources (DPR) facilitate the negotiation between the Farmor and Farmee of a Farm-Out Agreement (FOA), detailing the terms and conditions to govern their farm-out arrangement.

However, the Commission has not provided clear guidance on how parties should transition to the contract incorporated under the Model License and Lease, which will now encompass the relevant commercial terms and conditions for farm-out arrangements.

The absence of clear guidelines or regulations may lead to confusion among parties regarding whether they will operate under a dual regime, encompassing both the existing terms of the FOA and the provisions of the PML Model Lease. Additionally, it raises questions about whether the commercial arrangements established under the existing FOAs will take precedence over the provisions of the Act.



Non-Producing Marginal Fields Declared Before 1 January 2021 Which Have Been Transferred to the Government

The recent awardees of the 2020 marginal field bid round are included in this classification. According to the PIA, non-producing marginal field discoveries declared before January 1, 2021, will be converted into Petroleum Prospecting Licences (PPLs) and will enjoy the fiscal terms applicable to new acreage under the Act.

Once more, it remains uncertain whether Farm-Out Agreements (FOAs) previously executed under the 2020 Guidelines remain valid with the introduction of new obligations and commercial terms under the PIA. The PIA grants the Commission the authority to determine and collect royalties, signature bonuses, rents, and other payments.

Typically, the relationship between the Farmor and the Farmee is delineated by an FOA, which stipulates the terms and conditions of the farm-out arrangement. The Farm-Out Agreement (FOA) remains effective for 60 months following the acquisition of regulatory consent and can be extended upon demonstration by the Farmee of tangible efforts to advance field work as per an approved Field Development Plan (FDP).

The FOA entails the transfer of all rights, interests, obligations, and liabilities of the Farmor concerning the farm-out area to the Farmee. Some of the obligations by the Farmee include payment of Overriding Royalty (OR) to the Farmor, covering decommissioning and abandonment costs, fostering host community development relations, addressing environmental remediation etc.

However, the issuance of PPLs to awardees under the PIA implies that certain provisions of the FOA may become obsolete. The FOA, which forms the foundation of the Farmor-Farmee relationship, appears to be phased out as the PIA aims to establish a direct association between the Farmee and the Government through the issuance of PPLs to the Farmees.

Non-Producing Marginal Fields Which Have not Been Transferred to the Government by the Holder of an Oil Mining Lease (OML) within 3 years of the Effective date of the PIA.

The PIA requires the holder of an Oil Mining Lease (OML) which has a non-producing marginal field that has not been transferred to the Government to do one or more of the following:

a. Present an FDP for the marginal field.

b. With the consent of the Commission and on terms and conditions as the Commission may approve under regulations, farm out the discovery. The consent of the Commission to the farm-out shall amongst others, be subject to the Farmee presenting an FDP over a period agreed with the Commission and by a regulation under the Act. The marginal field here shall be relinquished and vested in the Government to be administered by the Commission if the Farmee fails to present an FDP.

c. Relinquish the field under the provisions of this Act.

Under this category, the PIA provides for a continuation of the farm-out arrangement between the Farmor and Farmee.

Initiatives Deployed by the Commission

Funding is a major challenge impeding marginal field operations in Nigeria. Field development up to the production stage costs as much as \$100 million, with the high cost of signature bonuses, asset re-evaluation studies, drilling wells, and accompanying costs explaining why marginal fields have continued to lie fallow after their auction in bid rounds. In recognition of the funding challenges facing some of the 2020 Marginal Field Bid Round Licences, the Commission plans to deploy initiatives to prevent a repetition of the past failure of the 2002 Marginal Field Award Round.

Some of these initiatives include:

- a. Fostering a production-based lending engagement between the Commission, PPL Awardees, Exploration and Production (E&P) service providers, and Nigerian banks: This initiative aims to establish avenues for strategic partnerships between Awardees and service providers, particularly in well re-entry and drilling services. Under this arrangement, service providers will offer their services with a recoverable service fee linked to production. This initiative is designed to assist awardees in accessing the necessary capital to initiate full field development, ultimately aiming to achieve first oil production.
- b. The Commission's Licensing Round Roadshow: The E&P International Financing Roadshow, hosted in Abuja and Miami, aims to convene financiers, investment bankers, private equity firms, and multilateral institutional investors.

AFRICAN ENERGY STORIES



This event's objective is to showcase and offer insight into emerging investment prospects in oil and gas exploration within Nigeria. It seeks to disseminate qualification requirements, unveil avenues for business and partnership opportunities, provide exclusive information and data, including teasers of oil licenses slated for the proposed 2024 bid rounds, emphasize the hydrocarbon potential of various blocks and existing data packages, establish legal, fiscal, and contractual frameworks, and facilitate work program obligations. matchmaking between country representatives and the Commission.

Governance Framework: The Framework, presently undergoing an advanced stage of internal review and stakeholder consultations toward finalization, pertains to upstream petroleum operations. Its primary goal is to bolster sustainability, environmental standards, and corporate governance criteria. Additionally, it aims to streamline CONCLUSION assets.

revised the EWT Guideline to enhance and more. early cash flow and speed up the journey to first oil.

Convocation of Regulatory Induction Programme for PPL Awardees: This program aims to equip awardees with the necessary understanding of statutory protocols from the award stage to achieving first oil production. A week-long tripartite engagement was held in Lagos in December 2023, involving all awardees and initial asset owners. The objective was to address impediments to a smooth transition by the awardees and their operations towards achieving first oil, thereby addressing issues related to fulfilling initial

Discussions encompassed various topics such as royalty and tax administration, data c. Development of Corporate exchange protocols, leasing requirements, FDP under the PIA, permitting processes for drilling Commission's Corporate Governance and re-entry applications, production accounting, facilities deployment, and development of host communities. These are some of the concerted efforts made by the Commission to provide statutory guidance and support towards the progression of the assets to field development.

the process of attracting capital from Nigeria's marginal field is a key catalyst for local investors to facilitate the optimal and participation. With the continued only be able to increase oil output but also trigger a new wave of service demand in Revision of the Extended Well Test (EWT) seismic data acquisition and interpretation, Guideline: To facilitate dynamic data geological support and evaluations, field gathering and accelerate the development planning, supply chain achievement of 'first oil', the Commission management, environmental assessments,

The PIA marks a new era for marginal field

operation, however with the uncertainty underpinning the transition process, the Government must provide a clear pathway for its implementation through regulations and guidelines which will not only provide guidance for operators but also encourage foreign investment and partnerships.

The recent initiatives deployed by the Commission are a welcome development to encourage marginal field operators.

The Nigerian government can draw inspiration from the strategies implemented by Brazil and Angola in managing marginal field operations to enhance the dynamics of marginal fields in Nigeria. Brazil, for instance, has instituted various policies aimed at incentivizing marginal field operators and, consequently, promoting local content within its petroleum sector.

Notably, the Energy Policy Council (NPE) in Brazil has lowered the royalties on production from marginal fields from 10% to 5%. Additionally, Brazil has streamlined the development process for marginal fields to foster the participation of small and medium-sized local enterprises involved in upstream petroleum activities.

efficient development of PPLs and other development of these assets, Nigeria will not Angola views marginal field reserves as significant contributors to the country's macroeconomic landscape. In May 2018, the Angolan Government, led by President Lourenço, introduced a fresh legal framework with tailored incentives aimed at stimulating investment in marginal fields. These incentives are structured progressively based on the estimated volume of recoverable resources.

N.I.E.S.2025







24TH - 27TH FEBRUARY 2025

PRESIDENTIAL BANQUET HALL - ASO VILLA | ABUJA CONTINENTAL HOTEL, FCT

CONFERENCE THEME:

BRIDGING CONTINENTS: Connecting Investors Worldwide

with Africa's Energy Potential

SCAN HERE TO REGISTER



REGISTER NOW WWW.NIGERIAENERGYSUMMIT.COM

EVENT PRODUCERS:



Office of the Permanent Secretary, Federal Ministry of Petroleum Resources, Black & 6th Floor, NNPC Towers, Central Business District, Abuja.

Wuse II, Abuja No 4 Manuka Close, Durban Street, Ademola Adetokunba. Abuja, Migeria +254 706 334 5050, +254 815 944 8287 Mayler, Landon 15 Struten Street. WILL BEG United Kingmitt +44 303 390 3574

For Spormandisp, Exhibition & Delegate Bookings Contact: www.nigeriaenenyyummit.com james@brevityanderson.com kunle stevernan@brevityanderson.com | +254 802 324 1280







...This report provides analyses about the role of natural gas in filling the gap in the global energy demand and supply, coupled with strategic recommendations from industry experts and stakeholders focused on gas prospects in driving the energy transition towards a low-carbon future.

By Ndubuisi Micheal Obineme

he global energy industry is set for growth in this era of energy transition, underscoring the need for pragmatic approach towards energy security. Several reports have emerged showing that global energy demand will continue to increase drastically due to the population growth rate, and the world needs more energy to complement the global population growth to meet the growing energy demand.

According to published reports, three-quarters of a billion people in the developing nations are suffering from energy poverty as they have no access to electricity and nearly 2.5 billion people have no clean cooking solutions. Energy poverty stands as an obstacle to energy transition, which requires radical action from the government and private sector to strengthen the global energy sector to resolve issues around energy poverty in developing nations. Some stakeholders are also advocating for a just energy transition tailored to the current realities in the energy sector and unique challenges for energy accessibility in developing nations.

This report provides analyses about the role of natural gas in filling the gap in global energy demand and supply, coupled with strategic recommendations from industry experts and stakeholders about gas prospects in driving the energy transition towards a low-carbon future.

State of Global Energy Investment

In its 2024 annual report titled, 'World Energy Investment Report', the International Energy Agency (IEA) acknowledged that global energy investment is set to exceed \$3 trillion USD for the first time in 2024, with \$2 trillion USD going to clean energy technologies and infrastructure. In contrast, upstream oil and gas investment is expected to increase by 7% in 2024 to reach \$570 billion USD, following a 9% rise in 2023. This is being led by the Middle East and Asian NOCs, as they increased their investments in oil and gas by over 50% since 2017, which accounts for almost the entire rise in spending for 2023-2024.

KEY HIGHLIGHTS:

- IEA forecasts global demand for natural gas to grow by more than 2.5% in 2024 and 2025.
- GECF latest report reveals that LNG trade is set to increase more than double by 2050.
- Asia continues to be the key engine of this growth, while North America and the Middle East are in the lead on the exports side.
- Majority of gas production by 2050 to come from new projects, which requires over US\$9 trillion investments, according to GECF report.
- IGU also forecasts a 22% global gas supply shortfall by 2030 due to under-investment in the gas sector.
- IGU says the path to global, regional prosperity, net zero, climate aspirations go through gas.
- Stakeholders calls for continuous investment in gas sector, noting that green gases and CCUS projects are key for energy transition.
- NGC says Trinidad and Tobago is poised to continue exporting LNG to both large markets, and small-scale markets.

According to the IEA report, the world's renewable power capacity is expected to surge over the rest of this decade, with global additions progressing to reach the current power capacity of China, the European Union, India, and the United States combined.

In the report, IEA stated that over 5,500 gigawatts (GW) of new renewable energy capacity will be installed between 2024 and 2030 - almost three times the increase seen between 2017 and 2023.

China will account for almost 60% of all renewable capacity installed worldwide between 2024 and 2030, the IEA report revealed. This would also make China home to nearly half of the world's total renewable power capacity by the end of "To fully meet the tripling target is entirely this decade.

"While China is adding the biggest volumes of renewables, India is growing at the fastest rate among major economies.

"In terms of technologies, solar PV alone is forecasted to account for a massive 80% of the growth in global renewable capacity between now and 2030.

"The wind sector is also poised for a recovery, with the rate of expansion doubling between 2024 and 2030. By the end of this decade, the share of wind and solar PV alone in global electricity generation is set to double to 30%.

"As a result of these trends, nearly 70 countries that collectively account for 80% of global renewable power capacity are poised to reach or surpass their current renewable ambitions for 2030," the IEA report added.

Despite the progress made in the renewable energy sector, the IEA noted that there are only very few countries that have explicitly laid out their 2030 targets for installed renewable energy capacity in their existing Nationally **Determined Contributions,** also known as **NDCs**, under the Paris Agreement.

IEA analysis indicates that the official commitments in NDCs currently amount to 1,300 gigawatts (GW) - just 12% of what is required to meet the global tripling renewable energy capacity objective agreed upon at COP28 in Dubai, UAE.



Angela Wilkinson, Secretary-General and CEO of the World Energy Council (WEC)

possible if governments take near-term opportunities for action. This includes outlining bold plans in the next round of Nationally Determined Contributions under the Paris Agreement due next year, and bolstering international cooperation on bringing down high financing costs in emerging and developing economies, which are restraining renewables' growth in highpotential regions such as Africa and Southeast Asia," IEA wrote.

Other challenges hindering the expansion of renewable energy capacity across the world, according to the IEA report, include long wait times for project permits, insufficient grid infrastructure investment, the requirement to integrate variable renewables quickly and economically, and high financing costs particularly in emerging and developing economies, etc.

While investments in clean energy (renewable energy) have doubled almost twice, industry experts have said that accelerating the renewables-based transition to meet the growing energy demand is far from being on track, and the world needs more energies to address issues around energy access in the developing nations as well as mitigate disruptions caused by geopolitical shocks, extreme weather events, and supply chain challenges.

Energy Transition Narrative

The World Energy Council (WEC) published a report titled, "Redesigning Energy in 5D", featuring the collective expertise and perspectives of nearly 1,800 energy leaders in over 100 countries. The report underscores the need to redesign the global energy system to focus more on people's needs. WEC's report outlined the importance of 5Ds -

decarbonization initiatives, digitalization plans, demand-side disruption, energy source diversification, and a more decentralized approach to energy systems, which are the key drivers that will influence the energy transition.

Angela Wilkinson, Secretary-General and CEO of the World Energy Council, said that the discussions on energy transition should be centralized on meeting the growing energy demand of people across diverse communities.

According to her, the word 'energy transition' has become "one of the most frequently-used, politically-loaded and polarizing phrases of recent years"

"We also know that today's energy systems are not fit for purpose. The urgency to secure more energy for sustainable development and to decarbonize all energy uses, not just supplies, is crystal clear," Wilkinson said at the 26th World Energy Congress, adding that,







"There is no one-size-fits-all solution for energy transition. No quick and easy fix. Complex coordination challenges cannot be ignored or resolved, even with AI or other technology innovations."







She maintained that there is no single energy transition and no world energy system.

"There are energy transitions from different starting points and situations and a variety of regional visions where the direction of travel is





Michael Stoppard, Global Gas Strategy Lead, S&P Global Commodity Insights

multiple pathways because what got us multiple pathways. 'here' will not get us where we want to go."

the energy transitions should be built do most good," she added. upon.

"It's about user-first. What are the needs Natural gas is classified as a clean burning fossil that mean for supply and finance?"

finance bringing that scale: it's the pull of that pull of social transformation.

publication Investor Daily TV on the sidelines of the Abu Dhabi International A report published by S&P Global expert,

"We need to get away from the supplycentric conversation and start to engage energy users in a conversation and need to know how energy fits into their lives," Wilkinson explained.

"So, what are the changes in the narrative? It's to move away from a 'one size fits all' approach to understanding that we have to lead and learn with the

clear. But how to get there requires diverse regions as we move forward with

"We have plenty of energy and plenty of She said 'consumer trust and money. The challenge is to get them to flow to engagement' are two crucial pillars which the places where they're most needed and will

The Role of Natural Gas

of people and industry? And what does fuel due to its lower carbon footprint compared to other traditional energy sources. Its flexibility of use also enables it to integrate Speaking about finance, she said that effectively with renewables. According to a while money talks, it doesn't walk the last report, one-fifth of the world's energy used mile to get vital projects over the line: today comes from natural gas. Gas is used in "The technology that wins is the heating our homes, shopping malls, and technology that scales... but it's not offices, fuelling paper and steel mills, powering glass, food, and metal factories, providing social demand. We have to engage with feedstock for fertilizer plants, and generating electricity, among others.

"We have to bear in mind that it's not just During the global energy crisis in 2022 about technology and money -- it's also triggered by Russia's invasion of Ukraine, gas about people and wider and wiser use of and LNG played a key role in securing the global energy. Meanwhile, mother nature is energy security, especially in Europe. The reshuffling the deck and we have to natural gas commodities ultimately saved the manage climate adaptation with day, supporting Europe's energy security and mitigation," Wilkinson said in an exclusive assisting the continent to make it through the interview with Jakarta Globe's sister 2022 winter without experiencing a blackout.

Petroleum Exhibition & Conference also Michael Stoppard, noted that meeting the challenges of climate change is becoming ever emissions if properly operated. more urgent.

> "Natural gas can make a major positive contribution by leveraging existing energy infrastructure and an existing scaled supply chain.

"Hence the immediate push of natural gas can help achieve fast decarbonization by accelerating the phaseout of coal with a proven alternative technology. This can be done in tandem with deploying and developing lower-carbon renewable energy and other enabling technologies.

"What role should natural gas play in the energy transition?," Stoppard commented in its report, stating that, "The UN's annual climate change conference (COP28), held in the United Arab Emirates in 2023, concluded with a call to "transition away from fossil fuels." But not all fossil fuels are born equal. Any concerted action to reduce greenhouse gas emissions is likely to mean efforts to reduce oil and coal consumption as soon and as much as reasonably possible."

He said, "For natural gas – the fossil fuel with the lowest GHG footprint - the arguments are more complex. The option exists to transition away from either coal or oil toward natural gas. This brings quick and significant near-term benefits in reduced emissions but does not reach the desired long-term goal of net zero. As a result, the adoption of natural gas often sets idealists against pragmatists."





"Renewable energy alone cannot scale up quickly enough to take the early action that is essential.



"Developing low-carbon gases and making existing infrastructure suitable for conversion can achieve deep decarbonization in the longer term, which will also provide a pathway to net-zero."

He recommended a two-pronged approach that sees gas infrastructure working together with electrification needs to be part of the global environmental policy toolkit.

He explained that the CCS is a proven technology that has the potential to remove 90%-95% of

"Its application to date has been mainly in oil and gas production, linked to enhanced oil recovery or gas processing associated with LNG facilities," Stoppard explained, noting that, "In future, CCUS will need to be deployed at a much greater scale downstream in industrial clusters or hubs. The principal applications of CCUS will be in "hard-todecarbonize" factories, such as those processing steel, cement, glass, and fertilizer. These sectors typically use natural gas."



S&P Global also forecasted that carbon capture will increase to 1.5 gigatons-6 gigatons per year by 2050, over 30 times higher than used today.

In its report, Stoppard narrated that natural gas has the potential to support the production of renewable power, hydrogen, and enhance air quality if used efficiently.

He also noted that natural gas would also help push forward sustainability, and decarbonization, which can be used for coal and oil substitution as well.

According to Stoppard's report, coal is responsible for 43% of global energy-related GHG emissions.

"Coal-to-gas substitution would be the biggest near-term opportunity.

"Replacing older and less efficient coal plants with best-in-class natural gas generation will reduce emissions by more than 50% per unit of electricity," he explained.

In addition, Stoppard also stated that the production of ammonia and methanol provides another opportunity to replace coal with natural gas.

"Ammonia is a key input in the production of many fertilizers and can also be co-fired with coal in power stations to reduce overall coal burn," he said.

"Most of the ammonia and methanol produced comes from natural gas, but coal is also used, primarily in China. In the steel sector, metallurgical coal could be substituted by natural gas using direct reduced iron technology.

"There is also scope for natural gas to replace oil. The main opportunity in stationary facilities is the 1.6 million barrels per day of oil used to generate power in the Middle East.

"Another critical area is the rollout of electric vehicles. Although the vision is to power EVs with low-carbon sources of generation, in practice, natural gas will be needed at least at the margin as electricity demand booms.

"Using gas-fired power to help meet power demand from EVs is a form of oilto-gas substitution.



"Natural gas could also have an important role to play in medium or heavy-duty vehicles and shipping, either in the form of compressed natural gas or as methanol or ammonia."



For renewable power generation, Stoppard acknowledged that wind and solar are key drivers for renewable power in this era of energy transition, but they still need backup.

He added, "Thermal generation will most likely be required to help renewable power manage long-duration storage needs.

"Today's planning horizon, which will determine energy infrastructure for the coming decade, contains few alternatives, and gas-fired power is the principal option.

"Every unit increase in renewable power is likely to be accompanied by some form of dispatchable generation. This support is sometimes called a backup to renewables, but that term can be misleading since the backup often provides more power than the primary source.

"Hydrogen — or one of its derivatives, such as ammonia — is now widely recognized as a key component of decarbonization.

"Some net-zero projections show hydrogen accounting for as much as 25% of energy enduse by 2050. So-called green hydrogen generated from renewable power via electrolysis will also feature.

"Given limitations in developing sufficient renewable capacity to meet both strongly growing direct power demand and a new appetite for hydrogen, blue hydrogen produced using natural gas is expected to play a significant role."

Adding to this, Andrea Stegher, International Gas Union (IGU) Vice President, said gas and renewables can enable net-zero pathways, energy security, and access issues.

Stegher made this known while delivering a keynote address on the topic, "The Role of Natural Gas and Biomethane in the Fair, Affordable and Sustainable Energy Transition", at this year's G20 summit held in Brazil.



Andrea Stegher, International Gas Union (IGU) Vice President

He said,



"The path to global and regional prosperity, net zero, climate and energy aspirations go through gas. Natural gas and its evolving technologies support the renewable energy supply by overcoming intermittency and instability.



He stated that Brazil is a great example of how important a diversified and complimentary energy mix is necessary to achieve the global goal of net zero, noting that the country is playing a leading role in promoting a just, secure, and

"Brazil has the most precious ecosystem in the world, the Amazon, rightly called the lung of our planet.

accessible energy transition.

"The global gas industry is perfectly positioned to ensure that emission reductions can be easily achieved so that this lung can continue to breathe for all of us.

"Gas is essential to human progress and global growth as the world is navigating existential industrial, energy, financial, and political uncertainties."

Stegher called for continuous innovation in the gas sector, stating that green gases and carbon capture, utilization, and storage (CCUS) projects are fundamental in supporting the energy transition.



Meanwhile, at COP 29 in Baku, the President of the International Gas Union (IGU), Madam Yalan Li, outlined two key factors that are very important points for the global gas industry in tackling methane emissions.

She said financing renewable gases and deploying meaningful actions for the abatement of the industry's methane emissions are key factors for the global gas sector.



Madam Yalan Li, President of the International Gas Union (IGU),

In her remarks, Madam Li also outlined three critically important aspects for a successful and rapid global uptake of renewable gases.

Madam Li underscored the need to promote policies on the development of renewable gases to incentivize production, usage, and gridconnectedness as well as invest in research and innovation, support cuttingedge research to drive down costs, improve efficiency, and develop renewable gas technologies.

She also highlighted the importance of facilitating financing instruments and the promotion of public and private mechanisms.

In her Welcome remarks for the "Active" Actions on Methane Emission Control", Madam Li argued that reducing methane emission is a fast, effective, and costeffective way to mitigate climate change, and she reiterated IGU's belief that high ambition and strong actions in reducing methane emissions are keys to maximizing the commercial and

environmental value of gas.

The State of Global Gas Sector

The global demand for natural gas is building momentum, with several positive projections in 2024 and beyond, but supply challenges persist.

The International Energy Agency (IEA) has also forecasted that the demand for gas is expected to grow by more than 2.5% in 2024, with similar growth expected in 2025.

Furthermore, the Gas Exporting Countries Forum (GECF) Global Gas Outlook 2050 latest report reveals a significant surge in global natural gas trade, expected to account for over one-third of global gas demand by 2050.

The GECF report also outlined that LNG trade is set to increase more than double by 2050, surpassing long-distance pipeline trade, thereby enhancing integration, flexibility, and efficiency in natural gas markets.

According to the GECF report, the majority of natural gas production by 2050 is expected to come from new projects and undiscovered resources, which require significant investments exceeding US\$9 trillion to meet global demand.



"Natural gas is a key player in energy transitions. It emerges as a crucial partner in facilitating just, orderly, and equitable energy transitions.



"Its clean burning properties make it a sustainable alternative to traditional biomass, contributing to improved air quality, reduced emissions, and global food security.

"Investing in natural gas becomes imperative investments in renewable gas projects to address the trilemma of affordability, through innovative financing security, and sustainability," the GECF report stated.

> In a similar report titled, '2024 Global Gas Report (GGR)', released by the International Gas Union (IGU), and Rystad Energy, at the 2024 ONS Conference, they forecasted that a 22% global gas supply shortfall is expected by 2030 due to underinvestment despite the growth opportunities forecasted for the global gas sector in the coming years.

They said the underinvestment in gas and clean energy would jeopardize global energy supply, with 2030 energy targets visibly out of reach.

In a press statement obtained by The Energy Republic, IGU confirmed that the global gas market is currently in fragile equilibrium, with limited supply growth as demand rises steadily, up by 1.5% in 2023, with an expected acceleration to 2.1% by the end of 2024.

IGU stated that Asia continues to be the key engine of this growth, while North America and the Middle East are in the lead on the exports side.

"Should gas demand continue to grow as in the last 4 years, without additional production development, a 22% global supply shortfall is expected by 2030," IGU said in the press statement, saying that, "If demand continues to strengthen, the shortfall will be more pronounced. This underscores the urgent need to scale up investments."

"If current energy demand and supply trends persist, 2030 targets outlined in policy-driven decarbonization scenarios will most likely be missed.

"Europe has experienced energy demand growth.

"In North America, energy demand has surpassed 2019 levels and continues to climb, fuelled by the transport sector and AI data centers.

"Asia's demand is also surging, particularly in the industrial sectors of India and China.

"Meanwhile, Africa's energy demand is growing faster than in most regions, driven by urban development, though it still falls short of the levels required for full energy access, as equitable electricity access remains a significant challenge in Africa and parts of South America.

"To contain the growth of greenhouse gas emissions and to make global gas market equilibrium resilient, it is critical to both enhance investment in natural gas supply and scale up biomethane, carbon capture and storage (CCS), and low-carbon hydrogen technologies.

"Natural gas today provides an immediate opportunity to cut emissions from coal by 50% and from oil by 30% through cost-effective switching.

"Biomethane is a direct substitution for natural gas. Today, its scale is significantly below potential at roughly 1% of the natural gas market,



IGU analyses on world map for global gas demand by region

North America		South America		Europe		Africa		Middle East		Russia		Asia		Australia	
Year	Bcm	Year	Bcm	Year	Bcm	Year	Bcm	Year	Bcm	Year	Bcm	Year	Bcm	Year	Bcm
2019	1,088	2019	159	2019	550	2019	170	2019	567	2019	446	2019	898	2019	54
2020	1,067	2020	146	2020	534	2020	158	2020	574	2020	423	2020	906	2020	51
2021	1,079	2021	165	2021	553	2021	167	2021	598	2021	475	2021	980	2021	52
2022	1,121	2022	153	2022	496	2022	164	2022	589	2022	452	2022	964	2022	53
2023	1,135	2023	157	2023	465	2023	169	2023	616	2023	463	2023	995	2023	51
2024F	1,143	2024F	155	2024F	469	2024F	170	2024F	645	2024F	467	2024F	1,038	2024F	51

Source: Rystad Energy

hubs like China and India.

its scale is still far below what is needed, same as for biomethane and low-carbon critical role in decarbonizing the energy sectors) and ensuring its resilience. transition." Scaling them is essential, and this requires urgent investment and enabling Rystad Energy CEO, Jarand Rystad, added, policies to start building the growing the press statement.

improving living standards in the future trajectory of natural gas." developing world, new demand trends, and ongoing growth in developed Strategic Recommendations regions. We must look for a realistic way to balance these trends with long-term sustainability goals, such as building a diversified energy system, and comprehensive approaches to tackle climate change. Embracing innovative solutions and flexible policies will be key to navigating this highly uncertain energy landscape."

and it is primarily produced in North Snam CEO, Stefano Venier, said, "The energy America and Europe. However, new transition represents a unique challenge for centers of production are emerging in mankind. A journey that will not be linear, marked by great aspirations and many hurdles, from geopolitical tensions to technology "CO2 capture capacity, a crucial disruptions and unforeseeable global technology for a successful energy economic developments. In this continuously transition, is also gaining momentum, but evolving transformation, natural gas and related infrastructure represent a critical element of sustainable resiliency for the global hydrogen. These technologies will play a energy system, while new green and low carbon molecules will play an essential role to supply (especially in hard-to-abate achieve a just and technologically neutral

"Natural gas, now 30% of the fossil fuel mix, is volumes of project proposals," IGU said in cheaper and cleaner than oil and coal, with emissions significantly lower than both. As global LNG access expands, natural gas is on In her words, IGU President, Mme Li track to surpass coal by 2030 and oil by 2050. Yalan, commented, "Energy and gas We're proud to support IGU and Snam in demand continue to grow, driven by detailing these key market trends and the

While Asia has been projected to be a prominent hudspot for global gas demand growth opportunities, Paul Everingham, Chief Executive Officer (CEO) of Asia Natural Gas and Energy Association (ANGEA) said that the increasing demand for gas in Asia will be driven by Southeast Asian economies such as Indonesia, Malaysia, the Philippines and Vietnam, all of which are seeking to reduce coal use in power generation.

Paul made this known in a media chat with The Energy Republic, noting that there will also be significant demand growth from India, primarily for industrial use.

"Asia's ability to access more gas over the next 30 years will be critical to the region's energy security and energy transition and, in turn, its ability to reduce emissions," he said.

"Meeting this growing demand will require not only more gas production within the region but increased LNG production from diversified sources around the world. This means continued production from established energy trading partners like the US, Australia, and the Middle East, ongoing expansion from emerging exporting nations in Africa and Latin America, and new supply from pending market entrants such as Canada.



"Publicly available energy plans from emerging Asia clearly show that governments in the region want to use gas and LNG to reduce their current reliance on coal. What they need are firm signals from gas-exporting countries that there will be sufficient supply available in the future to ensure LNG remains affordable.

"With this assurance, nations in emerging Asia will have the confidence to invest the many billions of dollars required to construct LNG import infrastructure and gas-fired power plants that can meet their energy needs through coming decades," he added.

The Energy Republic also made a similar publication in 2023 on how gas and LNG are demonstrating essential value as a flexible, reliable, available energy source in this unprecedented time, with emphasis on the significance of adopting a diversified energy system across the energy value chain to address issues on Energy Security, Affordability, and Sustainability. The publication underscored the need for a diverse energy mix to produce the much-needed energy for the people, especially in developing nations across the world.

Speaking in a media chat with The Energy Republic recently, The National Limited (NGC) provided insight into how natural gas is paving the way for a sustainable energy future in Trinidad and Tobago and the Caribbean region as well as the role of NGC in contributing to this development.

The company said, "While sustainable energy has well-defined financial, social, environmental, and economic benefits, the region faces significant challenges in making a transition to renewables. Not all energy transitions look the same - one size does NOT fit all.

"Small Caribbean islands cannot adopt wholesale a standardised model of transition to renewables. as they all have different geographical characteristics and economic circumstances.

power and consistently supplied and stable energy at night, along with the cost of new infrastructure and technical capability/capacity issues, limits the economic viability of renewable power generation.



Paul Everingham, Chief Executive Officer of Asia Natural Gas & Energy Association (ANGEA)

"While some countries can potentially utilize continuous renewables such as geothermal Gas Company of Trinidad and Tobago energy or hydropower, not all countries have that advantage.

"This is where natural gas as LNG comes in.



"Caribbean countries wishing to eliminate the use of heavy fuel oil and diesel, but lack options such as geothermal and hydropower can choose natural gas as LNG to achieve lower emissions and cleaner power.

"Using LNG can extend the life of existing infrastructure at affordable and (through contracts) predictable costs. Moreover, LNG does not present the storage challenges of non-dispatchable energy sources.

"Trinidad and Tobago is uniquely poised by virtue of its location and infrastructure to continue to export LNG to both large markets, and eventually, to small-scale markets. NGC has been exploring the feasibility of micro and "Moreover, the need for dispatchable small-scale LNG projects in the Caribbean for some years because the company believes there are real and valuable opportunities in that space. Through different partnerships and agreements, the company is working assiduously to bring such projects to fruition, and potentially expand the use of LNG across the region."

At the Gastech 2024 Conference in Houston, industry stakeholders, and players also reiterated the crucial role of natural gas in supporting the global energy sector growth opportunities.

They called for a strategic approach to reinforce the global gas sector as well as support investment in project development to boost gas supply deliverables across the world.

Beyond investments, stakeholders noted that the other challenges affecting the gas and LNG market also include clarity and uncertainty on regulations including policy development to support the gas sector, coupled with decarbonization frameworks. They said this issue creates complexity in terms of gas supply deliverables and the affordability of natural gas commodities.

Gastech 2024 had pivotal discussions across the gas value chain, emphasizing great enthusiasm for gas and LNG as the fuel of choice through the next two decades and beyond. It also requires radical action from the government and private sector to strengthen the global energy sector by adopting gas as a transition fuel to resolve issues around energy poverty in developing nations. Natural gas creates several opportunities to produce more energy across the value chain to meet the growing energy demand.

Nigeria's Energy Transition Journey

The Nigerian government has committed to achieving net-zero emissions by 2060, incorporating gas as a transition fuel in its Energy Transition Plan. Nigeria's Energy Transition Plan (ETP) recognizes the role Natural Gas must play as a transition fuel on the path to net zero.

In 2021, the Nigerian government launched the 'Decade of Gas' initiative, which aims to





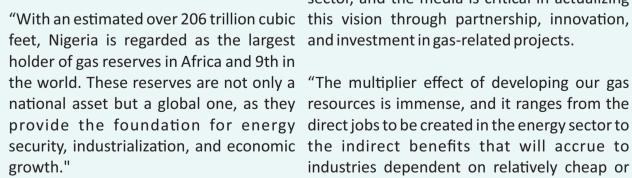
Ed Ubong, Coordinating Director, Nigeria's Decade of Gas Initiative

strategies.

Director, Decade of Gas Initiative said, "Nigeria has been heavily dependent on change. The global energy transition agenda aims to adopt clean energy and has catapulted gas into the limelight.



"Natural gas represents a pragmatic solution for Nigeria. It provides a cleaner, more efficient, and readily available source of energy supply to bridge the gap between fossil fuels and renewables.



In his words, Ubong stated that the and energy transition with a view of

transform Nigeria into a gas-powered powering the country into development and economy by 2030 through a series of economic growth over the next decade, policy reforms, infrastructure anchoring on energy sufficiency, development, and investment attraction industrialization, and economic prosperity.

Ubong highlighted that Nigeria has struggled Commenting on gas as Nigeria's energy with energy scarcity for years, and it has transition fuel, Ed Ubong, Coordinating reduced the quality of life for millions of Nigerians.

"By focusing on gas as a source of our power oil, but the global energy landscape is fast generation, we can attain energy sufficiency. changing with the effects of climate There is a dire need for investment in gas pipelines and gas-fired power plants, which can help to herald the country's electrical generation capacity, cut energy costs, and make electricity supplies more reliable to households, businesses, and industries.

"Gas is not just a fuel; it is also an industrial feedstock. The industrialization of Nigeria lies solely in creating a robust domestic gas market for the sustenance of industries like petrochemical plants, fertilizer plants, and manufacturing plants. By using gas as an engine for industrialization, we will attract new investments, create jobs, and see a diversified economy away from our dependence on crude oil. The role of governments, the private sector, and the media is critical in actualizing "With an estimated over 206 trillion cubic this vision through partnership, innovation,

national asset but a global one, as they resources is immense, and it ranges from the provide the foundation for energy direct jobs to be created in the energy sector to security, industrialization, and economic the indirect benefits that will accrue to industries dependent on relatively cheap or affordable energy.

Decade of Gas initiative stands as a "Gas will lead to rapid economic growth and an blueprint for transformation in Nigeria, increase in the standard of living of Nigerians. noting that the Federal Government and Additionally, is its export potential, especially the Private Sector through the Decade of in the form of liquefied natural gas, which will Gas initiative are concerted efforts to give Nigeria a chance at useful foreign leverage the country's abundant natural exchange as well as strengthen our foreign gas resources for economic development reserves and reduce budget deficits," he added.

Multiplier Effect of Trump's Presidency in **America's Natural Gas Sector**

Speaking in a media chat with The Energy Republic, Ernie Miller, CEO of Verde Clean Fuels acknowledged Donald Trump's emergence as US President-Elect would lead to increased domestic oil production, so the need to do something useful with the natural gas that accompanies oil becomes acute.

"President-elect Trump's pick for energy secretary, Chris Wright, fully understands the importance of natural gas given his long history as a pioneer in this industry," Miller stated.

"We believe the administration will continue investing in infrastructure by increasing export facilities and storage terminals and expanding pipelines while making the regulatory environment more friendly and navigable to enable rapid permitting and encourage investment. Negotiating favorable trade agreements will also enable more LNG exports."

Speaking further, Miller explained that natural gas is an essential part of America's journey to transition to a low-carbon future.

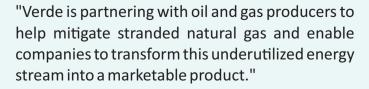
He said gas is a much cleaner fossil fuel compared to coal or oil, and it's also relatively abundant, inexpensive, and reliable.

According to him, "gas is being looked at as the best option – solar and wind power are too intermittent - to provide energy for the data centers that technology companies need to build to power the 'AI revolution.'

"But natural gas is not without its issue methane, which is considered to be one of the worst of the greenhouse gases. Since natural gas is a byproduct of oil drilling, a sizable portion of natural gas is stranded or flared because it is either too remote to be useful or otherwise economically unviable," Miller noted. "That's where technology can play a vital role."



"Verde Clean Fuels' technology takes that natural gas and turns it into gasoline – a win-win for corporations, consumers, and the environment.









Energising a Sustainable Future

Join the Leaders Shaping the Future of Energy

Plenary Speakers































Attendees

30,000

Companies

600+

Speakers

400+

Exhibitors

300

REGISTER YOUR DELEGATE PASS

19 - 23 May | Beijing, China

www.wgc2025.com









قَـطرللطاقة QatarEnergy

Principal Sponsor

VENTURE GLOBAL LNG

Global Sponsor







申能

Diamond Sponsor

Platinum Sponsor



Gold Sponsor



Associate Sponsor





"Verde Technology Converts Stranded Resources into Fuel" – Ernie Miller, Verde Clean Fuels CEO

In this interview, Ernie Miller, Chief Executive Officer of Verde Clean Fuels, speaks with Ndubuisi Micheal Obineme, Managing Editor of The Energy Republic (TER), about the company's innovative technology that converts organic materials into fully finished renewable fuels, such as gasoline and methanol.

Miller revealed that Verde Clean Fuels' technology can also convert flared natural gas into gasoline and has just signed a JDA with Diamondback Energy, which will see it deploy its proprietary STG+® process utilizing Permian Basin natural gas produced by Diamondback Energy's operations. According to Miller, the goal is to produce approximately 3,000 barrels per day of Reformulated Blendstock for Oxygenate Blending (RBOB) gasoline.

Miller is an expert in the financial management, strategic planning, and positioning of complex, high-growth capital and credit-intensive companies for optimum enterprise value. With over 25 years of experience in the commoditydriven Energy Sector, Ernie has a deep commercial understanding of all points along the value chain. He uses his expertise in financial analysis, hedging, risk management, and problem-solving to bring a forward-looking perspective to financial strategies to achieve the highest value allocation of capital and resources while measuring and of effectiveness. He has held previous roles in corporate development, risk management, and marketing. Excerpts:

TER: Verde Clean Fuels has developed a technology that converts organic materials into fully finished gasoline for ICE vehicles. What inspired your company to develop this innovative technology and how proactive is the technology so far?

Miller: Verde Fuel Cells was founded in 2007. Initially, we started as a renewable

gasoline company. We started producing gasoline from biomass.

For example, wood waste, through the use of a gasification process. The synthesis gas that comes out of the gasification process is what we use in our chemistry to produce renewable gasoline. This is an interesting business when you consider the carbon credit and all the value you can bring when you are able to produce fully renewable gasoline products.

In early 2010 in the United States, we had a fracking revolution which led to the deployment of fracking technology and the US discovering abundant and cheap natural gas in several natural gas basins in the country.

At that point, Verde developed the capacity to start using natural gas as a feedstock in the front end of our process to make gasoline. As natural gas became so abundant and more affordable through the use of fracking technology, we started to focus on natural gas as a feedstock, which is now a profitable business.

TER: What are the processes involved in using the Verde technology?

Miller: Verde's technology converts synthesis gas to gasoline. We are flexible regarding the source of the synthesis gas. It can come from biomass through the gasification process or it can come from natural gas through the reforming process. In either case, we will choose the synthesis gas that is suitable for us to produce methanol and gasoline.

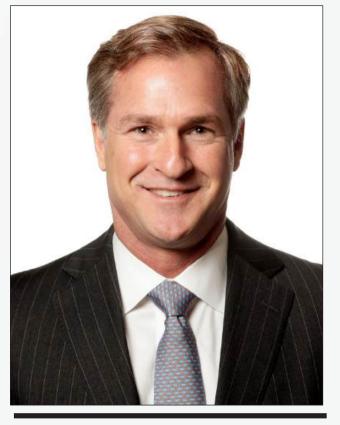
reporting past performance as a metric of effectiveness. He has held previous roles in corporate development, risk management, and marketing. Excerpts:

What differentiates the Verde process is the scale at which we can operate. There are two families of chemistry that can take gas to produce a liquid.

One that is well known is the Fischer–Tropsch process developed by Sasol in South Africa.

In the 1920s, the Fischer–Tropsch chemistry used synthesis gas to produce a synthetic crude oil after which it was refined into a finished product.

However, our process is different because it is a methanol-to-gasoline process. We also use



Ernie Miller, Chief Executive Officer of Verde Clean Fuels

synthesis gas which will be converted into finished gasoline products and it doesn't require any further refining.

We can deploy this technology elsewhere and there is no need to build a refinery or transport crude materials to a refinery, our products are ready to go into the energy market.

We can also deploy this technology to capture flared natural gas in the field.

TER: What are the success stories recorded so far?

Miller: We have been able to build a demonstration facility in New Jersey.

We are currently in the design process with Diamondback Energy to build a 3,000-barrel-per-day facility in the Permian Basin. We have successfully gone through the development process and we are now focused on the commercialization of the facility. There have been tremendous investments made in the company.

However, we have reached the point for the commercialization of the facility and are ready to deploy our technology to areas where there is stranded natural gas.

TER: What are the economic benefits of the technology?

Miller: The primary economic benefit of our company's technology is that otherwise stranded resources can be used productively.

For instance, Diamondback Energy has natural gas trading in West Texas, which has zero value. Since the adoption of our technology, Diamondback is now getting positive value from its stranded natural gas resources.

VERDE EXCLUSIVE INTERVIEW





Verde Clean Fuels — Demo plant

which affects the environment and local in this evolving era of energy transition? communities. Verde's technology offers a and turn it into a refined commodity such transition takes time. as gasoline.

For gas producers, our technological time to get to something better. solutions provide the opportunity to turn commodity.

TER: What are the challenges your energy transition can happen. company encountered in the development of this technology and The truth is that we cannot move into a how was it resolved?

value chain, was a challenge.

four reactors. There are intermediate impact. products along the way that you don't want in finished fuel because they can For instance, when you think about natural gas stored.

the finished fuel was a challenge that gasoline performs like other gasoline. required adjustments to the operating conditions within the reactors.

capacity. We have a strong technical team that efficiently overcomes the challenges in using the feedstocks and converts them to the finished products that we want.

In West Africa, there has always been TER: As a private sector player, what do you flared gas that burns in the atmosphere think the global energy sector should focus on

viable solution to capture the flared gas Miller: We call this an energy transition but

Energy transition is an evolution and it takes

their stranded resources into a high-value One of the things that you are seeing in the energy space is that some industry players have unrealistic expectations about how this

hydrogen economy overnight.

Miller: The conversion process is We also cannot transition to all-electric advanced chemistry. Controlling the vehicles overnight. So when I see mandates chemical reaction in an efficient way and from policymakers stating that there would be managing the commodities along the no more production of gasoline vehicles by 2030, will they give everybody a bicycle?

For example, the process of converting Some of those policies are driven by a methanol to gasoline involves a series of complete lack of understanding of the carbon

change the properties of the fuel and the being flared, we come in as a technology way it performs, is transported, and provider to turn the flared gas into gasoline to mitigate that flared gas.

Controlling and managing the reactions If flared gas is eliminated, we can capture and to avoid these intermediate products in convert that gas to produce gasoline. Our

Our technology eliminates the flared gas and the gasoline produced from that natural gas However, we have developed the field is more than 30% less carbon intensive than the gasoline that comes from crude oil (hydrocarbons). This is a huge incremental step in the right direction and adopting such technology to eliminate flared gas can only be seen as a positive.

But those people who are expecting us to go from where we are today to zero emissions don't fully understand the technicalities involved because it can't happen overnight.

TER: What advice do you have for the government to create policies and enabling environment for private sector players such as Verde to operate efficiently in this evolving energy landscape?

Miller: First of all, policymakers need to understand the issues that they are dealing with.

For instance, the electric vehicle mandate is a good example. Just because an electric car doesn't have a tailpipe or exhaust from a tailpipe, it doesn't mean that an EV is clean energy.

You need to consider the value chain and carbon lifecycle of an electric vehicle; the mining and production of an EV battery, including the lifespan of the battery compared with the traditional combustion vehicle running on fuels. It's clean energy; however, it is only 40% cleaner.

If you combine an electric vehicle's carbon footprint and lifespan compared to a traditional combustion vehicle running on renewable fuels, or even fuel from flared natural gas, the traditional combustion vehicle is a better solution and a lower carbon proposition.

Regulators need to understand and integrate all of this information into their energy policies.

They need to understand the full carbon lifecycle of this renewable energy to drive the energy transition agenda.

TER: What are your target markets in deploying the Verde technology?

Miller: This is a global process and we are very fortunate to have a partner like Diamondback Energy. We are building the first large-scale commercial facility in the Permian Basin in partnership with Diamondback.

The project will demonstrate, and be used as a case study, of what we will be offering globally.

There are great opportunities across the African continent, Middle East, and Asia as there are underutilized gas resources.

We see our technology as a global opportunity. We started here in the United States but we are actively looking for opportunities in the Middle East and Africa.



ENERGY EVERYWHERE EUROPEAN LIQUID GAS CONGRESS 2025

Shape the future of your business by connecting with the most influential experts and professionals in the sector.

Join the unmissable hub for the Polish, European and global energy industry and be part of the European Liquid Gas Congress 2025 on 20-22 May in Katowice, Poland.

WHAT CAN YOU EXPECT?

110 EXHIBITORS & SPONSORS

390+ ORGANISATIONS

60+ SPEAKERS

3 NETWORKING

The European Liquid Gas Congress 2025 is the must attend event in Europe for the liquid gas industry with an extensive program, an innovative exhibition, and strategic networking opportunities.





"Renewable Liquid Gases Can Reduce Emissions to 90%, and Contribute to Europe's Climate Neutrality Ambitions" - Ewa Abramiuk, Liquid Gas Europe GM

In this interview, Ewa Abramiuk Lete, General Manager of Liquid Gas Europe (LGE) talks to Ndubuisi Micheal Obineme, Managing Editor of The Energy Republic, about the role of liquid gases in Europe's energy mix and the potential of renewable liquid gas to reduce emissions to 90%.

Liquid Gas Europe is a nonprofit association that represents the voice of the liquid gas industry in Brussels, Belgium.

In her words, Ewa stated that liquid gases remain a vital energy source for heating, cooking, transportation, and industrial processes, particularly in rural and off-grid areas where alternative energy solutions are less accessible in European countries.

She said European countries consumed over 34 million tonnes of liquid gases in 2023, noting that the liquid gas sector is uniquely positioned to support the EU's Fit-for-55 targets and its 2050 climate neutrality ambitions. Excerpts:

TER: What's the current state of the European liquid gas sector and how have the liquid gases evolved over the years?

Ewa: The European liquid gas sector has seen significant evolution over recent years, embracing both conventional and renewable liquid gases to meet the challenges of the energy transition. The sector remains a vital energy source for heating, cooking, transportation, and industrial processes, particularly in rural and off-grid areas where alternative energy solutions are less accessible.

Conventional LPG continues to play a crucial role, with the EU and other European countries collectively consuming over 34 million tonnes in 2023, showing a slight recovery compared to previous years. This was supported by increased demand in the transport sector, particularly in countries like Turkey and Romania, and the resilience of industrial and chemical applications.



Ewa Abramiuk Lete, General Manager of Liquid Gas Europe (LGE)

Renewable alternatives, such as bioLPG and renewable dimethyl ether (rDME), are driving the sector's transformation.

In 2023, global bioLPG production capacity grew by nearly 20%, with Europe adding 100,000 tonnes of new capacity in 2024—a 36% year-on-year increase. These renewable fuels offer substantial emissions reductions, with bioLPG achieving up to 80% lower carbon emissions compared to conventional LPG.

The liquid gas sector is uniquely positioned to support the EU's Fit-for-55 targets and its 2050 climate neutrality ambitions. However, continued growth and innovation require strong policy support, including incentives for renewable gas production and infrastructure investments. With this foundation, the sector can further enhance its contributions to a cleaner, more sustainable energy future.

TER: The European Union has set an ambitious target of achieving climate neutrality by 2050, with the intermediate action plan to reach 55% emission reduction by 2030 coupled with the recently proposed 90% emission reduction target for 2040. Following these developments, what is the role of liquid gases in Europe's energy mix?

Ewa: Liquid gases, such as LPG, and renewable options like bioLPG and dimethyl ether (rDME), play a vital role in Europe's energy transition by providing practical, lower-carbon energy

solutions. They are especially important for sectors that are challenging to electrify, including off-grid homes, agriculture, and industrial processes. In rural areas, where alternatives can be costly or inaccessible, liquid gases offer a reliable, affordable way to reduce emissions and contribute to a greener future.

BioLPG significantly reduces carbon emissions—by up to 80% compared to conventional LPG—and can even achieve carbon-negative results when combined with offsetting measures. These fuels are "drop-in" solutions, meaning they can directly replace conventional fuels without requiring expensive changes to existing infrastructure or equipment. For example, bioLPG can seamlessly power heating systems, industrial equipment, and vehicles like those using Autogas, all while lowering emissions.

A recent Liquid Gas Europe initiative, Building Energy Everywhere, showcased how easily these solutions can be adopted. In this project, a care home in Belgium transitioned from traditional LPG to bioLPG. The switch required no additional modifications beyond replacing the fuel, demonstrating how renewable liquid gases can provide an immediate and accessible pathway to decarbonization.

By embracing renewable liquid gases, Europe can make significant strides toward its climate targets, including reducing emissions by 55% by 2030 and 90% by 2040, while ensuring an inclusive and practical transition to a low-carbon energy future.

TER: What are the challenges affecting the European liquid gas sector?

Ewa: The European liquid gas sector is at an exciting crossroads, with opportunities to expand its role in the energy transition through innovative solutions like bioLPG and rDME. Realizing this potential depends on building a cohesive EU-wide policy framework and harmonized national legislation. Clear and supportive regulations can drive investment, facilitate scaling, and accelerate research and development (R&D), unlocking the sector's ability to deliver accessible, competitive, and renewable energy solutions.



A commitment to technology-neutral policies is equally vital in fostering innovation and ensuring a fair energy transition.

By enabling diverse solutions, including renewable liquid gases, to compete on their merits, policymakers can create an environment where decarbonization is both efficient and inclusive. This approach ensures all viable technologies contribute to meeting the EU's ambitious climate goals.

With supportive measures such as direct incentives for production and R&D, along with a focus on technology neutrality, the liquid gas sector is well-positioned to thrive. Together, these actions can create a robust framework that empowers the sector to make a meaningful contribution to Europe's energy transition and long-term climate neutrality targets.

TER: In the third quarter of 2024, the European Liquid Gas Association published its latest manifesto, calling on the EU to ensure "a just energy transition for all" that allows all citizens to take part in the decarbonization of the economy by 2050. As General Manager of Liquid Gas Europe, what's your perspective on the European emission reduction targets? Do you think liquid gases have been fully supported and integrated into the European energy mix?

Ewa: The Liquid Gas Europe Manifesto highlights the critical need for a balanced and inclusive energy transition, ensuring that no community is left behind.

Liquid gases, particularly renewable options like bioLPG and rDME, provide practical, scalable solutions to decarbonize sectors that lack easy access to alternatives. Their unique versatility makes them essential for supporting Europe's ambitious climate targets while This approach promo addressing the needs of rural and off-grid areas.

While progress has been made, more can be done to fully integrate liquid gases into the European energy strategy. Targeted incentives for renewable gas production and clearer legislative pathways are key to unlocking their potential. Equally important is fostering innovation through collaboration between policymakers, industry leaders, and researchers.

The liquid gas sector is committed to helping Europe meet its 2030 and 2050 goals. By prioritizing inclusive policies and



Ewa Abramiuk Speaking at the ELGC 2024 Industry Awards

investment in renewable technologies, we can ensure liquid gases remain a pivotal part of the energy transition, driving sustainability and resilience across Europe."

for all" that allows all citizens to take part in the decarbonization of the economy by 2050. As General Manager of Liquid Gas Europe, what's your perspective on liquid gas development going forward?

Ewa: To accelerate the development of liquid gases, governments, and industry players must adopt a collaborative approach that positions renewable liquid gases like bioLPG and rDME as key enablers of Europe's decarbonization goals. These renewable fuels provide immediate, scalable solutions to reduce emissions while leveraging existing infrastructure, making them practical for both urban and rural areas.

A technology-neutral policy framework is essential to ensure renewable liquid gases are integrated into national and EU-level strategies alongside other renewable energy sources. This approach promotes fair competition and maximizes innovation across all viable technologies.

Targeted measures, including incentives for scaling production, investment in R&D, and simplified regulatory pathways, will further drive competitiveness and accessibility. Governments should also prioritize the energy needs of rural and off-grid communities, where liquid gases offer a reliable and cost-effective decarbonization pathway.

By aligning policies, fostering innovation, and addressing diverse energy needs, the liquid gas

sector can significantly contribute to Europe's 2030, 2040, and 2050 climate targets while supporting an inclusive and just energy transition.

TER: What are the key drivers to accelerate the European liquid gas market growth opportunities?

Ewa: The growth of the European liquid gas market is driven by several key factors that align with the region's broader decarbonization goals. Stable demand from off-grid households, industrial applications, and the transport sector underscores the essential role of liquid gases in providing energy solutions where electrification is challenging. At the same time, the production of renewable options like bioLPG is being bolstered by their integration as by-products of SAF and HVO production, which are scaling rapidly to meet EU climate targets.

Supportive policies are crucial to unlocking the market's potential, with technology-neutral regulations and financial incentives driving investment in renewable liquid gas technologies. Innovation in biorefinery processes and feedstock utilization is also advancing the scalability and accessibility of these renewable fuels. Additionally, increasing public awareness of the environmental and economic benefits of renewable liquid gases is encouraging adoption and expanding the market.

Together, these drivers are positioning liquid gases as a vital component of Europe's energy transition, supporting sustainability and inclusivity while contributing to the EU's ambitious climate goals.





international trade and business innovation. development?

development, particularly in the realm of knowledge exchange. renewable liquid gases such as bioLPG and renewable dimethyl ether (rDME).

potential. This collaboration aims to and build long-term collaborations. promote the development of renewable adoption.

collaborations, technological with like-minded organizations. advancements, and a commitment to transition.

local and international industry players? these goals.

gas sector.

including national associations,

TER: What are the opportunities in distributors, suppliers, and innovators, Europe's liquid gas sector in terms of fostering collaborations that drive growth and

Through our membership, businesses gain Ewa: The European liquid gas sector access to a vibrant network of industry leaders presents significant opportunities for and policymakers, creating opportunities for international trade and business strategic partnerships, joint ventures, and

We organize exclusive events, such as the European Liquid Gas Congress, breakfast The recent Memorandum of briefings, and thematic workshops, which Understanding (MoU) between SHV serve as high-impact platforms to showcase Energy and DCC Energy exemplifies this innovations, explore market opportunities,

liquid gases, focusing on sustainable Our expert-led working groups provide a production and widespread commercial forum for members to co-develop solutions on critical issues like sustainability, safety, and energy efficiency. By participating, businesses The European liquid gas sector is poised can directly influence industry priorities, for growth through international contribute to best practices, and form alliances

sustainability. By leveraging these Moreover, Liquid Gas Europe offers visibility opportunities, the industry can play a and positioning opportunities through our pivotal role in the global energy communication channels, reports, and campaigns, helping members strengthen their presence in both European and global TER: Please could you provide more markets. Whether you're looking to expand insights about the Liquid Gas Europe your network or influence key decisions (LGE) association's business and shaping the industry, Liquid Gas Europe partnership opportunities available for provides the connections and tools to achieve

Ewa: Liquid Gas Europe provides TER: Interestingly, Liquid Gas Europe unparalleled business and partnership successfully hosted the 2024 European Liquid opportunities for both local and Gas Congress (EGLC) in Lyon, France. What are international industry players in the liquid the key takeaways from this year's ELGC?

Ewa: The 2024 European Liquid Gas Congress As the leading advocacy platform for the (ELGC) in Lyon was a resounding success, industry in Brussels, we connect bringing together over 390 organizations, 110 stakeholders across the value chain, exhibitors, and more than 60 expert speakers from across Europe and beyond.

The event highlighted the pivotal role of renewable liquid gases in achieving a sustainable energy transition, emphasizing their contribution to the EU's Fit-for-55 package and 2050 climate neutrality goals.

Key discussions revolved around pressing topics such as financing challenges, evolving policy frameworks, and technological innovations. The Congress also featured three dynamic networking events, fostering valuable connections and partnerships among industry leaders, policymakers, and experts.

We were thrilled to see such strong engagement and collaboration throughout the event, which reaffirmed the commitment of stakeholders to drive forward the renewable liquid gas agenda.

As we turn our attention to ELGC 2025 in Katowice, Poland, we aim to build on the successes of Lyon and deliver an even more impactful and forward-looking event.

TER: How are preparations going on for ELGC 2025? What should we be expecting from ELGC 2025 in Poland?

Ewa: Preparations for the 2025 European Liquid Gas Congress (ELGC) in Katowice, Poland, are well underway, building on the strong success of the 2024 event in Lyon. Scheduled for May 20–22, 2025, the event promises an engaging program with updated formats, expanded exhibitions, and hands-on workshops.

Key topics will include governance, market trends, sustainability, and the critical role of renewable liquid gases in the energy transition.

The registration process is now open, allowing attendees to secure their place early and begin planning their participation.

Additionally, submissions for the AWARDS—our annual celebration recognizing innovation and leadership in the liquid gas sector—are now open. This initiative highlights outstanding achievements in areas like sustainability, safety, and technological advancements, further promoting excellence within the industry.

We're excited to bring together global stakeholders in Katowice to discuss the future of energy and to foster partnerships that will drive innovation and growth. For more information and updates, we encourage you to visit the official European Liquid Gas Congress website www.europeanliquidgascongress.com

GLOBAL ENERGY STORIES





European Union Exploring Options to "Sit at Table" with Trump to Avoid Tariff War



Qatar Energy Signs Long-term LNG Deals in China, Inaugurates Four New LNG **Vessels in South Korea**



Study shows Asia Needs more US LNG supply to curb surging coal use

Global LNG Trade Remains Resilient Amid Market

Turbulence

fter two years of severe turbulence, the global LNG trade grew by 2.1% in 2023, surpassing 401 million tonnes (MT), according to the 2024 IGU World LNG Report.

The report, obtained by The Energy Republic, revealed that the LNG market is back on track and making progress, connecting 20 exporting and 51 importing markets.

In the report, IGU stated that the US, which became the largest producer and exporter (84.53 MT in 2023 vs 75.63 MT in 2022), followed by Australia (79.56 MT), Qatar (78.22 MT), and Russia (31.36) are now dominating the global LNG export market.

Meanwhile, about 180 companies were involved in LNG deliveries under term contracts, while about 35% of the transactions were spot-priced in 2023.

"Europe saw the greatest addition of 30 MTPA, followed by Asia's 26.9 MTPA and Asia Pacific's 13 MTPA. While the Philippines and Vietnam joined the club of LNG importers in 2023 for the first time, IGU report revealed.

"China came back as the largest LNG importer at 71.19 MT, Japan, and Korea remained second and third despite annual declines, and India came back to the fourth position, with more demand responding to the lower spot price.

"Europe also cemented its role as an LNG importing heavyweight,

maintaining the second-largest importing Over 120 MTPA of currently operational region spot at 121.29 MT in 2023. With LNG supplying almost half of Europe's gas, the competition between Asian and European markets remains a key market dynamic.

Furthermore, LNG receiving capacity growth has been shaping market development over the past 24 months, as it reached an impressive 1,029.9 MTPA across 47 markets at the end of February 2024, adding almost 70 MTPA in 2023 and making it the highest year of new additions since 2010.

According to IGU, global liquefaction capacity is likely to grow to over 700 MTPA by 2030, driven by new FIDs and the start-up of projects currently under construction to support growing demand, particularly in the growing Asian markets, where coal-to-gas switching is important decarbonization and air quality improvement strategy.

However, IGU said that supply remained constrained in major markets, with just 0.8% YOY growth from Indonesia's 3.8 MTPA addition at Tangguh LNG. Several major uncertainties confront the supplyfragility of its current equillibrium.

Key sources of this uncertainty include the Biden Administration non-FTA LNG project approvals pause, which could delay over 70 MTPA of new capacity; sanctions on Russian LNG, which impact almost 20 MTPA of expected capacity; the possibility that Ukraine may not extend the Russian gas transit deal at the end of 2024; shipyard bottlenecks; the ongoing security risk in the Middle East; as well as some declining gas field supply.

liquefaction capacity is over 20 years old, and some of these facilities are being mothballed due to insufficient upstream gas production, which calls for attention to the supply side risk.

Despite the challenges, IGU maintained that the global LNG market continues to rapidly evolve as it responds to growing gas demand in emerging markets, increasing number and diversification of market participants, and the acceleration of technology development and innovation.

"The LNG industry is no longer a game only for big markets or big companies, with portfolio players playing an increasingly more important role.

"LNG has become a critical component of the global energy mix, with its role as a flexible, highly efficient, and reliable resource continuing to grow, and as such, decarbonizing the LNG value chain is a priority for many stakeholders in the industry.

"Several proposed projects are undertaking constrained market, contributing the innovative emissions-reducing measures to meet this need by integrating renewable electricity, carbon capture, and storage, partnering to develop e-methane, and grow bio-LNG, or liquefied biomethane, which is produced from capturing and upgrading biogas that would have otherwise been emitted from landfills, agricultural waste, or other feedstock," IGU added.



TotalEnergies' 2024 Outlook highlights paths for global

energy system

otalEnergies has released its Energy Outlook 2024, presenting three scenarios for the global energy system's evolution up to 2050. The report, now in its sixth edition, provides insights into the impact of various policy paths on energy transition, focusing on carbon emissions and climate targets.

The report also emphasizes accelerating the deployment of low-carbon at limiting temperature rise to below 2°C, technologies to meet the rising energy demands while addressing climate necessity for international cooperation and investment, especially in the Global South, to ensure sustainable energy access.

Momentum, and Rupture. The 'Trends', represents the current energy trajectory of countries through 2030. According to The report stresses that to accommodate the the analysis of Solarquarter publication, advancements in decarbonization technologies, such as solar, wind, electric vehicles, and heat pumps. However, it highlights limitations due to infrastructure constraints and geopolitical tensions, resulting in a projected temperature rise of 2.6 to 2.7°C by 2100, exceeding the Paris Agreement's sustainably. goals.

TotalEnergies revisits two other pathways: 'Momentum' and 'Rupture.' in NZ50 regions, and a more extensive use markets. of natural gas as a transition fuel. Despite these measures, the "Momentum" path The key messages of the TotalEnergies Energy forecasts a 2.2 to 2.3°C temperature Outlook 2024 are as follows: increase by 2100, still above the ideal target.

Furthermore, the "Rupture" scenario outlines an ambitious decarbonization pathway aimed



predicting a range of 1.7 to 1.8°C by the century's end. This scenario requires a change. TotalEnergies highlights the dramatic acceleration in renewable energy deployment and advanced technologies, alongside global cooperation. Achieving "Rupture" would entail an 80% increase in solar and wind capacity in emerging economies like India by 2030, as well as The three scenarios outlined in the widespread deployment of low-carbon TotalEnergies report are: Trends, technologies such as decarbonized hydrogen and sustainable fuels.

energy needs of a growing global population, this scenario considers recent especially in developing countries, energy access must increase significantly. Currently, about 4.5 billion people have limited access to energy, impacting essential services such as healthcare and education. TotalEnergies forecasts that by 2050, less developed regions will require four times their current energy capacity to meet growing demands

In its commentary, TotalEnergies emphasizes In addition to the 'Trends' scenario, the necessity of prioritizing mature, costeffective decarbonization technologies and strengthening international cooperation to The "Momentum" scenario integrates provide affordable solutions globally. This decarbonization strategies of net-zero would involve policy adjustments to reduce 2050 (NZ50) nations and the climate greenhouse gas emissions without pledges of others. This scenario assumes compromising energy accessibility and partial electrification, a phase-out of coal economic growth, particularly in emerging

Energy Access & Human Development: Reliable, affordable energy is crucial for human development but remains unequally distributed globally.

Past 20 Years:

The global energy transition has begun.

Energy demand growth is largely driven by rising living standards.

The U.S. shale revolution reshaped the energy landscape.

Some decarbonization technologies are mature and beginning deployment.

2050 Scenarios:

Trends: Follows current trajectories, projecting a +2.6-2.7°C rise by 2100 (above Paris targets).

Momentum: Assumes net-zero 2050 commitments, projecting a +2.2-2.3°C rise by 2100.

Rupture: Aims for a +1.7-1.8°C rise by 2100 through rapid global deployment of decarbonization technologies, with support for the Global South.

- ◆ Green Electrification: Key to transition; lowers emissions and system losses (from 60% today to ~40% in Rupture).
- ◆ Pathway from Trends to Rupture: Pragmatic global deployment of cost-effective decarbonization technologies, focusing on:
- Substituting electricity for fossil fuels (e.g., EVs, heat pumps).
- ◆ Replacing coal with renewables and flexible gas in power generation.
- ◆ Reducing methane emissions from fossil fuel production.

Policy Recommendations:

- ◆ Allocate subsidies and mandates to optimize cost-effectiveness and build public support.
- ◆ Remove infrastructure bottlenecks, especially in electricity grids.
- ◆ Strengthen international cooperation for affordable tech deployment and financing in developing countries.



Rystad Energy Forecasts LNG Growth Opportunities Under

Trumps' Presidency

s President-Elect Donald Trump is gearing up to take over the mantle of the presidency of the United States, Rystad Energy has forecasted that the next four years could prime the liquefied natural gas (LNG) markets for a golden era.

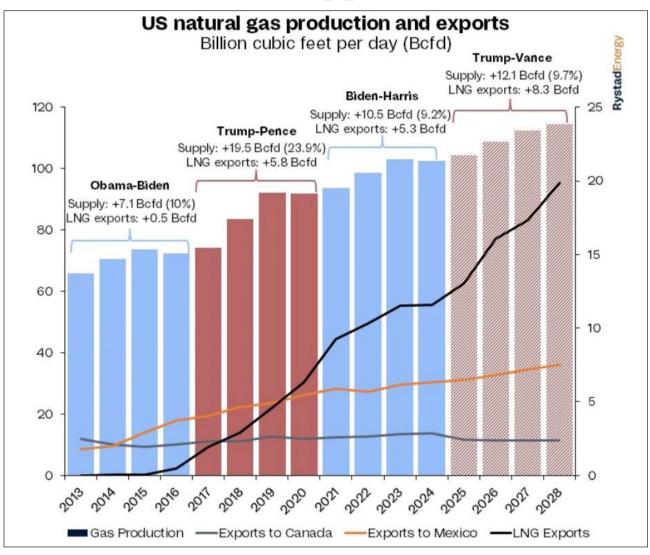
An article published by Rystad Energy experts: Emily McClain, Jan-Eric Fähnrichm, and Elliot Busby, explained that Trump policies are likely to accelerate US LNG infrastructure expansion through deregulation and faster permitting, bolstering global supply.

Based on his campaign promises, they said Trump's policy could strengthen the sentiment around global LNG supply after years of uncertainty, helping to unleash long-term demand. Even so, an untimely supply boost will heighten the risk of a medium-term market glut, which would put downward pressure on prices.

They explained, "President-elect Trump's proenergy agenda includes fast-tracking permits for stalled LNG projects, reversing Biden-era regulatory pauses, and increasing leases on federal land for gas production.

"If implemented, US LNG export capacity could nearly double from 11.3 billion cubic feet per day (Bcfd) in 2023 to 22.4 Bcfd in 2030, with major projects like Texas LNG and Calcasieu Pass (CP2) moving forward despite environmental pressures. This expansion is crucial for the US to remain a major player in the global LNG market, with demand expected to reach almost 600 million tonnes (Mt) in 2030. Based on currently producing and under-development projects, a supply gap of 140 Mt will materialize in 2035."

Emily McClain, Head of North America Gas & LNG Research, Rystad Energy commented, "Trump's accelerated LNG approvals could further strengthen the US position in the global energy market, meeting critical demand as the world transitions away from other energy sources. However, this rapid expansion risks oversaturating the market, potentially driving down prices and profitability for producers. The key challenge will be balancing domestic growth ambitions with global stability to ensure long-term market share and competitiveness."



Source: Rystad Energy's Gas Market Solution, November 2024

Rystad Energy experts also highlighted that the geopolitical implications of expanded US LNG production are also substantial, noting that the Trump administration could leverage LNG as a bargaining chip in trade negotiations with Europe, Russia, and other major economies.

"Europe is still searching for reliable, long-term alternatives to Russian piped gas and LNG supply, while China-US LNG trade is likely to be affected by tariffs," they said.

According to them, Trump's history of imposing tariffs during his first administration raises concerns about the potential impact on LNG infrastructure costs and trade. A 25% steel tariff implemented in 2018 led to significant price increases for LNG projects, a trend that could repeat under Trump 2.0.

Additionally, they pointed out that another trade war with China could disrupt the flow of LNG between the two countries, just as it did in 2019 when LNG exports were halted. Such tariffs would not only elevate capital expenses for LNG projects but also risk slowing contracting activity with key buyers like China, jeopardizing long-term export growth.

"While Trump's policies aim to bolster US energy independence and dominance, the global LNG market is highly sensitive to supply-demand fundamentals.

"The risk of oversupply looms large, especially if multiple new US LNG projects move forward simultaneously. An over saturated market could erode prices, disadvantaging US producers compared to competitors like Qatar and Australia. However, reliable US supply would also unlock new demand, particularly from pricesensitive markets in Asia, if executed strategically.

"Europe stands to be a significant beneficiary of Trump's LNG expansion policies, particularly as the EU strives to further reduce reliance on Russian gas.

"European leaders have already hinted at using US LNG purchases as a bargaining tool to avoid potential trade tariffs under Trump's administration.

"By aligning energy policies and prioritizing US imports, Europe could secure a stable energy supply while fostering stronger transatlantic relations," they added.



Trump win set to have significant global gas market impact, says Axpo Singapore MD

rump's election as US President "is set to have far-reaching, significant effects on global gas markets," Axpo Singapore Managing Director Sophie Ducoloner told S&P Global Commodity Insights in an interview.

"Trump is expected to fast-track new LNG projects. On the other hand, had the Democrats won, they may not have necessarily rejected these projects but could have implemented more regulatory and environmental processes," Ducoloner said.

On Jan. 26, the US announced a review of LNG export approvals to non-free trade agreement countries and paused the LNG authorization process for those projects.

The industry also awaits signals on what Trump could do next with an eye on the Russia-Ukraine war and potential tariffs on China, Ducoloner said, adding that LNG flows could be impacted if there is a trade war with China and new tariffs are introduced.

China's demand for LNG imports continues to stay strong and is expected to grow over 5%-6% year over year in 2024, some industry sources had told Commodity Insights earlier.

In 2023, China imported 71.32 million mt, or 98.4 Bcm, of LNG, up 11.7% year over year, according to customs data.

The priority for the Chinese will still likely be to increase domestic natural gas production, which is quite sizable, and to increase pipeline gas, because it is usually cheaper, Ducoloner said.

However, a US-China trade war could trigger a situation where more regional flows from Asian suppliers as well as LNG cargoes from the Middle East and Africa go into China, while American LNG cargoes go elsewhere, she said, noting that this situation would come with its own complexities.

The Chinese have been "very good at



Sophie Ducoloner, Managing Director, Axpo Singapore

extracting extrinsic value," Ducoloner said. During the peak of the energy crisis, when Europe had a lot of demand for LNG, China was able to reallocate some of its cargoes by increasing its domestic production and using alternative fuels for its own economy, she said.

Europe is in a stable position because storage is full, but it is still a bit early to predict how cold the winter will be, Ducoloner added.

"If the winter is very cold in both Western and Asian countries, we will end up with tighter gas markets," she said.

'Golden age' of gas

"For gas to experience its golden age, it needs to become cheaper," Ducoloner said.

Interestingly, there is a lot of demand from Asian markets such as South Korea, India and Thailand, although LNG is not cheap, Ducoloner said.

"The gas market in Asia is more driven by the European context. The correlation between TTF and JKM is much higher than that of oil and JKM," according to Ducoloner.

"Unless there is a very mild winter and everything operates very smoothly, you will see a bit of contango," she said.

In addition to the weather, the steepness of the contango will depend on geopolitics and potential outages, she said. Current LNG prices are still too high to induce a coal-to-gas switch in the electricity grid of many Asian countries, Ducoloner said.

However, if levels reach half that price, then gas starts to become extremely competitive, she said.

The December JKM was assessed at \$13.889/MMBtu Nov. 8, up 62 cents/MMBtu from Nov. 7.

Strong buying interest in Asia for the second half of December resulted in a narrower contango between the second half of December and the first half of January. The contango was assessed at 5.3 cents/MMBtu Nov. 8, compared with 12 cents/MMBtu the previous day, according to Commodity Insights data.

Spreading operations

In the Asia Pacific, Axpo has built an energy trading platform and is active in LNG trading, gas trading, LPG trading -- both on paper and physically -- as well as power trading, Ducoloner said.

Axpo is "extremely active" in Japanese and Australian derivatives power trading, she shared.

"It is a learning curve where progressively we are expanding from only exchange to OTC, and certainly one day to physical trading. Those downstream markets really fit the Axpo strategy with regard to providing electricity and risk management solutions," Ducoloner said.

"We are quite asset light, but we are not contract-light, meaning that Axpo is not so much an investor in wind, solar, offshore wind as it is in Europe but is very interested in taking the physical exposure to that and managing the market and credit risk," Ducoloner said.

Axpo is very active in the Power Purchase Agreement, or PPA, market in Europe and is growing that business also in the US.

"We aim to follow the same pattern in Asia once the markets in Asia are more liberalized," Ducoloner said.

"Axpo's strategy is to be involved in the LNG market as a transition fuel but not necessarily to put a footprint of 20 years as of now," she added.



European Union Exploring Options to "Sit at Table" with Trump to Avoid Tariff War ... set to open bid to buy more Amercian natural gas.

he European Union is considering several options to get along with US President-Elect Donald Trump to avoid a trade war leading to high import tariffs for goods between Europe and United States, The Energy Republic discovered.

The EU-US trade war escalated in 2018 and pushed the United States to impose tariffs of 25% and 10% on steel and aluminum imports from the EU on national security grounds, against which the EU retaliated. The US also threatened the EU with tariffs on cars, and car parts, among others.

In July 2018, EU's Commission President Juncker reached a political agreement with President Trump to avoid further escalation on the tariff front, set out in a Joint EU-US Statement. In January 2019, both countries entered into several negotiations on a trade agreement, which would strictly focus on the removal of tariffs on industrial goods, and exclude agricultural products; and on an agreement on conformity assessment, that would help address the objective of removing non-tariff barriers. The EU adopted a decision to authorize the opening of negotiations with the USA in April 2019. The negotiations never officially began under the Trump Administration, although technical talks on conformity assessment progressed slightly.

Since 2019, the US trade deficit with Europe has averaged \$240 billion annually, according to a Reuters report.

During his 2024 election campaign, Trump vowed to impose 10% tariffs on imports of goods from all countries into the U.S. and place 60% tariffs on all imports from China, leading to concerns the EU's trade surplus with America could be wiped out.

Trump also threatened to impose import tariffs on EU goods imported to the United States, saying that Europe would "pay a big price" for not buying enough American goods. "They don't take our cars. They don't take our farm products. They sell millions and millions of cars in the United States," Trump said.

Reuters report also shows that European nations are particularly likely to be targeted with tariffs by the incoming Trump administration as the long-standing U.S. trade deficit with Europe, which is around \$240 billion annually has become a major irritant for Trump allies.



Ursula von der Leyen said EU leaders had 'touched on' the idea of an LNG deal with Donald Trump Credit: STEFAN WERMUTH/REX

In a recent interview with the Financial Times, also published on Dow Jones Newswires, Christine Lagarde, European Central Bank (ECB) advised the European Union to avoid a trade war with US President-Elect Trump and recommended buying more US commodities as a way of strengthening the business relations between both continent.

In her words, Lagarde said, "EU should avoid a trade war with Trump by buying more American weapons and liquified natural gas (LNG).

Lagarde said the EU should approach Trump's threats with a "cheque-book strategy" by offering to buy goods including U.S. LNG and weaponry. "This is a better scenario than a pure retaliation strategy, which can lead to a tit-fortat process where no one is a winner," she said.

She also called on EU policymakers to monitor the potential for a "rerouting scenario" through which U.S. tariffs on Chinese exports see goods from China redirected to Europe instead.

Largarde noted Trump has put forward a wide range of possible tariff options, suggesting he may be "open to discussion," as she said there could now be an opportunity for the EU leaders and the new U.S. president to "sit at the table and see how we can work together."

Speaking about Trump's proposed tariff plan, European Commission President Ursula von der Leyen has responded positively, stating that the EU would consider buying more liquefied natural gas (LNG) from the United States to avoid Trump's new tariffs plan.

According to a news report published by Politico Publication, the European Union is

currently exploring the option to strike back fast and hard against any Trump tariffs to bring the US President-Elect back to the negotiating table and strike out a deal.

With the opening shot in the trade war yet to be fired, the EU's first response is to appeal for a détente, von der Leyen said after an informal meeting of the bloc's leaders in Budapest.

"First of all: engage," von der Leyen said, when asked about how to avoid Trump's tariffs, referring to her phone call with the president-elect. "Secondly, discuss common interests [...] and then go into negotiations."

Stressing that the EU still buys significant amounts of energy from Russia, von der Leyen asked: "Why not replace it with American LNG, which is cheaper for us and brings down our energy prices? It's something where we can get into a discussion, also [where] our trade deficit is concerned."

Adding to this, Laurent Ruseckas, executive director for gas markets at commodities giant S&P Global, said any such deal on fossil fuels between the EU and the US was likely to be more about politics than energy.

"The EU doesn't buy LNG — there's a global LNG market and LNG buyers have their contracts," he said. "It's certainly possible to do a memorandum of understanding to talk about increasing purchases but ultimately in the past, that's been a way to put a political wrapper around something that was delivered by the market. And the EU is buying as much LNG currently as the market needs."





France gaz Predicts Natural Gas to Contribute 20% in French gas consumption by 2030

.....calls for investments in innovative technologies to support local production of green gases.

By Ndubuisi Micheal Obineme

s the global energy transition agenda progresses, France gaz has predicted that natural gas will continue to play a key role in France's energy sector, contributing at least 20% to the French gas consumption by 2030, with local production of green gases and innovative technologies to drive the gas sector in France. The regulation country's low carbon future.

Madeleine Lafon, made this known in a one-on-one interview with The Energy Republic in Paris, stating that the natural gas sector has been resilient, playing a key role in France's energy security even during Europe's energy crisis in 2022 triggered by the Russia-Ukraine war.

Notably, natural gas has been playing a key role in securing France and Europe's energy supply. Before Russia invaded Ukraine, Europe was highly dependent on Russian gas supplies. Reports show that European countries imported over 155 billion cubic meters (bcm) of Russian gas, which accounted for about 45 percent of total gas imports into the European market.

"The Russia – Ukraine war made France and other European countries terminate Russian gas supply. The war led to a historic gas price increase, but, there were no blackouts as the European Union was able to implement several measures to decarbonize the country's energy for energy efficiency," Lafon explained. "The war completely changed the way gas development. flows into the European market as most of France's gas imports are now coming from the United States, Norway, Qatar, and Algeria."

Speaking further, Lafon revealed that natural gas currently accounts for 15% of the French energy mix, and most of the country's gas consumption comes from importation.

She said, "France is an entry point for the entire European market. We have five regasification plants. In 2023, we developed a Floating Storage Regasification Unit (FSRU) terminal, which we use for our gas importation.

"We have an effective storage regulation that supports the natural has set a mandate that obliged French gas suppliers to store at least The France gaz Managing Director, 20% of natural gas in their underground storage facility.

> "There will be even more molecules coming from natural gas and it will contribute to French energy security for a long-term period."

> In addition, she noted that the French government developed a framework focused on reducing greenhouse gas (GHG) emissions to make France become carbon neutral by 2050.

> She stated that this can be achieved by providing the necessary funding mechanism for the local production of low-carbon gases in France.

However, she said that France Gaz is working on a methodology for the recognition of green gases based on the GHG protocols, noting that its member companies are also working sector through innovative project

"We have 700 projects in the pipeline in terms of biomethane plants that will be injected into the French energy grids.

"We are looking at how we can develop CCS projects in the future.

"The CCS project will capture hardto-bate industries, while CO2 will be



Madeleine Lafon, Managing Director of France gaz

injected into depleted fields such as the North Sea.

"We are also working on industrial projects to use two technologies for pyrogaseification and hydrothermal gaseification," she outlined.

"Our electricity generation is coming from nuclear power that is considered low carbon. The French government has set a target of about 50 percent of the country's energy mix will come from electricity and this would also require green molecules (including green hydrogen).

"We have up to 13TWh of injection capacity of biomethane, representing 3% of France's energy mix. We are expecting to reach more than 50TWh capacity by 2030.

"We would also produce green gas from domestic and industrial waste through the use of technology. We are currently developing Aerobic Technology for biomethane production.

"What is important right now is energy security for our consumers and we are also trying to put some green energy production in our energy production system," she said.

In her words, Lafon stressed that there is an urgent need to increase investments and funding mechanisms for incountry research and development (R&D) to support the local production of green gases, including incorporating technologies like carbon capture and storage (CCS) in the energy value chain and enhancing the integration of lowemission gases.

To achieve the France energy transition target, she stated that there is a need for long-term investment in the natural gas sector as the global energy sector hasn't been able to identify any specific technology that will be adopted by 2050.



"It is important to maintain gas investments for all its current usage, while the industry players focus on the decarbonization and production of renewables and low-carbon gases through the use of technologies.

"At France Gaz, we believe natural gas is key for the overall energy system in France.

"We need to continue to innovate and get access to funding to develop innovations as we don't know the actual technology that will be used by 2050.

"Natural gas will contribute to French energy security for a long-term period.

"We predict about 20% of energy consumption will come from green gas produced locally by 2030.

"Also, low carbon hydrogen and biogenic CO2 will be needed. If you look at the biogenic CO2, when you produce

biomethane, you will also produce biogenic CO2. This will be part of the game changer to produce e-methane products, among others.

"We need to have investment in new technologies to support research and development to allow gas producers to develop innovative projects.

"Infrastructure will be key to getting the gases produced from the French territories. Our infrastructure system is made of LNG terminals, a regasification system, transport, distribution mechanism, and storage facilities. But we need to enhance these infrastructures to support green gases for the future.

"There are opportunities to develop technologies to produce green and low carbon gas molecules locally in France.

She added, "At France Gas, our mission is to get across to a wide range of stakeholders including media, government officials, politicians,

students, and local authorities to share our vision with the whole industry so we can have a market for the green gases.

"We have signed MOUs with other countries, mainly in exchange for good processes, and market forecasts. Our vision in Europe is different from Africa. We share our vision with these countries.

"We are working to secure the gas industry locally and we are working to develop a key tool for decarbonization such as CCS. This is something that we support because we know that CCS will be useful for the hard-to-bate industries, especially in Europe.

"We will work on two key factors. The first one will be to decarbonize the ecosystem and the second one is sufficiency. These two factors will bring us to carbon neutrality by 2050.

"By 2050, natural gas will be completely decarbonized in France."

Poland launches largest gas power plant, supplying 5% of national electricity demand market demands, stabilize Poland's power grid

oland has launched its largest gasfired power plant to supply electricity to meet 5% of national energy consumption. The power plant, which has commence operation, is managed by state-owned PGE Group, Poland's biggest power producer.

In a statement obtained by The Energy capacity of 1,366 megawatts (MW). Located in Gryfino, West Pomeranian nation's electricity demand.

Gryfino Dolna Odra ensure



Republic, the gas-fired power plant is one the security and stability of the national of the most modern in Europe, with a energy system while facilitating the further growth of renewable energy."

Voivodeship, the plant will now operate "The commissioning of this plant completes under the name PGE Gryfino Dolna Odra. the construction of the most modern and This facility will enhance regional energy largest gas-fired power station in Poland – PGE security by meeting over 5 per cent of the Gryfino Dolna Odra, with a total capacity of 1,366 MW," commented Dariusz Marzec, President of the Management Board of PGE "Gas investments play a crucial role in Polska Grupa Energetyczna. "The new gas energy transformation and achieving units will replace outdated and inefficient coalclimate neutrality," said Robert fired units at the Dolna Odra Power Plant, Kropiwnicki, Deputy Minister of State aligning with PGE Group's decarbonisation Assets. "While we continue to expand the strategy. At the same time, this investment will renewable energy system, stable energy enhance Poland's energy security, ensuring sources are essential to complement it. stable energy supplies for over 3 million Currently, gas is the most flexible energy households. Due to its flexibility – the ability to source available. Investments like PGE quickly ramp up or down production - the Gryfino plant will help balance

and optimise the use of renewable energy sources."

The power plant consists of two gas-steam units each with a gross capacity of 683 MW. Its nominal efficiency exceeds 63 per cent, more than 70 per cent higher than that of the old coal-fired units. The plant's rapid start-up time – 4 hours from cold state to technical minimum and just 30 minutes from hot state to technical minimum – allows it to flexibly support the growth of renewable energy sources.

The plant has been designed to meet the strictest emission standards based on the BAT conclusions for gas-steam units. Emissions of dust and sulfur oxides will be reduced to nearly zero, significantly improving air quality in the region. The plant's CO2 emission rate is approximately 330 grams per kilowatt-hour (kWh) of generated electricity, nearly three times lower than the emissions from the previous coal-fired units at the Dolna Odra Power Plant.

The new power plant's capacity is secured through a 17-year contract in the capacity market auction, effective from 2024. The investment, valued at over 3.7 billion złoty net (855.3 million euros0, was carried out by the PGE Group, with the contract being awarded to a consortium led by GE Vernova and Polimex Mostostal.



The naming of the vessels took place in two separate ceremonies in the city of Geoje.

Qatar Energy Signs Long-term LNG Deals in China, Inaugurates Four New LNG Vessels in South Korea

...the four new vessels, "Id'asah", "Nuaijah", "Umm Swayyah", and "Lebrethah" are part of 128 total vessels ordered

atarEnergy and Shell have entered QatarEnergy-Shell collaboration, H.E. Minister into a new long-term sale and (MTPA) of liquefied natural gas (LNG) to China.

commence in January 2025, underscoring successful conclusion of this SPA." the commitment of both entities to largest globally.

Commenting on the announcement, His partner, Shell. This agreement helps meet shipping industry. the requirements of Shell's end LNG end-users worldwide."

Highlighting the strength of the

Al-Kaabi noted: "This SPA marks the 11th LNG purchase agreement (SPA) for the supply contract between us, serving as a supply of three million tons per annum testament to our enduring partnership. It underlines our consistent ability to meet the diverse requirements of our customers and partners globally. I extend my appreciation to LNG deliveries under the SPA will Shell's management and working teams for the

meeting the world's growing energy In another development, QatarEnergy demands. The agreement also highlights inaugurated four new conventional-size LNG the continued growth of China's LNG vessels built in the Samsung Heavy Industries market, which is projected to be the Shipyard and the Hanwha Ocean Shipyard in the Republic of Korea as part of QatarEnergy's historic fleet expansion program.

Excellency Mr. Saad Sherida Al-Kaabi, the The four new vessels, "Id'asah", "Nuaijah", Minister of State for Energy Affairs, the "Umm Swayyah", and "Lebrethah" are part of President and CEO of QatarEnergy, said: 128 total vessels ordered from Korean and "We are pleased to enter into this new Chinese shipyards as part of the largest long-term LNG SPA with our trusted shipbuilding program in the history of the LNG

customers in China and enhances our The naming of the vessels took place in two contributions to meeting the needs of separate ceremonies in the city of Geoje, the first of which was held at the Samsung Heavy Industries Shipyard for the "Id'asah", the first to be delivered by Samsung.

In his remarks at the naming ceremony, Minister Al-Kaabi thanked the shipowner, a subsidiary of JP Morgan Asset Management's Global Transportation Group for their commitment and dedication, and Samsung Heavy Industries for their great workmanship and quality.

In the second naming ceremony, which was held at the Hanwha Ocean Shipyard, the first three new LNG vessels to be delivered by Hanwha Ocean as part of this program were named the "Nuaijah", "Umm Swayyah", and "Lebrethah", all of which will shortly join QatarEnergy's expanding LNG fleet.

Al-Kaabi said: "This is a historic moment as these three LNG vessels prepare to set sail on their missions across the globe, providing a cleaner and more economic source of energy, and are equipped with state-of-the-art technologies to achieve optimal fuel efficiency and reduce emissions."

The ceremonies were attended by senior executives and representatives from the shipyards, shipowner companies and representatives of the Korean government, in addition to senior executives from QatarEnergy and QatarEnergy LNG.



QatarEnergy is an integrated energy company committed to the sustainable development of cleaner energy resources as part of the energy transition in the State of Qatar and beyond.

We are the world leader in Liquefied Natural Gas (LNG) - a cleaner, more flexible, and reliable source of energy, and an integral partner in the global energy transition. Our activities cover the entire spectrum of the oil and gas value chain and include the exploration, production, processing, refining, marketing, trading, and sales of energy products and commodities.

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.







Paul Everingham, CEO, Asia Natural Gas & Energy Association (ANGEA)

Study shows Asia Needs more US LNG supply to curb surging coal use

...coal use and emissions from power generation in Asia will surge in coming decades unless there is significant new supply of U.S. liquefied natural gas (LNG), according to Wood Mackenzie report.

he study, commissioned by the Asia Natural Gas and Energy Association (ANGEA), models energy demand, power generation and the implications for gas demand for nations across Asia through to 2050.

The study found continued growth in LNG production from the U.S. – the world's biggest exporter – was essential to balancing global markets and providing emerging Asia with an affordable and available alternative to the high-emitting coal that is currently the region's dominant electricity source.

Wood Mackenzie forecasts LNG demand from Asia growing from 270 million tons per annum in 2024 to 510 million tons per annum in 2050, fueling economic and population growth across emerging economies, and supporting greenhouse gas emissions reduction, alongside investment in renewables.

Without the resources to be selfsufficient, Asia must rely on LNG imports to meet its natural gas needs. "Wood Mackenzie has modelled two scenarios: one where the current halt to U.S. LNG export approvals to non-free trade agreement countries is lifted early in 2025 and another where this 'pause' stays in place longer-term," ANGEA CEO Paul Everingham said.

"If the pause is lifted and approvals and development of export facilities resume, then U.S. LNG is expected to comprise a third of global supply by 2035."

"But if it remains in place and planned and proposed U.S. LNG projects are not developed, there is a risk that LNG developments in other regions will fail to keep pace with anticipated demand growth," Everingham said.

"The study demonstrates that although there is considerable LNG supply set to enter global markets through the second half of this decade, strong uncertainty exists about the 2030s and beyond and this is impacting energy planning in Asia.

"This aligns with ANGEA's experience engaging with key energy decision makers around Asia, who are planning to make long-term investments in gas supply and infrastructure worth tens of billions of dollars. The most common question they ask us is 'where is our gas supply for future decades going to come from?

"They want to know if the U.S. will be a reliable long-term supplier of the LNG they seek to replace coal in power generation. If it's not from the U.S. or Australia, then this study shows gas would need to be sourced from less cost-competitive projects around the world and the likely outcome would be higher LNG prices than what many South Asian and Southeast Asian nations can afford.

"Nations like Bangladesh, Vietnam, the Philippines, Indonesia and Malaysia will not be able to realize their plans to transition to gas-fired power if LNG prices are high and coal use, which hit record levels in both 2022 and 2023, will keep growing. Without certainty of an affordable supply, their fallback position, quite understandably, is to stick with a fuel they are familiar with and which they know is likely to be inexpensive and plentiful: coal.

"If price increases were to result in 2035 LNG demand from the emerging Asian importing countries being 30% lower than Wood Mackenzie's current projections, it's estimated an additional 95 million tons of coal would be used in that year alone.

"With natural gas and LNG found to produce an average of 50% fewer emissions than coal when used to generate power, this outcome would result in around 100 million tons of additional annual CO2 emissions.

"This is roughly equivalent to the annual emissions of 20 million cars and will impact Asia's progress towards climate objectives."

Everingham said the Wood Mackenzie study was notable for the realistic approach it took to Asia's energy transition, as emerging nations sought to maintain energy security and economic growth while reducing emissions.

Wood Mackenzie forecasts both LNG demand growth and a positive outlook for renewables developments in Asia – highlighting the complementary role of both sources in meeting rising energy demand.



"Rather than starting at net zero and working backwards to provide an unrealistic picture of the energy sources Asia will use over the next 25 years, Wood Mackenzie has carefully analyzed individual countries to project their most likely energy pathways, as they strive to reduce greenhouse gas emissions," Everingham said.

"The rollout of renewable energy in Asia is a complex undertaking and we've already seen countries having to cut back on renewables targets. Natural gas and LNG provide an opportunity to reduce power-related emissions and coal use, while also ensuring energy security."

Mangesh Patankar, Head of Asia Gas and LNG Consulting at Wood Mackenzie, said that the company forecasts growth in Asia's LNG demand from the 2030s onwards would mostly come from South Asia and Southeast Asia.

"LNG will continue to play a strong role in the Japanese, South Korean and Taiwanese economies to 2050. However, demand from these countries will decline slowly as energy transition measures progress," Patankar said.

"Growth in LNG demand from China will be strong until the early 2030s but is expected to be limited after that as piped gas projects from Russia are expected to enter operations and ramp up.

"By contrast, Southeast Asia and South Asia will experience rapid growth in LNG demand throughout the 2030s and beyond, as energy demand continues to grow at pace and LNG provides a low-cost and low-carbon solution, alongside renewables, to reduce dependence on coal-fired power amidst depleted and declining domestic gas resources.

"Meanwhile, LNG demand from India will grow strongly from 2027 through to 2050, largely via consumption in the non-power sector, including city gas, fertilizer and petrochemical manufacturing."

Robert Liew, Wood Mackenzie's Director for Asia Renewables Research, said analysis

of Asia's future energy landscape suggested power generation capacity from solar projects in China, India and Japan would be lower than the levels outlined in the International Energy Agency's APS and STEPS scenarios.

The study indicates that a range of Asian economies—including India, Indonesia, Malaysia, Thailand and Vietnam— may have set net zero targets that were too ambitious.

"There are implementation challenges that will continue to impact renewable energy projects in Asia," Liew said.

"These include grid challenges involving lack of battery storage to overcome intermittent generation, issues associated with land acquisitions required for renewables projects and unattractive tariff regimes in several countries."

There are also country-specific challenges, Liew said

"Bangladesh, for example is densely populated, which makes developing renewable projects difficult close to demand centers. Meanwhile, countries such as Thailand and Indonesia have limited ability to harness onshore wind power due to low wind speeds."

Taiwan eyes Canadian natural gas to supply its growing energy needs

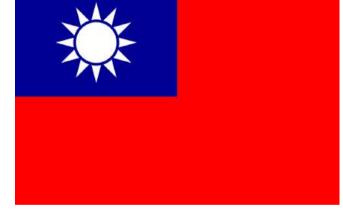
ccording to a report published by The Globe and Mail, Taiwan is "eager" to buy LNG from Canada when the opportunity is available, as the island nation looks to diversify its energy supplies.

Chern-Chyi Chen, Taiwan's Deputy Minister of Economic Affairs, said that his nation's state-owned petroleum company is in close contact with LNG proponents in British Columbia. The senior government official said that Taiwan is open to investing in Canadian LNG projects.

"It might be something like now you need to invest in order to get the supply," said Chen via The Globe and Mail.

"In that case, of course, we will be interested in investing for a guarantee of the supply."

Mr. Chen said that Taiwan wants to generate half of its electricity from natural gas, up from 40 per cent currently.



The small island nation imports almost all of its natural gas in liquid form from Australia, Qatar, the United States, and others.

"CPC Corporation will continue to search for opportunities with producers in British Columbia," said Chen.

Taiwan's Economic Affairs Ministry said it wants to build four more gasification terminals to receive LNG imports, bringing its total number of such facilities to six. It also wants to accumulate a 24-days' worth of natural gas supply by 2027.

Taiwan already holds a 15% share of the LNG Canada project, set to begin full operations by

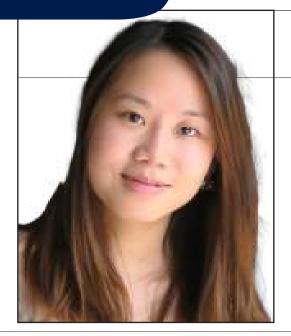
mid-2025. Taiwan joins Japan and South Korea as likely importers of the 14 million tonnes per annum (mtpa) of LNG from Canada's first large-scale liquefaction export facility.

Taiwan has joined a long list of other Asian and European countries that have expressed interest in obtaining Canada's LNG.

As more countries seek to diversify their energy suppliers and find new sources from reliable, producers, Canada stands uniquely positioned to meet growing global LNG demand — if only the country could develop the necessary export infrastructure and capacity.







FEATURED CONETNT

Karen Hui

Research Scholar at **Greater China, APF Canada**



ASIA PACIFIC FOUNDATION OF CANADA

By Karen Hui, Research Scholar at Asia Pacific Foundation of Canada's Greater China Team.

Energy Security in Uncertain Times: How Canada and Taiwan Can Partner for Strategic Gain

aiwan's heavy reliance on imported energy is a glaring national security risk, especially as tensions with China continue to rise. The island's domestic energy production is negligible — currently, domestic sources account for only about three per cent of its energy consumption, a predicament made worse by a 2016 decision to phase out the use of nuclear power.

Taiwan depends on imported oil, coal, and natural gas, much of it shipped through sea lanes susceptible to disruption, especially the South China Sea and Taiwan Strait. China could readily exploit this Achilles' heel by imposing a naval blockade; in 2022, Beijing conducted a military drill explicitly targeting the island's oil-importing ports Keelung and Kaohsiung. If Beijing were to target these ports or some other aspect of Taiwan's import capacity, not only would the effects on Taiwan be devastating, effectively crippling its economy and its ability to defend itself, but it would also have much wider repercussions, given Taiwan's centrality to global supply chains.

To reduce its energy insecurity, Taiwan is boosting its supply of renewables by diversifying its energy partnerships and bolstering its ability to produce more energy domestically.

Canada, as a global leader in clean energy, is well-positioned to support these ambitious goals while advancing its own climate ambitions and deepening its Indo-Pacific energy ties.

Specifically, it can partner with Taiwan on developing capacity in two types of clean energy: offshore wind power and hydrogen, both of which are at the forefront of global decarbonization efforts.

Taiwan's Precarious Energy Position

A significant portion of Taiwan's current energy imports comes from politically volatile regions. For instance, nearly 60 per cent of its crude oil, the island's primary energy source, originates in the Middle East, particularly Saudi Arabia (31.2%) and Kuwait (17.8%). The vulnerability of these shipments is amplified by having to transit through chokepoints in the Strait of Hormuz, which is facing a potential blockade. Taiwan's coal imports, meanwhile, increasingly come from Russia — the share of its coal imports from Russia has tripled in the past decade to 12 per cent, a clear risk given Russia's close ties with China. Moreover, Taiwan's energy stockpiles are scant: it has a meagre 11 days' worth of natural gas, 39 days of coal, and 146 days of oil. A maritime blockade by China could paralyze Taiwan's economy within weeks.

Some of Taiwan's domestic policy decisions have further eroded its energy autonomy. It was once a regional leader in nuclear power; in the mid-1980s, Taiwan generated roughly half of its electricity needs through its three nuclear power plants. However, high-profile nuclear accidents such as the 1986 Chernobyl disaster and a controversy over a local nuclear waste facility increased anti-nuclear sentiment on the island. Taiwan's Democratic Progressive Party (DPP), formed in 1986, capitalized on this sentiment, helping the party distinguish itself from the incumbent Nationalist Party, or Kuomintang (KMT).

When the DDP regained power in 2016, it pursued a "nuclear-free homeland" policy of phasing out all nuclear reactors in Taiwan by 2025. Taiwan's nuclear power generation now comes from just two plants that provide six per cent of its electricity. The nuclear-free policy has created an energy gap largely filled by imported liquefied natural gas (LNG), thereby deepening Taiwan's import dependence.

To fill the yawning energy gap, Taiwan's government, under former president Tsai Ingwen's "Energy Transition Policy," set an ambitious 2025 energy mix target of 20 per cent renewable energy, 30 per cent coal, and 50 per cent LNG. But as of 2023, renewable sources accounted for only around 9.5 per cent of electricity generation. The slow transition to renewables, combined with rising electricity demand, has led to power shortages and has renewed public support for nuclear energy. The pro-nuclear KMT, which has held a legislative majority since the January 2024 elections, is pushing to amend regulations to extend the operational lifespan of existing nuclear plants.

Taiwan's new president, Lai Ching-te, doubled down on his predecessor's 2016 plan to deploy 20 gigawatts (GW) of solar and over 6.7 GW of offshore wind through partnerships and domestic development policies. He pledged C\$38 billion (900 billion New Taiwan dollars) by 2030 to explore advanced energy sources, creating an opening for a partnership with Canada.

Canada: A Hydrogen Powerhouse

Taiwan's leaders have recognized hydrogen's unique properties as a versatile, low-carbon

GLOBAL ENERGY STORIES



energy carrier (see Box 1), viewing it as indispensable to its carbon neutrality goals. They have set a target for hydrogen to constitute up to 12 per cent of its total energy consumption by 2050 through a two-pronged strategy to build a robust hydrogen supply chain. In the short term, Taiwan aims to team up with major international hydrogen exporters to bridge the immediate supply gap while it builds its domestic production capacity. Concurrently, Taiwan is prioritizing technological self-reliance in hydrogen production, focusing on localizing key technologies, including carbon capture, hydrogen production processes, and efficient utilization methods.

Hydrogen: The 'Fuel of the Future'

Hydrogen is not an energy source per se, but an energy carrier. Similar to a battery, it stores energy that can be released later for various applications. To use hydrogen as a fuel requires specific processes, with two common categories: blue hydrogen and green hydrogen.

Blue hydrogen is derived from natural gas, but the process releases significant amounts of carbon dioxide. However, the deployment of carbon capture and storage technology can mitigate these emissions.

Green hydrogen is produced through electrolysis, a process that splits water (H2O) into hydrogen and oxygen using renewable energy sources such as wind and solar power. Free from greenhouse gas emissions, this method is considered the more environmentally sustainable option. Once obtained, hydrogen can be burnt directly or mixed with oxygen in a fuel cell to produce electricity and heat, powering vehicles and other industrial processes.

Canada is well-placed to support these goals. The country ranks among the world's top 10 hydrogen producers, boasting a projected annual capacity of 212,000 tonnes of green hydrogen in 2024, and is predicted to be the world's fourth-largest producer by 2030, trailing only Australia (the largest hydrogen producer), the U.S, and Spain. According to its 2020 federal hydrogen strategy, Canada aspires to break into the top three clean hydrogen producers by 2050.

Beyond production capacity, Canada also has expertise in carbon capture, utilization, and storage (CCUS) technologies, which are crucial for

mitigating the emissions associated with blue hydrogen production. As one of only three countries with large-scale CCUS facilities for both electricity generation and large-scale industrial applications, and holding 14 per cent of the world's CCUS patents, Canada can offer transferable technologies for producing clean hydrogen at relatively low cost.

Canadian companies have also gained worldwide recognition for their hydrogen fuel cell technology. Over half the world's fuel cell buses run on Canadian fuel cell powertrains, showcasing two decades of innovation. Ballard Power Systems, a British Columbia-based pioneer in this field, exemplifies the potential for Canada-Taiwan collaboration. The company is currently in discussions with stakeholders in Taiwan for the island's first domestically built hydrogen bus.

However, hydrogen is not without criticism. "Blue" hydrogen, produced from natural gas with carbon capture, is often presented as a climate-friendly option. However, independent research reveals that actual CO2 capture rates are closer to 12 per cent, significantly lower than industry claims of 80-90 per cent. Green hydrogen offers a truly clean alternative, emitting no CO2 during production. Nevertheless, its high production cost makes green hydrogen a niche product, representing less than one per cent of global production. Taiwan, with its limited renewable energy capacity, could face challenges in scaling up green hydrogen production, as it requires a substantial and consistent supply of renewable electricity.

Offshore Wind: Shared Opportunity and Expertise

In one area — wind power — Canada has already made significant inroads into Taiwan's renewable energy sector, with investments totalling nearly C\$3.2 billion over the past six years. Northland Power, for example, is leading Taiwan's landmark 1-GW Hai Long offshore wind project, scheduled for completion in 2025. Costing C\$9 billion, Hai Long will comprise 73 turbines capable of powering more than one million Taiwanese households and industrial facilities upon activation, making it one of the largest offshore wind facilities in Asia.

While Canada does not yet have any operational offshore wind farms, its extensive experience in onshore wind energy provides a strong foundation for Taiwan's offshore development. Ranked ninth overall in installed capacity in 2022, Canada's thriving onshore wind sector is among the world's largest per capita.

Since pioneering eight wind farms in 1998, onshore wind power has expanded over 40-fold to 337 farms nationwide. This growth is expected to continue, with capacity projected to reach 18.17 GW by 2024 and 27.75 GW by 2029. The core technologies of wind turbines, including blades, generators, and control systems, share similar design principles across both onshore and offshore applications, making Canada's expertise readily applicable to Taiwan's offshore wind ambition.

Furthermore, Canadian companies are developing innovative solutions for grid stability and reliability, which are crucial for integrating large-scale renewable energy sources such as offshore wind farms. NRStor Inc.'s fuel-free and unprecedented compressed air energy storage facility, designed for integration with wind farms, can store excess wind energy and then release it during periods of high demand, mitigating the intermittency challenges of renewable energy. In the long run, as Taiwan undergoes an industrial transformation to develop a green supply chain—particularly to bolster its domestic production of offshore wind components — Canada's energy expertise offers valuable opportunities for long-term collaboration and leveraging Taiwan's advanced manufacturing capabilities.

Navigating Turbulence

Despite the significant potential for Canada-Taiwan co-operation, such a partnership could face both geopolitical and commercial challenges. For hydrogen trade, Canada faces strong competition from regional energy exporters such as Australia, which is investing heavily in scaling green hydrogen exports and benefits from lower transportation costs due to geographical proximity. Taiwan's East Asian allies, Japan and South Korea, produce more than half of the world's hydrogen fuel cells, representing attractive partnerships. Taiwan's Lai has specifically expressed interest in collaborating with Japan on hydrogen initiatives.

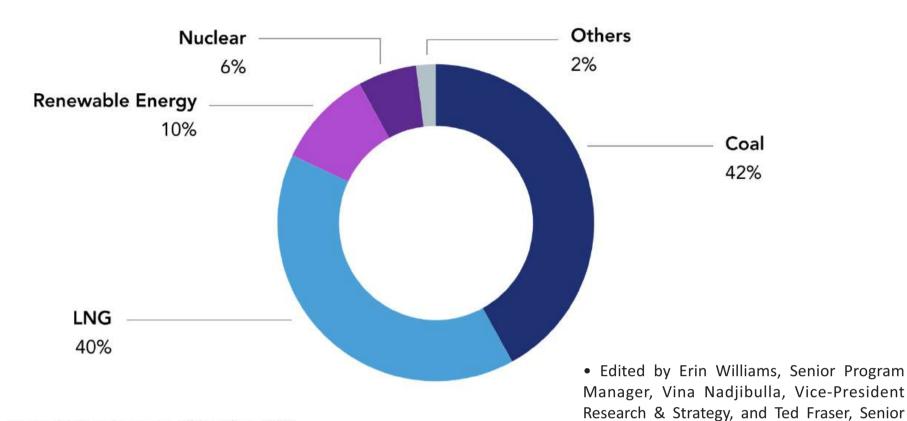
Similarly, Taiwan's burgeoning offshore wind sector is attracting significant global investment, with more than 1,500 such investments approved in just the first eight months of 2023. This rush to invest highlights the advantage held by competitors such as Denmark, Germany, and Japan, all of which have decades of experience in building offshore wind capacity, developing mature supply chains, training skilled labour forces, and implementing cost-competitive technologies.

Another hurdle for Canada is domestic. While Canada is a top energy producer and exporter,





Taiwan's Power Mix, 2023



Source: Ministry of Economic Affairs, Taiwan (2023)

commercializing its energy trade has As global demand for AI drives an insatiable transport oil and gas from production addressing its energy challenges. areas to coastal ports, over 90 per cent of its energy exports go to the U.S.

pipelines, storage facilities, and vehicles autonomous vehicles. are primarily designed for fossil fuels such energy infrastructure.

Taiwan's Energy Security: High Stakes

Taiwan's energy security is inextricably linked to its continued economic prosperity and global technological leadership. The island's key industries, particularly its semiconductor sector, are highly energy-intensive.

always been a challenge. For example, need for advanced semiconductors, Taiwan's due to limited pipeline capacity to ability to meet this demand hinges critically on

The stakes could not be higher, considering Taiwan currently accounts for over 60 per cent Similar bottlenecks could hamper of global semiconductor production and Canada's commercialization of clean produces over 90 per cent of the most energy if the necessary infrastructure advanced semiconductors used in critical investments are not made. Existing technologies such as AI, 6G smartphones, and

as oil and gas. Transporting clean energy, Canada, with its commitment to strengthening particularly hydrogen, requires an Indo-Pacific ties and its expertise in clean overhaul of existing value chains, from energy technologies, has a prime opportunity production and storage to transportation to deepen its collaboration with Taiwan in this and end-use applications, which crucial area. The recent signing of a Foreign necessitates substantial investments in Investment Promotion and Protection new infrastructure and technologies. Arrangement, a benefit shared by only a few Canada could risk missing out on the Western countries, not only grants Canadian burgeoning global clean energy market, energy investors a significant advantage in the including opportunities in Taiwan, if it Taiwanese market, but also holds symbolic falls short in upgrading and expanding its importance, fostering confidence in both Canadian and Taiwanese industries to explore further collaboration. Furthermore, the Collaborative Framework on Supply Chain Resilience endorsed by both sides underscores their shared commitment to establishing secure and sustainable supply chains, further bolstering collaboration on clean fuels, renewable energy, and achieving net-zero emissions.

About the Author

Editor, APF Canada.

Karen Hui is a Research Scholar with the Asia Pacific Foundation of Canada's Greater China Team. With a master's degree in sociology from the Chinese University of Hong Kong, she specializes in policy and academic research related to social development from critical perspectives, especially labour, social movements, public health, and supply chain.

About APF Canada

The Asia Pacific Foundation of Canada (APF Canada) is an independent not-for-profit organization focused on Canada's relations with Asia. Our mission is to be Canada's catalyst for engagement with Asia and Asia's bridge to Canada.

APF Canada is dedicated to strengthening ties between Canada and Asia through its research, education, and convening activities, such as the Canada-in-Asia Conferences series, our Women's Business Missions to Asia, and the APEC-Canada Growing Business Partnership project.

For nearly four decades, our research has provided high-quality, relevant, and timely information, insights, and perspectives on Canada-Asia relations for Canadians and stakeholders across the Asia Pacific.

GLOBAL ENERGY STORIES





Shell Wins Appeal Against Court Order to Reduce Carbon Emissions

hell has won its appeal against a landmark climate ruling from 2021 that required the energy giant to cut its carbon emissions by 45% by 2030. The Court of Appeal of The Hague overturned the District Court of The Hague's 2021 ruling in the case brought against Shell plc by Milieudefensie, other NGOs, and a group of private individuals.

The outcome, which comes during the opening days of the COP29 climate summit in Azerbaijan, marks the latest twist in a precedent-setting case that could have far-reaching implications for the future of climate litigation.

In May 2021, The Hague District Court ruled that Shell must reduce its greenhouse gas emissions by 45% from 2019 levels by 2030. The case was brought against Shell in 2019 by Milieudefensie, an environmental campaign group and the Dutch branch of Friends of the Earth, alongside six other bodies and more than 17,000 Dutch citizens.

The 2021 District Court ruling, was the first time a court had ordered a private company to comply with global climate policy as outlined in the 2015 Paris climate agreement.

The verdict, which came when Shell had its headquarters in The Hague, also said the company was responsible for all emissions across its value chain, including those from the products they sell — known as Scope 3 emissions.

However, Shell appealed the 2021 decision and subsequently moved its headquarters to the UK, a relocation that was criticized for being partly motivated by the courtroom defeat. The Hague district court ruling had only been legally binding in the Netherlands.

In appeal hearings held earlier this year, Shell argued that the case had no legal basis.

Shell's lawyers said demands for companies to curb greenhouse gas emissions could not be made by courts, but only by governments, Reuters reported.

Following several hearings, the Dutch Appeal Court in the Hague reversed the decision on Tuesday 12th November 2024, stating that while Shell is required to reduce its emissions, "there is currently insufficient agreement on a specific reduction percentage that an individual company such as Shell should adhere to.

In a statement obtained by The Energy Republic, the appeals court in The Hague said that while Shell is required to reduce its carbon emissions, it could not determine the extent of these cuts. The case against Shell, therefore, was dismissed entirely.

"The court of appeal denied the claims of Milieudefensie because the court was unable to establish that the social standard of care entails an obligation for Shell to reduce its CO2 emissions by 45%, or some other percentage," the court said in a statement.

Furthermore, the appeal court said that urging Shell to drastically cut its Scope 3 emissions by a specific percentage was "ineffective" because other companies could step in to take over that trade, and "this would consequently not result in a reduction in CO2 emissions."

Shell welcomed the decision of the appeal court ruling to overturn the 2021 verdict.

"We are pleased with the court's decision, which we believe is the right one for the global energy transition, the Netherlands, and our company," said Shell plc Chief Executive Officer Wael Sawan.

"Our target to become a net-zero emissions energy business by 2050



remains at the heart of Shell's strategy and is transforming our business. This includes continuing our work to halve emissions from our operations by 20301. We are making good progress in our strategy to deliver more value with less emissions."

The appeal court ruling marks a pivotal moment in the ongoing dialogue about corporate responsibility and climate change. While Shell's immediate obligations have been adjusted, the ruling sets a precedent for future cases and reinforces the shared responsibility of all stakeholders in addressing this critical issue.



Notably, Shell has stated previously, that a court ruling would not reduce overall customer demand for products such as petrol and diesel for cars or for gas to heat and power homes and businesses. It would do little to reduce emissions, as customers would take their business elsewhere.

Shell strongly believes that smart policies from governments, along with investment and action across all sectors, will drive the progress towards net-zero emissions that we all want to see.

IAE 2025 Paris: African Gas to Offset Global Supply Gap

s the global energy landscape undergoes transformation, African gas reserves are increasingly relevant in meeting growing liquefied natural gas (LNG) demand. This strategic position is underscored by the continent's vast untapped gas reserves and expanded production and export infrastructure, both of which play a pivotal role in bridging global gas supply.

The Invest in African Energy Forum — taking place in Paris on May 13-14, 2025 — serves as a critical platform for attracting and channeling foreign investment into Africa's gas and LNG sectors. Uniting African industry stakeholders with the global investment community, the forum will showcase leading investment opportunities in gas exploration, extraction and processing and associated infrastructure, as well as forge strategic partnerships central to unlocking Africa's gas potential.

Global Gas and LNG Demand Landscape

Global demand for natural gas has been on an upward trajectory, driven by its cleaner-burning properties compared to coal and oil, which align with the global push towards lower carbon emissions. According to the International Energy Agency, global gas demand is projected to grow by 2.5% in 2024, though tight gas supplies continue to constrain demand growth.

Demand is fueled in part by increasing consumption in Asia, particularly in

China and India, where gas is seen as a transitional fuel towards renewable energy sources. In Europe – although overall gas demand is declining, due in part to the EU's ambitious targets to reduce greenhouse gas emissions by 55% by 2030 – the need for diversified and secure energy sources remains. Africa's Gas Reserves and Production Capacity

Africa holds more than 620 trillion cubic feet (TCF) of natural gas, translating to about 8.5% of global proven reserves. Nigeria, Algeria, Egypt and Mozambique are the continent's gas powerhouses, collectively accounting for the majority of these reserves. As of 2023, Nigeria, with 206 TCF of proven reserves, remains the largest gas producer in Africa and is a key supplier to markets like Spain, Portugal, France and Italy, primarily through its 22-million-ton-per-year Nigeria LNG plant.

Meanwhile, Mozambique is emerging as a key player on the global LNG stage following large-scale discoveries in the offshore Rovuma Basin. The TotalEnergies-led Mozambique LNG project is expected to produce up to 12.8 MTPA, while ExxonMobil spearheads the 15.2-MTPA Rovuma LNG project and Eni launches its second floating LNG facility in-country, set to boost Mozambique's contributions to global supply.

Egypt, leveraging its strategic location and substantial gas discoveries in the Mediterranean, is also positioning itself as a regional gas hub. The Zohr field alone is estimated to hold around 30 TCF of gas. Egypt's LNG facilities, Idku and Damietta, have a combined capacity of approximately

12.2 MTPA, enhancing its export capabilities to European markets. Neighboring Libya is also seeking to boost energy supplies to Europe on the back of an \$8-billion gas production deal with Italy that will source gas from two offshore fields starting in 2026.

Supporting Global Supply and Demand

African gas projects are crucial in diversifying global gas supplies, enhancing energy security and stabilizing prices. Europe, seeking to reduce its dependence on Russian gas in light of geopolitical tensions, is increasingly looking to Africa for reliable LNG supplies. In 2023, Africa supplied around 15% of Europe's LNG imports – with the lion's share coming from Algeria and Nigeria – and countries like Egypt and Mozambique contributing smaller shares. The development of new LNG infrastructure, such as the Trans-Saharan Gas Pipeline, is set to further facilitate the flow of African gas to Europe.

Moreover, African LNG is crucial for meeting burgeoning demand in Asia. The Mozambique LNG project has secured long-term contracts with buyers in Japan, China and India, ensuring stable demand for its future output. Africa's geographic location, especially for East African producers like Mozambique – as well as future exporters like Tanzania and South Africa – positions them favorably to serve Asian markets, reducing transportation costs and times compared to traditional suppliers in the Middle East and Australia.

With substantial reserves and ongoing development projects, Africa is well-positioned to meet growing global demand for gas as a transitional fuel.



Burford Capital Report Reveals how Businesses are Preparing for Increased Global Energy Transition Disputes

\$4 million

65% of GCs expect the typical costs for legal fees and expenses for a dispute related to the energy transition to exceed \$4 million.

Burford Capital, the leading global finance and asset management firm focused on law, has released new research titled, "Energy transition disputes: GCs and senior lawyers on the business impacts of legal challenges to come," which demonstrates how businesses are preparing for a likely rise in legal disputes related to the global energy transition. This transition—or the shift to renewable sources of energy—is likely to cause an increase in expensive commercial disputes.

Businesses are investing significant sums in this transition, and corporate commitments highlight the scale of economic engagement as they invest in the new technologies, infrastructure and other resources that will be needed. But multifaceted legal and commercial pressures present businesses with a myriad of potential challenges including contractual disagreements, regulatory compliance issues and the need for intellectual property enforcement or litigation. Burford's research report aims to offer a unique perspective on how corporations foresee the expected rise in litigation and arbitration related to this energy transition, examining the areas of business impact related to this evolving landscape.

Burford commissioned this independent research by capturing

insights from 300 Gcs and heads of litigation across key industries impacted by the energy transition and spanning North America, Europe, Asia and Australia.

Key findings from the study include:

Disputes relating to the energy transition are rising

- ◀ 76% of GCs report they are already encountering disputes related to the energy transition and nearly half (47%) expect a further rise in the volume of such disputes in the next decade, driven by evolving laws, new technologies and infrastructure requirements.
- ◆ Disputes relating to the energy transition are expected to be costly
- ◆ Almost two in three GCs (63%) expect legal fees and expenses to exceed \$4 million per energy transition case; a notable minority (29%) expect per case costs to exceed \$10 million.
- ◆ Over half (52%) view high costs as a significant factor in deciding not to pursue disputes.
- ◆ Half (50%) of GCs agree that the energy transition will create the need for additional capital sources for the business.
- ◆ Expected disputes span all types of business conflict

- ◆ GCs are most likely to predict (77%) that the energy transition will result in more contractual disputes and commercial arbitration.
- ◆ Joint ventures are expected to be particularly prone to disputes over profit allocation (76%) and intellectual property rights (65%).
- ◆ Over half of GCs (57%) also expect their businesses to face arbitrations to resolve investor-state conflicts relating to the transition.

New tools are needed to manage the rising dispute costs

Legal finance is increasingly used to mitigate the financial burden of these disputes; three in four (75%) GCs have used or would consider using legal finance to offset the cost of disputes relating to this transition.

◆ In particular, GCs value monetization—or advancing some of the expected entitlement of a pending claim, judgment or award— to generate liquidity from claims tied up in litigation and arbitration. With legal finance, companies can also offset the cost of pursuing affirmative litigation to generate liquidity, shifting legal departments from cost centers to value drivers.

Christopher Bogart, CEO of Burford Capital, said: "Businesses face significant challenges related to the global energy transition due to cross-border projects, differing legal frameworks and rapidly evolving policies. Additionally, long-term energy contracts may not keep pace with energy markets and technologies, resulting in conflicts among stakeholders. Burford's latest research demonstrates the value of corporate finance for law, as legal finance helps companies manage the high costs of energy transition disputes and allows them to pursue meritorious claims without depleting resources."

Burford's research is based on a 2024 survey conducted by GLG and is supplemented by interviews with ten global energy transition experts conducted by Ari Kaplan Advisors.





SPOTLIGHT CONETNT

Ivan Tan Director of Trade at

Enterprise Singapore



Enterprise Singapore Highlights Singapore's Growth Opportunities in Energy Sector By Ndubuisi Micheal Obineme

nterprise Singapore, the government agency facilitating trade and enterprise development under the Ministry of Trade and Industry, shared the growth opportunities in Singapore in the energy sector.

Despite being a non-oil producer, Singapore has been spotlighted as one of the largest global commodity trade hubs conducting nearly 20 percent of the world's energy and metals trade. The country is also Asia's oil price discovery center.

Speaking about this development in an interview with The Energy Republic, Ivan Tan, Director of Trade at Enterprise Singapore, stated that Singapore is Asia's oil trading hub and the world's largest transshipment port and bunkering hub.

Tan noted that the key factors driving the growth opportunities in Singapore are based on increased energy demand in the region.

Singapore took deliberate action to grow its commodities trading sector including the energy sector over the past 30 years, which has helped strengthen its status as one of the world's leading trade hubs, attracting the global business community of commodity traders.

He said, "Singapore has one of the world's largest container transshipment ports. One in seven of the world's transshipment containers go through the port of Singapore. A lot of ships choose to

bunker in Singapore and it creates a strong demand for marine fuels in the country.

"Singapore also has more than 10 million cubic meters of oil storage. These oil storage tanks enable energy companies to blend and reexport their products.

"Over 150 global companies trading energy products are present in Singapore. These companies include national oil companies, independent traders, and distributors of LPG, among others.

"Foreign companies choose to establish their business in Singapore because it gives them a lot of options in terms of market access.

"It is also easy for companies in Singapore to charter vessels from shipping companies in the country.

"We have over 50 banks that provide commodity financing and credit facilities to trading companies.

"We have a strong talent pool, including a good mix of both international talent and Singaporeans. About 70% of the traders in these commodities companies are locals while the trade on low carbon fuels commodities in remaining 30% are foreigners."

Furthermore, he highlighted that the global energy transition agenda has also positioned Singapore as a hotspot for low-carbon fuels trading, noting that trading of biofuels is gaining momentum – both globally and in Singapore. Companies are also looking to trade green ammonia and methanol in Singapore in the future.

He said Singapore is home to a significant number of global energy and multinational companies such as BP, ExxonMobil, and Shell and they have chosen the country as their Asia Pacific hub.

"We have over 40 companies that are also trading LNG in Singapore. As the companies move into decarbonization, they can leverage their base in Singapore to tap into the country's human capital, financial institutions, and world-leading shipping, and marine sector to support energy transition efforts.

"There will be more trades in low carbon fuels in Singapore. LNG trading has been growing in the past 10 years in the country.

"Singapore is driving the adoption of low carbon fuels to support the energy transition. For instance, Singapore mandates that all flights departing from Singapore are to use sustainable aviation fuel (SAF) from 2026. The Singapore Government has also announced the 1% SAF target from 2026, with plans to raise it to 3-5% by 2030"

"We are actively engaging with companies and discussing with them in doing business and Singapore," he explained.

Speaking about his perspective on energy transition, he underscored the need for carbon market development, advocating for a unified carbon price to accelerate the energy transition agenda.

If the carbon price is increased, according to him, it will accelerate the energy transition globally.



Adding to this, Tan emphasized the need to adopt innovative technologies in utilizing low-carbon fuels such as solar energy, wind, biofuels, methanol, ammonia, etc.

He reaffirmed the government's commitment to creating an enabling environment to drive technological solutions across the energy value chain, stating that Singapore wants companies

to venture into ammonia supply for power generation and bunkering activities.

As part of government efforts, he shared that Singapore's Energy Market Authority and the Maritime Port Authority have collaborated and issued a request for a proposal on green ammonia for power generation and bunkering.

"Last month, they announced the selection of two consortia for the project – a, comprising both Japanese and Singapore

companies. This is an example of how the Singapore government is working on encouraging innovation and creating the enabling environment for companies to explore the opportunities in Singapore's renewable and lowcarbon energy space."

He expressed Enterprise Singapore's readiness to work with local and international companies to smoothen the process of their business activities in Singapore's energy sector.

Natural gas to play a key role in Southeast Asia's energy transition - PetroVietnam CEO

etroVietnam Exploration Production Corporation (PVEP) CEO, Tran Hong Nam has said natural gas will play a key role as a transitional energy source in Southeast Asia, given the high costs and regulatory complexities in adopting renewables, according to the S&P Global news report.

Tran made this known at the OSEA Conference held from 19 to 21 November 2024 in Singapore, stating that renewables such as offshore wind are significantly higher in terms of cost compared to traditional gas-powered electricity.

According to him, natural gas plays a very important role for the time being in dealing with transition, while maintaining energy security and affordability.

He explained that many countries are already making "big shifts" from oil to gas which aids in emissions reduction, and natural gas use could be made cleaner using methane abatement technologies.

A report published by the International self-sufficiency through refinery upgrades. Energy Agency (IEA) revealed that nearly 80% of the region's rising energy quarter of growth until 2035. demand since 2010.

make up half of the region's energy demand, while natural gas forms about 20%, which made the region more vulnerable to price spikes, especially during the recent global energy crisis.



Tran Hong Nam, CEO, PetroVietnam Exploration Production Corporation (PVEP)

IEA noted that fossil fuel subsidies in Southeast Asia had soared to a record \$105 billion in 2022, nearly 60% above the previous peak.

Vietnam suffered an energy shortage amid financing woes and sticky retail prices in 2022, and its major refineries have maintained high run rates since then as the country pursues fuel

Southeast Asia remains highly dependent IEA also stated that Southeast Asia made up on imported fossil fuels, with such energy 11% of global energy demand growth since sources - especially coal - making up 2010, and is projected to contribute over a

Following this development, Tran said security In its report, IEA stated that coal and oil and affordability will continue to be areas of focus in Southeast Asia, as the region's energy demand is expected to grow further.

"As a national oil company... we have the responsibility to meet the energy requirements that the economy requires," Tran added.

For instance, Vietnam's Block B project, which PetroVietnam Exploration Production Corporation has a stake in, and expected to achieve first gas in the third quarter of 2027, with the project expected to produce 490 MMcf/d of gas.

In 2023, Vietnam imported its first commissioning LNG cargo for the 1-MMtpa Thi Vai regasification terminal in Southeast Vietnam. Since April 2024, utilization of this terminal has ramped up with LNG being supplied to existing gas-fired power plants and industrial end-users.

Last year, Vietnam also approved its long-awaited Power Development Plan 8, or PDP8. PDP8 featured strong gas-fired capacity growth, with gas capacity to grow to 38 GW by 2030 from 7 GW.

According to S&P Global Commodity Insights data, Vietnam imported 0.07 million mt of LNG in 2023 and has imported 0.25 million mt of LNG so far in 2024.

In 2025, Vietnam's power sector could see gas availability risks due to the government-imposed LNG price ceiling, alongside a lack of power purchase agreements for the country's upcoming LNG-fired power plants, according to Commodity Insights' Vietnam short-term power report.

Vietnam could expect to see another 1 GW of smaller hydro and biomass projects starting in 2025, which could alleviate supply risks but will be insufficient to cover the projected power demand increase, the report added.





Why Singapore maintains a prominent position for business and trade development globally - Ivan Tan

van Tan, Director of Trade at Enterprise Singapore, has said Singapore would continue to maintain its prominent position as a global business and trade hub, due to strategic efforts by the government to support the growth of the country's economy.

Tan made this known in an interview with The Energy Republic, stating that Singapore is setting an economic growth trajectory of 2 to 3 percent per annum for the next decade.

To fuel this growth, Singapore is focusing on offshore wind for the energy sector. He maintained that Singapore has a competitive advantage in the marine and companies to build a competitive minerals, and agri-commodities. advantage to support global offshore wind projects.

rigs and offshore supply vessels."

Singapore's economic



Ivan Tan, Director of Trade at Enterprise Singapore

offshore space, highlighting that growth, positioning the country as one of the Enterprise Singapore is now working with world's largest trading hubs for energy, metals,

In energy and metal trading, he highlighted "Singapore companies are building that Singaporean-based companies have offshore marine structures and extensive experience in trading commodities fabrication infrastructures such as jack-up such as crude oil, liquefied natural gas, and petrochemicals, adding that Singapore also has a good base of metals companies involved He noted that commodity trading has in trades of both ferrous and non-ferrous been one of the driving forces for metals used in industries such as electric vehicles, and shipbuilding.

By Ndubuisi Micheal Obineme

"Singapore refineries account for a significant amount of export and a large part of Asia-bound iron ore carried on ships are managed by companies in Singapore.

Reports have also shown that almost 400 international trading companies have strategically anchored themselves in energy, metals and minerals, agri-commodities, and other trading businesses in Singapore, which now positions the country as a global commodity hub.

Companies such as Ecopetrol, the national oil firm of Colombia, and the Abu Dhabi National Oil firm are recent newcomers that have established their trading offices in Singapore. This is against the backdrop of geopolitical tensions, the climate emergency, and harsh economic challenges across the world.

Tan believes that this development will continue in Singapore as the government is intensifying efforts to create an enabling environment to attract more global companies in major industries to base their operations in Singapore.

Speaking further, he said Singapore has a competitive tax regime, with a corporate tax of around 17%, while in most cases, dividends remitted from overseas subsidiaries are not taxed.



"Singapore also has a progressive personal income tax system where the top income bracket is only 24%, " he explained.

He also acknowledged that Singapore has been making significant strides in green tech innovation with a new investment focus on climate-tech solutions.

He expressed the government's readiness to support climate-tech innovation, reiterating that Singapore has a robust Intellectual Property (IP) framework to protect the product of innovators.

"We give the same treatment to foreign companies and our local companies. We don't distinguish between local and foreign companies' intellectual property rights protection. He said Singapore hosts the Singapore Week of Innovation and Technology (SWITCH) annually, which creates networking opportunities for innovative startups and companies to share and pitch their innovative ideas to companies and other partners who might be interested in funding and collaborating with them on their projects.

According to him, companies like ExxonMobil and Abu Dhabi National Oil Company have tapped SWITCH and open innovation challenges organized by Singapore to find innovative solutions to support its sustainability development efforts.

On the part of Enterprise Singapore, Tan explained that beyond working with Singapore companies, the agency assists global trading companies to establish their businesses in Singapore, as well as connect

them to other industry players and partners that will provide support for their growth in the country.

"Enterprise Singapore is a government agency under the Ministry of Trade and Industry and the work that we do spans four areas: championing local enterprise development, including internationalization; supporting the growth of Singapore as a global trading hub by attracting global commodities traders to establish their global or Asian home base in Singapore; attracting global enterprises, startups and investors to operate in Singapore's robust proenterprise environment; and building trust in Singapore's products and services through quality and standards projects.

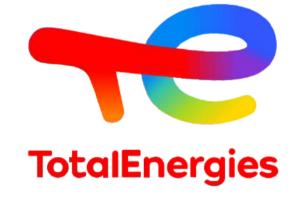
"Enterprise Singapore plays a key role in all the four areas I mentioned," he added.

China: TotalEnergies to Supply Sinopec with 2 MMtpa of LNG for 15 Years Mr. Niu Shuanwen, Senior Vice President

s part of its strategy to grow its Liquefied Natural Gas (LNG) business, Total Energies announces today the signing of a sales agreement (HoA) with Sinopec for the delivery of 2 million tons of LNG per year for 15 years, starting in 2028.

Thanks to this major agreement with one of the leading LNG players in the country, TotalEnergies strengthens its long-term position in the LNG market in China, the largest market in the world. This agreement comes within the strategic cooperation agreement signed earlier this year between TotalEnergies and Sinopec during President Xi Jinping's state visit to France. In China, natural gas is a key component of the energy transition as it mitigates the intermittency of rapidly growing renewable energies and helps reduce greenhouse gas emissions when it replaces coal in electricity production.

"We are delighted to have been chosen by Sinopec to supply 2 million tons of LNG to China, the largest LNG importing country in the world.





"This new agreement demonstrates the competitiveness of TotalEnergies' LNG business and allows us to continue growing our long-term sales in Asia," said Stéphane Michel, President of Gas, Renewables and Power at TotalEnergies.

Mr. Niu Shuanwen, Senior Vice President of Sinopec Corporation, said "Sinopec and TotalEnergies are strategic partners. This HoA further strengthens the cooperation between the two companies in natural gas. Natural gas is an important enabler for realizing energy transition and dual carbon goals. Sinopec is committed to building the world's leading clean energy and chemical company and will continue to promote energy transition and the clean, diversified and secure supply of energy. Sinopec strives to make positive contributions to global energy governance and climate change."

TotalEnergies is the world's third largest LNG player with a global portfolio of 44 Mt/y in 2023 thanks to its interests in liquefaction plants in all geographies. The Company benefits from an integrated position across the LNG value chain, including production, transportation, access to more than 20 Mt/y of regasification capacity in Europe, trading, and LNG bunkering. TotalEnergies' ambition is to increase the share of natural gas in its sales mix to close to 50% by 2030, to reduce carbon emissions and eliminate methane emissions associated with the gas value chain, and to work with local partners to promote the transition from coal to natural gas.



NATURAL GAS HYDROGEN RENEWABLE ENERGY WIND ENERGY AMMONIA

Setting The Stage for Clean Energy Development

The Energy Republic is a global publication and business platform that provides in-depth analysis about the oil industry, and opportunities around clean energy sources such as Natural Gas, Hydrogen, Ammonia, Solar Energy, Wind Energy, Hydro Energy, Geothermal Energy, Biomass, among others.

Our SERVICES:

Media & Publicity

Content Management

Event Coverage

Marketing & Consulting

Magazine Publishing

CONTACT US ON

info@theenergyrepublic.com www.theenergyrepublic.com



