THE OFFICIAL LNG2026 SHOW DAILY

Published by Petroleum Economist Official Media Partner

Host Partner QatarEnergy

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LNG2026

Qatar • قطر

2-5 FEBRUARY

PRESENTED BY IGU International Gas Union Union Internationale du Gaz · GTI Energy · IIF IIR Institut International du Froid International Institute of Refrigeration

HOSTED BY QatarEnergy

WELCOME TO DOHA, QATAR!

- Managing Costs, Risk and Emissions in LNG
- The New LNG Wave is Finally Here
- Middle East to Lead New LNG Golden Age
- Charting a Distinct Strategy in LNG and Beyond

Supply reliable energy for decades to come.

Challenge accepted.

Driven by a spirit of innovation and determination, we established the LNG industry in Australia in the 1980s and remain one of the nation's largest suppliers of LNG to major regional trading partners. We are leveraging this track record of world-class project execution and operational excellence as we build a diverse global portfolio to meet the world's growing energy needs. To learn more, visit woodside.com

Woodside Energy

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LNG2026 Welcome

We are delighted to present the 21st International Conference and Exhibition on Liquefied Natural Gas, LNG 2026, in the remarkable Qatari capital, Doha, and to celebrate with you all the incredible advancements and innovations our global LNG industry has achieved over the past three years. We also extend our sincere gratitude to the event's host, QatarEnergy, for their excellent organisation of this flagship conference and exhibition!

It has been 56 years since the first LNG Conference took place, and the world has changed considerably since then: "Leading LNG: Powering Today and Tomorrow", the theme of LNG2026, couldn't be more fitting in today's volatile energy markets, where new supplies are driving the growth and global reach of LNG. We look forward to connecting world-leading experts, decision-makers and stakeholders who unlock high-value deals and help shape the future of the global LNG market.

As LNG2026 concludes, we invite you all to join us again, in three years, for LNG2029 in Brisbane, Australia, hosted by the Australian Gas Industry Trust. It will be a true celebration of the role of LNG in advancing energy security and sustainability, and in supporting global growth.

As market and technology advancements in the sector are central to the LNG Series, as we prepare to say "thank you, Qatar!", Australia is ready to welcome us all to Brisbane with: "Welcome to LNG2029!". The International Gas Union, one of the three owners of the LNG Series, would like to thank everyone for joining us on this incredible LNG journey! See you in Brisbane in 2029! •

Menelaos (Mel) Ydreos
Secretary General
International Gas Union (IGU)

SIEMENS energy

Fuelling the future with low-carbon solutions

Come visit us at LNG 2026
in booth #3390

Event Overview

Welcome to the 21st International Conference & Exhibition on Liquefied Natural Gas (LNG2026), themed **Leading LNG: Powering Today and Tomorrow.** We are pleased to have you join us at this key global gathering where industry leaders and innovators connect to explore new developments, emerging technologies and market opportunities in LNG.
The LNG2026 Conference Programme features dynamic Plenary Sessions, engaging Spotlight Sessions, and a comprehensive Technical Programme across dedicated halls across the exhibition floor. With numerous sessions and a diverse lineup of expert speakers, attendees can explore cutting-edge topics and innovations in the LNG sector, facilitated by industry leaders.

REGISTRATION ONSITE AND BADGE PICK UP

Registration Opening Times:
Location 1: QNCC, Conference Side, Main Car Park Entrance
Location 2: QNCC, Exhibition Side, Hall 6 Registration Desk

2 February

Location 1	8:00 – 17:00
Location 2	12:00 – 17:00

3–4 February

Locations 1 and 2	8:00 – 17:00 daily

5 February

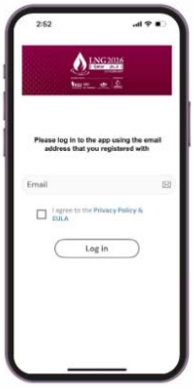
Locations 1 and 2	8:00 – 15:00

Every time an attendee enters LNG2026 they will be asked to present government issued photo ID. This can be a valid passport or a Qatar ID (QID) for residents. All attendees are required to wear their badge AT ALL TIMES during LNG2026, and this includes networking functions. Attendees will only be able to access the areas of the event included in their registration. We look forward to seeing you at the Qatar National Convention Centre (QNCC) today. •

LNG2026 Event App

The LNG2026 Event App, brought to you by Shell, will be an essential tool to help you navigate the event.
The Event App contains the programme for the week, speaker profiles, exhibition layout, exhibiting company profiles, details of networking functions and much more.

How to Download the Event App



Download the **LNG2026 App**

Download the LNG2026 Event App to your phone from Play Store or App Store, or use the QR code below:

Download on the App Store
GET IT ON Google Play

How to Access the Event App

1. Open the Event App and search for LNG2026
2. Log in using your email address you used to register for the event
3. To verify your account, you will need to enter a code sent to your email (please check your spam folder) or mobile.

Once Logged In

Depending on your registration type you will have access to different features e.g. floor plans, full programme, speaker profiles, exhibitor list as well as creating your own personalised schedule for the event.

Features Available to All Attendees:

- Event information
- LNG2026 Show Daily

Benefits for Conference Delegates:

- View attendee list
- Schedule meetings
- Manage your schedule
- View speaker profiles, papers, and posters

Event App Helpdesk

If you require help or advice with regards to the Event App, please speak to our staff at the Event App Support Desks located in the Spider Area, Level 1 and Exhibition Foyer, Ground Level or email support@allintheloop.com •

Monday's Programme

Opening Ceremony

Don't miss the LNG2026 Opening Ceremony, featuring a captivating performance celebrating Qatar's rich culture and its role as a global energy leader. Join industry leaders and delegates from around the world as we open an inspiring week of collaboration and insight.

10:00 I Conference Hall, Level 2

Conference Launch and Plenary Session

Join us for the Conference Launch followed by the **Plenary Session Global LNG Dynamics: An Industry Perspective**

CEOs from leading LNG companies share insights on shifting global supply and demand, addressing affordability, security, reliability and key challenges shaping the industry's future.

12:30–14:00 | Conference Hall, Level 2

Spotlight Sessions

Geopolitics and the Future of LNG

Experts explore how geopolitical developments, trade tensions and global risks are reshaping LNG markets and influencing strategies to strengthen energy security.

14:15–15:15 | Auditorium 1

Tackling Methane Emissions in the LNG Sector

This session examines innovative technologies, best practices and collaborative approaches to reduce methane emissions and enhance LNG's role in a lower-carbon energy future.

14:15–15:15 | Auditorium 2

Exhibition Opening

The LNG2026 Exhibition welcomes trade visitors and delegates to explore the latest innovations, technologies and solutions across the LNG value chain. The exhibition provides a unique platform for connecting with conference delegates, policymakers, industry leaders and exhibitors from around the world.

Exhibition Opening Hours

- **Monday 2 February 2026:** 12:00 – 17:00
- **Tuesday 3 February 2026:** 9:00 – 17:00
- **Wednesday 4 February 2026:** 9:00 – 17:00
- **Thursday 5 February 2026:** 9:00 – 15:00

Welcome Reception

Join us at the Welcome Reception for an exceptional networking opportunity. Connect with industry leaders and peers as you immerse yourself in Qatar's rich heritage, traditions and vibrant culture. This unforgettable evening promises meaningful connections and a taste of Doha's hospitality.

17:00 I Longines Outdoor Arena at Al Shaqab

For the full programme, remember to download the LNG2026 Event App and manage your programme schedule through the app. •

Monday's Programme at a Glance

For the full up-to-date programme, remember to download the LNG2026 Event App and view the latest programme schedule.

10:00 - 10:45	Opening Ceremony	Conference Hall
10:45 - 12:30	Break/Lunch	
12:30 - 12:45	Conference Launch	Conference Hall
12:45 - 14:00	PL01 - Global LNG Dynamics: An Industry Perspective	Conference Hall
14:15 - 15:15	SP01 - Geopolitics and the Future of LNG	Auditorium 1
	SP02 - Tackling Methane Emissions in the LNG Sector	Auditorium 2
17:00 - 19:00	Welcome Reception for Executive Delegates	Longines Outdoor Arena at Al Shaqab

Atlas Copco welcomes you to ***LNG 2026***

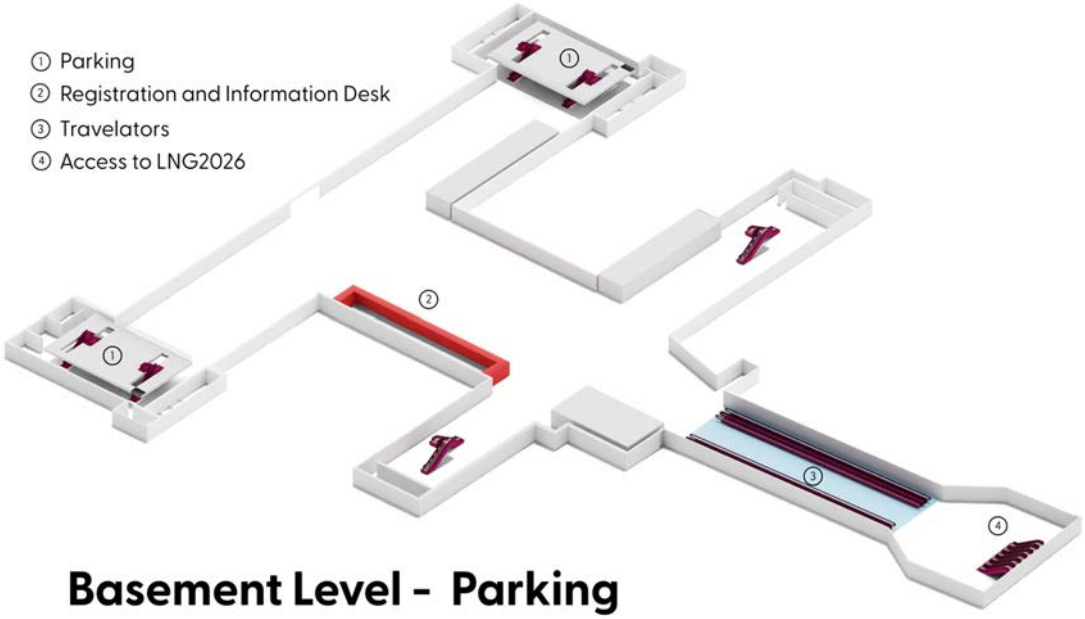
At Atlas Copco, we bring together decades of LNG experience, a strong global presence, and the flexibility to support projects across every stage of the natural gas value chain. From liquefaction and storage to transport and regasification, our compression and expansion technologies are designed to deliver reliable performance in the most demanding LNG environments.

Booth No. **9110** | 2nd - 5th February

Scan the QR code to know more.

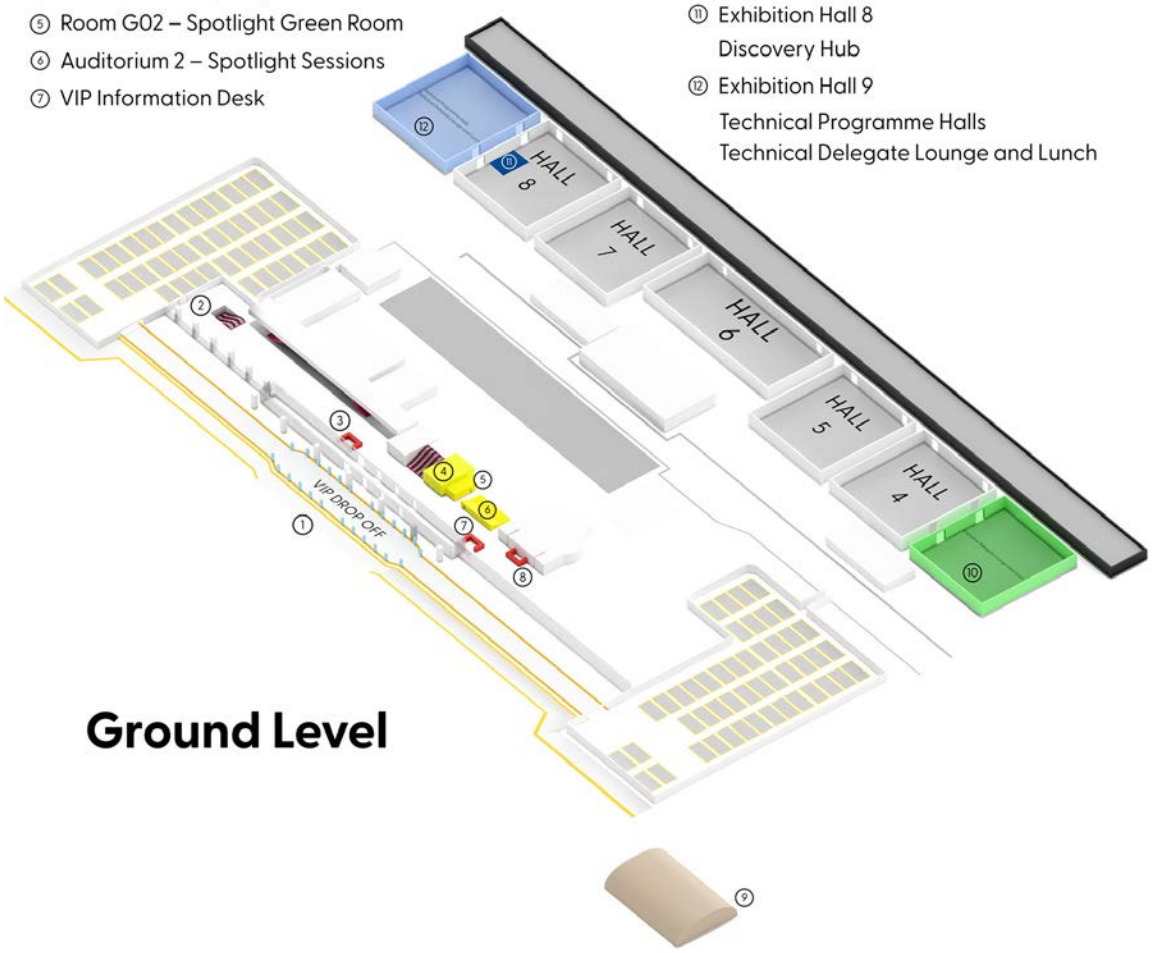
Atlas Copco
Gas and Process

LNG2026 Floorplan



Basement Level - Parking

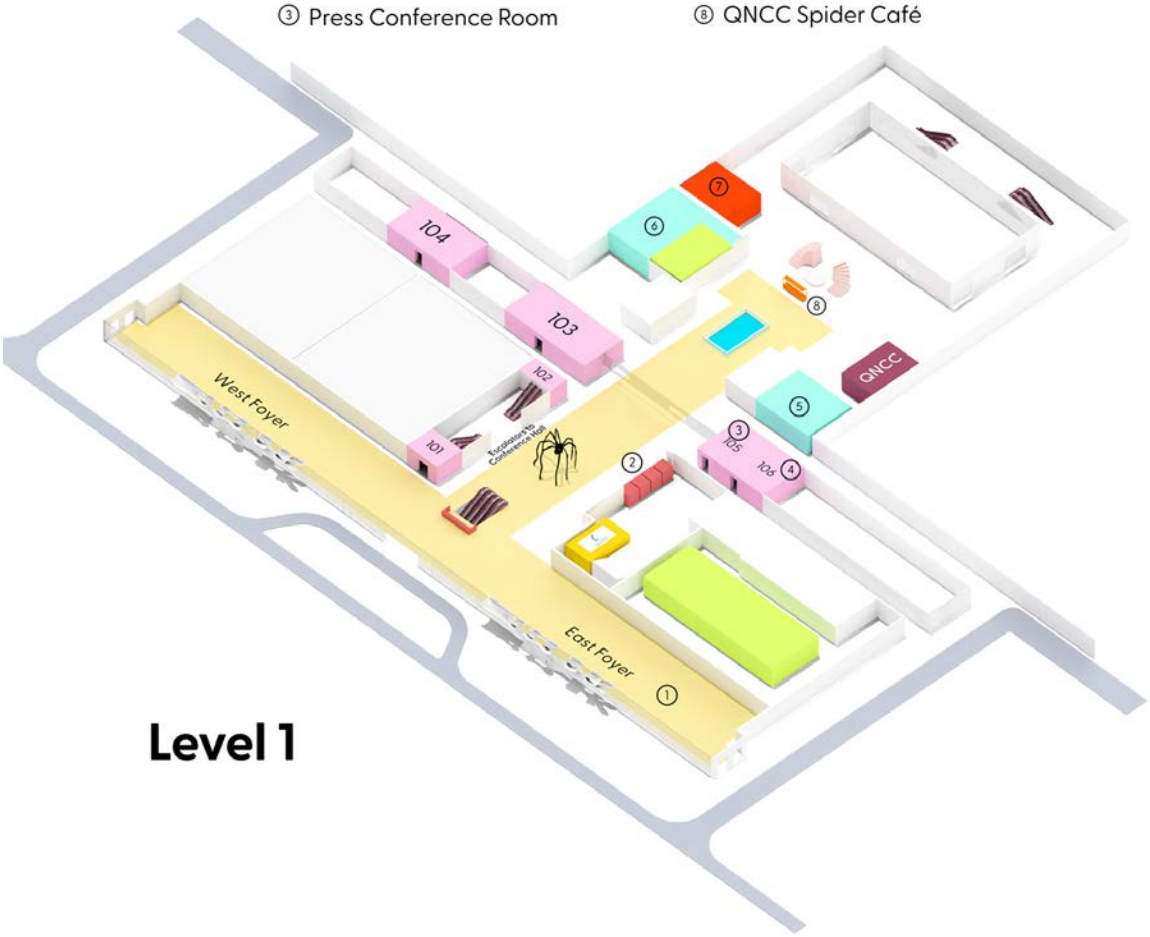
① VIP Entrance
② Access to Parking
③ Cloakroom/Lost and Found
④ Auditorium 1 – Spotlight Sessions
⑤ Room G02 – Spotlight Green Room
⑥ Auditorium 2 – Spotlight Sessions
⑦ VIP Information Desk
⑧ Delegate Bag Collection Desk
⑨ Qatar National Library Station
⑩ Exhibition Hall 3
Executive Delegate Lounge and Lunch
⑪ Exhibition Hall 8
Discovery Hub
⑫ Exhibition Hall 9
Technical Programme Halls
Technical Delegate Lounge and Lunch



Ground Level

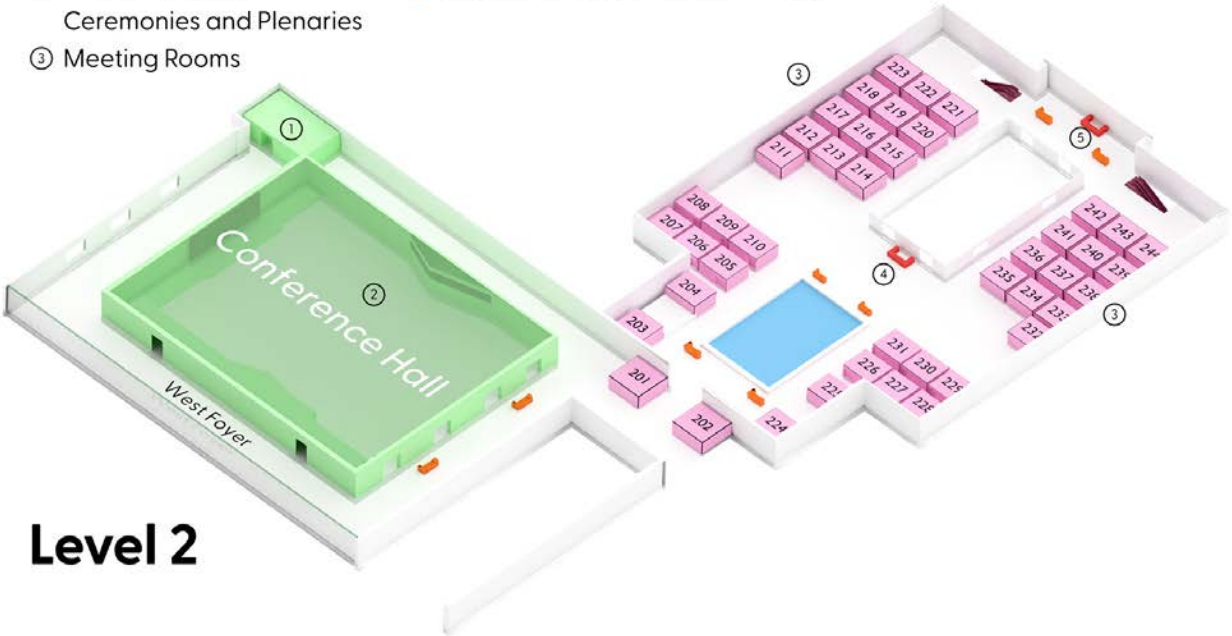
LNG2026 Floorplan

① Networking Reception (Day 3)
② Media Information Desk
Information Desk
Event App Support
③ Press Conference Room
④ Media Centre
⑤ Male Prayer Room
⑥ Female Prayer Room
⑦ Medical Centre
⑧ QNCC Spider Café



Level 1

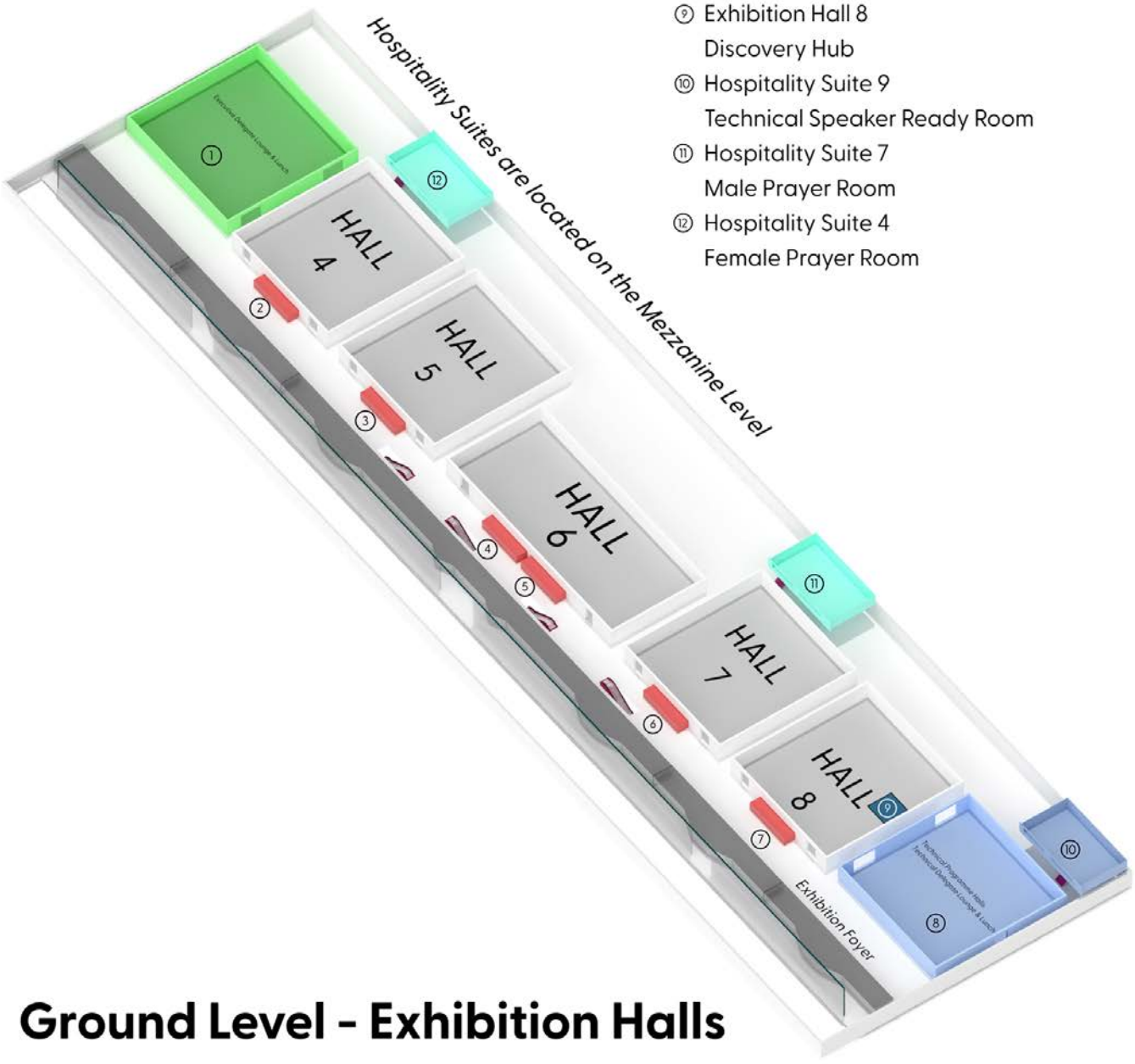
① Plenary Green Room
② Conference Hall - Ceremonies and Plenaries
③ Meeting Rooms
④+⑤ Meeting Rooms Information Desk
Executive Delegate Coffee Break



Level 2

LNG2026 Floorplan

① Exhibition Hall 3
Executive Delegate Lounge and Lunch
② Trade Visitor Registration Desk
③ Trade Visitor Registration Desk
④ Conference and Exhibition Accreditation
⑤ Information Desk/Event App Support
⑥ Trade Visitor Registration Desk
⑦ Cloakroom
⑧ Exhibition Hall 9
Technical Programme Halls
Technical Delegate Lounge and Lunch
⑨ Exhibition Hall 8
Discovery Hub
⑩ Hospitality Suite 9
Technical Speaker Ready Room
⑪ Hospitality Suite 7
Male Prayer Room
⑫ Hospitality Suite 4
Female Prayer Room



Ground Level - Exhibition Halls

What to Expect on Tuesday

PLENARY SESSIONS

LNG: A Critical Enabler for a Lower-Carbon Future

Industry leaders explore LNG's pivotal role in delivering reliable, affordable and lower-carbon energy, and its continued importance in global energy transition strategies.

Achieving Success Together: Cultivating Strategic Partnerships in LNG

Experts discuss how evolving partnerships from joint ventures to government collaborations are driving innovation, creating long-term value and strengthening the LNG industry.

SPOTLIGHT SESSIONS

Seas of Change: LNG Shipping in an Evolving Energy Landscape

Top voices in LNG shipping examine market shifts, regulatory challenges and emerging technologies shaping the sector's competitiveness and long-term growth.

The Growth of North America's Gas Market

This session explores new investment opportunities across North America's expanding gas market and its growing influence on global LNG dynamics.

TECHNICAL SESSIONS

Increasing End Use Applications of LNG

Industry specialists present innovations in downstream LNG applications that advance sustainability, reduce emissions, and support industrial and societal development.

Shipping, Marine and Port Operations: Advances in Shipping and Port Operations

Experts highlight the latest technical and operational advancements in LNG shipping and port management that enhance safety, efficiency and environmental performance. •

Discover Qatar

Culinary Highlights in Doha, Qatar

Qatar is a vibrant destination where desert sands meet the sea, blending ancient traditions with modern wonders.

Located on the Arabian Peninsula, Qatar's history dates back to the 6th millennium BCE. From Bedouin tribes and fishing villages, to the influence of Arab, Portuguese and Ottoman cultures, Qatar's heritage has been shaped over centuries. Today, Doha is also known for its thriving culinary scene. Here are some popular and highly regarded dining establishments:

1. Belhambar

Belhambar presents a modern interpretation of traditional Qatari cuisine, highlighting local ingredients and flavours in a refined setting.

Location: Katara Cultural Village

Visit Website: qr.finedinemenu.com/belhambar/menu/63e0a00e4ecb830015ac39f3

2. Nobu, Doha

Chef Nobuyuki "Nobu" Matsuhisa's blending of traditional Japanese dishes with Peruvian ingredients fits right into Doha's international culinary scene. The Doha location, the largest in the world, sits on its own pier in the Arabian Gulf.

Location: Diplomatic St, Four Seasons Hotel, Doha

Visit Website: noburestaurants.com/doha/nobu-doha-japanese-restaurant-bar-and-lounge

3. IDAM by Alain Ducasse

IDAM offers a refined French-Mediterranean menu with an Arabian twist. The combination of exquisite cuisine and stunning views of the Doha skyline makes for an unforgettable dining experience.

Location: Museum of Islamic Art

Visit Website: idamlive.azurewebsites.net

4. Curiosa by Jean-Georges

Curiosa brings bold Latin American flavours to Msheireb Downtown, combining vibrant cuisine with a contemporary dining experience.

Location: Four Seasons Hotel Doha, The Corniche

Visit Website: fourseasons.com/doha/dining/restaurants/curiosa-by-jean-georges

5. Bayt El Talleh

Offering an authentic Lebanese cuisine in a welcoming atmosphere, bringing traditional flavours to life in the heart of Katara Cultural Village.

Location: Katara Cultural Village

Visit Website: akh.com.qa/brands/bayt-el-talleh

6. Desert Rose Café

Located inside the National Museum of Qatar, Desert Rose Café offers locally inspired dishes in a striking architectural setting, ideal for a relaxed break between meetings.

Locations: National Museum of Qatar

Visit Website: nmoq.org.qa/en/visit/desert-rose-cafe

Remember, this is just a small selection, and Doha has many more excellent restaurants to explore. It's always a good idea to check recent reviews and recommendations to ensure you're getting the most up-to-date information on the best places to eat in the city. •

Middle East to Lead New LNG Golden Age

Fresh investment, rising demand and a flurry of new export capacity, especially from Qatar, will shape both regional energy strategies and global LNG market dynamics | **Paul Hickin**, Editor-in-Chief and Chief Economist, *Petroleum Economist*

When the IEA popularised the notion of a golden age of gas back in 2011 it seized on the idea that gas was poised to become a dominant global energy source due to abundant unconventional reserves, in particular of US shale gas. Analysts have since started to make claims that this boom has ended and to herald an age of electricity. The energy industry needs to overcome this blind spot.

Let's start with the electrical elephant in the room. It seems odd to make assertions around the rise of electricity in isolation given that natural gas will likely be the most important source of that power for the foreseeable future. The demand for electricity is projected to increase by 40–50% to 2035 due to datacentres, electric vehicles, urbanisation and industrialisation—and gas will be pivotal. *Petroleum Economist* sees gas' share of electricity demand going from around 23% today to 25% in 2035—a small rise but in an ever-expanding pie. Electricity may grab the headlines, but gas will do a lot of that work: they go hand in hand.

The next error is to underestimate the globalisation of gas through LNG. Back when the first prognosis was made, gas was still very much a regional phenomenon. Since then, it has evolved into an interconnected global commodity that has boosted energy security, helped diversify supply sources from traditional pipeline deliveries, and influences pricing dynamics and trade flows.

The other glaring mistake is to have assumed that gas growth started and ended with the US shale boom

One of the key challenges for the region will be balancing the need for gas from a thriving local population and its role as a key export revenue source

rather than look across the ocean to the new Gulf growth story. Middle East governments are investing heavily in gas production, LNG infrastructure and downstream industrial capacity. Qatar, the UAE, Saudi Arabia and their Gulf peers collectively account for roughly 17–18% of global gas production, underscoring the region's centrality to the global picture, while also holding 40% of proven gas reserves.

The Middle East is also entering a period of unprecedented capital expenditure. Across oil, gas, renewables and digital infrastructure, the region is expected to attract more than $100b annually, with LNG expansion a major pillar as NOCs seek to maintain hydrocarbon leadership while preparing for a more diversified energy future.

Qatar the shining light

Qatar is the Middle East LNG leader. Its North Field Expansion (NFE) programme—one of the largest LNG projects in history—will significantly increase global LNG supply. The NFE will take Qatari liquefaction capacity to 142mt/yr, double what the field was once capable of producing. Global LNG supply will reach around 600mt by 2030, a 42% increase from 2024, with Qatar a driving force. Qatar's strategy is clear: expand LNG capacity to maintain long term market share; secure long term contracts with Asian and European buyers; and position LNG as a fuel to transition to from coal and oil. The result is a structural shift in global LNG markets. By the early 2030s, Qatar is expected to remain one of the lowest cost LNG producers globally, giving it a competitive advantage even in periods of oversupply.

UAE an emerging regional LNG hub

The UAE is rapidly scaling its gas and LNG ambitions. Abu Dhabi's ADNOC is investing heavily in upstream gas development, LNG export terminals and digitalisation to enhance efficiency. The country's broader energy strategy positions LNG as a key fuel that supports industrial growth and electricity demand. The UAE and its Gulf peers are integrating advanced technologies to sustain output and expand export infrastructure. This includes new LNG liquefaction capacity; expansion of gas processing facilities; and investments in carbon capture technologies. The UAE's goal is not only to meet domestic demand but also to become a regional LNG trading and re export hub.

Saudi Arabia a gas dark horse

Saudi Arabia may be known for oil, but its gas ambitions are accelerating, with the Jafurah development making naysayers stand up and take notice. The Kingdom is investing in unconventional gas, expanding pipeline networks and exploring LNG export options. While Saudi Arabia is not yet a major LNG exporter, its long term strategy includes developing large non associated gas fields; reducing domestic oil burn for power generation; and supporting industrial clusters such as petrochemicals and mining.

Gas accounts for around 75% of electricity generation in the [Middle East] and will comprise more than four-fifths of the power mix by the end of the decade

Saudi Arabia's NOCs are also deploying more than $100b in upstream capital to expand capacity, and this positions the Kingdom to play a bigger role in regional gas markets and potentially enter the LNG export arena later in the decade.

Middle East in microcosm

Despite vast gas reserves, LNG imports and re exports within the Middle East are rising, raising the importance of gas as a source of flexible gas supply, an engine of industrial diversification, a reliable provider to a rising population and a driver away from oil.

And across the Middle East these elements are striking. Gas accounts for around 75% of electricity generation in the region and will comprise more than four-fifths of the power mix by the end of the decade. Meanwhile oil, which makes up some 20% of electricity use, is set to see its share fall to single digits over a similar timeframe.

The comments coming from *Petroleum Economist's* Middle East Gas Conference in December were equally telling, with industry executives warning that $200b of investment would be needed over the next four years to increase production to meet rapidly growing demand for power. Energy leaders at the Dubai-based event noted that regional gas production is projected to grow by 30% by the end of the decade, equivalent to adding the entire consumption of Europe's power sector. One of the key challenges for the region will be balancing the need for gas from a thriving local population and its role as a key export revenue source: a dual-action economic driver.

Gas is now a leading narrative in the Middle East, and LNG its protagonist. The story of the golden age of gas will see a sequel that is more enduring than the original. •

PARTNERED CONTENT

Driving Efficiency in LNG Development Through Large-Scale Modularisation

Rob Shaul, McDermott Senior Vice President, Low Carbon Solutions

As global energy markets evolve and demand for LNG continues to rise, industry leaders seek innovative ways to deliver projects efficiently and economically. According to recent industry reports, global LNG demand is projected to increase by over 50% by 2040. Yet, the expansion of LNG infrastructure brings significant challenges, most notably escalating capital costs and a tightening labour market, particularly in regions like the US Gulf Coast where traditional stick-built construction remains prevalent and often requires prolonged timelines, higher labor needs and increased exposure to weather-related delays.

To counter these trends, McDermott is advancing a transformative approach to project execution: large-scale modularisation. By increasing equipment density within modules, we reduce the overall footprint and decrease quantities of pipe, cable and concrete. This streamlined approach not only lowers costs but also provides greater certainty and flexibility to project timelines.

Benefits beyond economics

The benefits of modularisation extend well beyond economics. Fewer modules mean fewer on-site hook-ups and less construction complexity, while maintaining flexibility in transportation. Safety and quality are improved by a factory setting (a fabrication yard rather than a construction site), minimising impacts to the local community by reducing the need for temporary housing, craft labor support infrastructure, and improving sustainability outcomes by having smaller footprints and reducing land disturbance. In an industry where safety and speed are paramount, these improvements deliver measurable value.

An ongoing challenge in LNG development is securing adequate real estate. Our modular approach addresses this head-on, enabling higher LNG output from a smaller footprint and minimising the need for extensive laydown areas. Traditional methods might require hundreds of acres, but modular designs can achieve the same output on significantly less land—up to 60% more LNG per acre in some cases.

Realising success

A notable example of this modular approach is McDermott's collaboration with ConocoPhillips. Together, we have developed a standardised modular design based on the Optimized Cascade® Process (OCP), leveraging offshore module methods to achieve economies of scale and reduce costs. This approach demonstrates how industry collaboration can drive innovation and set new benchmarks for project delivery.

Building on this, our recent Master Services Agreement with Monkey Island LNG exemplifies the benefits of modularisation. This agreement involves providing front-end engineering and planning services for a world-scale natural gas liquefaction facility in Cameron Parish, Louisiana. By utilising McDermott's compact, modular LNG train design and the ConocoPhillips OCP, the project aims to deliver up to 60% more LNG per acre than comparable facilities.

Another prime example of modularisation is the Woodfibre LNG facility in British Columbia, Canada. The project leverages modular construction from McDermott's QMW fabrication yard in Qingdao, China, and integrated project delivery to streamline execution and reduce on-site complexity.

Broader impacts and future outlook

The impact of our modular strategy extends beyond individual projects. As the LNG sector contends with fluctuating FID timelines and ongoing competition for skilled labour, modularisation offers a pathway to greater certainty and resilience. Standardised design and construction methods empower operators to better manage risk, control costs and respond swiftly to market changes. In a world where energy security is paramount, this agility helps meet global demand without unnecessary delays.

As the industry looks ahead to the next wave of LNG development, the message is clear: success will be defined not only by scale, but by agility, sustainability and execution excellence. At McDermott, we are proud to lead on these fronts. Together with our partners, we're shaping the future of LNG with confidence and precision. •

MCDERMOTT

PARTNERED CONTENT

Leveraging Innovations in Compression to Support Low-Carbon LNG Facilities

An interview with **Dr. Marcus Bruecher,** SVP Compression, Siemens Energy

As a leading provider of equipment for LNG plants, how is Siemens Energy currently supporting the industry's efforts to decarbonise?

Bruecher: Siemens Energy brings unique value to LNG customers with our portfolio that covers most of the critical equipment required for an LNG plant. That breadth lets us deliver integrated solutions to boost production while minimising CO_2 emissions—from power generation and electrical distribution to the full suite of gas compression trains.

We bring deep experience across all the LNG compression applications. Our installed base of main refrigerant (MR) compression trains continues to grow across multiple liquefaction processes. We are also the global leader in boil-off gas (BOG) compression, with more than 240 single-shaft centrifugal units in operation, most of them equipped with our advanced movable inlet guide vanes (mIGV) for precise and efficient capacity control.

Beyond MR service, we supply high-efficiency booster compressors, as well as end-flash gas, residue gas, methane recycle, regeneration gas and nitrogen compressors for nitrogen rejection units (NRUs), all tailored to each facility's specific process needs. By optimising both individual compressor performance and the interactions among multiple compression services, we help operators lower emissions, enhance reliability and maintain the flexibility required to meet increasingly demanding LNG production targets.

What recent projects have Siemens Energy been involved with where these technologies were implemented?

Bruecher: One example is the Woodfibre LNG project in Canada, the world's first net-zero LNG export facility at 0.04 tons of CO_2e per ton of LNG produced.[1] Siemens Energy is supplying a large portion of the liquefaction island's rotating and electrical equipment—MR compression, cryogenic BOG and feed gas booster trains, along with synchronous motors, VFDs, converter transformers, harmonic filters, switchgear and e-houses. We also worked closely with the customer and the utility during FEED, supporting electrical grid studies for optimising the solution and ensuring operational reliability.

Another is ADNOC's Ruwais LNG project in Abu Dhabi, a low-carbon development powered by clean energy.[2] We are providing cryogenic BOG compressors and NRU compressors. The BOG trains feature our advanced mIGVs, which optimises the flow angle for controlling the flow entering the compressor. The train configuration enables high-efficiency performance across varying loads and pressures, and flexible ship-loading and holding operations without recycling flow or requiring additional quenching.

How have BOG compression requirements evolved as the industry becomes increasingly electrified?

Bruecher: As LNG plants electrify, BOG compression must handle higher pressures to enable re-liquefaction in the main cryogenic heat exchanger, as gas turbines no longer consume BOG as fuel. This improves emissions performance and maximises BOG recovery.

BOG generation rates vary significantly between holding and ship-loading operating modes, therefore robust control strategies and the right compressor configurations to manage these variations without compromising reliability or efficiency are necessary. Flexibility is key, requiring designs with wide turndown and stable low-flow operation. Effective designs, such as what we offer, addresses compressor stability at low-flow conditions and ensure that the full range of operating points fits within the compressor map to avoid recycling and expensive LNG injection (or quenching).

What challenges do you see in the coming years as operators move to reduce emissions and improve sustainability?

Bruecher: The industry is making tremendous progress in lowering LNG's carbon intensity by shifting toward e-LNG and reducing emissions from gas-turbine-driven plants. Both types of facilities present unique opportunities and challenges for decarbonisation.

In FLNG, where MR compression is typically gas tubine-driven, having a technology like the SGT-750 gas turbine with high efficiency and single digit NOx even at part loads is key to minimising emissions—one reason Delfin recently selected Siemens Energy for their FLNG program in Louisiana.

Moving forward, compressors and their drivers will remain central to efficiency gains and energy optimisation. Siemens Energy is well-positioned to support our LNG customers, and we are excited to see what the future holds. •

[1] Source: https://woodfibrelng.ca/
[2] Source:https://www.adnoc.ae/en/our-projects/ruwais-lng

Charting a Distinct Strategy in LNG and Beyond

Eni's chief operating officer for global natural resources, Guido Brusco, takes stock of the company's key achievements over the past year, and what differentiates its strategy from those of its peers in the LNG sector and beyond |
Joseph Murphy, Senior Gas Analyst, *Petroleum Economist*

Outline what you view as Eni's main accomplishments in 2025. And what does the company hope to achieve in the year ahead?

Brusco: In 2025, Eni delivered outstanding results across exploration and project development. We achieved about 900m boe of new equity resources, exceeding expectations thanks to discoveries in Namibia, Angola, the UK, Norway, Egypt, Indonesia and Cote d'Ivoire, reinforcing our leadership in organic reserve replacement.

On the development side, we delivered excellent results with the accelerated and smooth start-up and ramp-up of key projects, including Baleine in Cote d'Ivoire, Johan Castberg and Balder X in Norway, Agogo in Angola, and Congo LNG.

We maintained strong operational continuity across all geographies and successfully executed well-planned, optimised major turnaround activities, ensuring reliability and efficiency.

We also advanced strategic partnerships, including the business combination with Petronas in Indonesia and Malaysia, agreements for Argentina LNG, and new LNG contracts with Venture Global, Botas, Gulf Development Co. and Gail. These initiatives support Eni's strategic goal of reaching 20mt/yr of contracted LNG volumes by 2030, reinforcing our global footprint and long-term growth.

Looking ahead, our focus will be on a robust pipeline of high-value projects, including Coral North in Mozambique, Angola NGC, the Kutei North Hub in Indonesia and Cronos in Cyprus, as well as progressing Argentina LNG. This will be combined with continued exploration success and our commitment to fast-track, low-carbon developments.

We will continue to do what we do best: find many low-cost reserves, develop them quickly and at competitive costs, with a well-balanced portfolio of geographies and commodities built on high-quality assets and with a very low breakeven.

How does Eni's strategy stand out among its peers?

Brusco: Eni's strategy stands out for its ability to discover large, low-cost reserves and develop them quickly and at competitive costs, supported by a well-balanced portfolio across geographies and commodities.

This combination of strengths makes Eni uniquely positioned to deliver resilience, flexibility and value creation in today's dynamic energy market. Our approach is built on four key differentiators that define how we operate and compete globally:

- Exploration leadership and reserve replacement: we pursue a balanced mix of infrastructure-led exploration (ILX) and near-field opportunities alongside high-impact plays, consistently identifying significant reserves at low cost through advanced geological expertise and leading technologies (including the most powerful high performance computing in industry, HPC-6), while leveraging our distinctive dual-exploration model to enhance the economic return and provide optionalities to the project portfolio management. In addition, Eni leads on reserve replacement, underpinned by outstanding exploration success, exceeding 120% in the period 2019–24, according to Wood Mackenzie's 2025 The Majors' benchmarking.
- Fast-tracked, phased, cost-competitive and disciplined development: the reduction of the overall development project schedule by performing various technical activities as much as possible in parallel allows us to reduce time-to-market and decrease capex exposure and geological risk. This allows us to be more resilient versus scenario uncertainties thanks to the shorter investment cycles and reduce our financial exposure though early production revenues.

- Balanced portfolio: a geographically diversified and commodity-balanced portfolio enhances stability and growth, enabling us to adapt to market volatility. From 2022–25, Eni achieved 6.5% growth, the highest among European operators.
- Integrated approach: the combination of upstream development with LNG trading, along with our strong in-house expertise and our ability to leverage potential synergies, allows us to generate value along the entire value chain.

Let's talk specifically about the rationale for the gas joint venture with Petronas and your ambitions for this partnership.

Brusco: The Asia-Pacific region plays a central role in Eni's portfolio, and our presence in the region has significantly grown over the past few years. Our strategy today is particularly focused on expanding our activities related to natural gas and LNG, consistently with our goal to increase our gas share of the upstream production.

The business combination with Petronas will open up new opportunities, particularly in Indonesia and Malaysia, two key emerging countries that represent the backbone of gas and LNG markets in Southeast Asia.

This NewCo will combine know-how, operational competences and financial capabilities of both companies to invest in new gas development projects to reach a production of 500,000boe/d of equity gas in the medium term. It is a new version of Eni's 'dual exploration model', that leverages exploration achievements to attract investments from new partners. While the new joint venture will initially be focused on Indonesia and Malaysia, we do not rule out future expansion in the region, as it remains a premium market with significant opportunities.

In a nutshell, what advantages does the satellite model create, both for oil and gas ventures and energy transition businesses?

Brusco: Business combinations are a proven value driver for Eni. Our satellite model creates deconsolidated entities that can independently access capital markets in a specific geographical area, attract specialised investors and finance their own growth. This ensures financial flexibility and accelerates development for both upstream and energy transition businesses, not competing for capital allocation with other corporate projects.

Satellites operate with dedicated management and regional focus, enabling faster decision-making and stronger alignment with local market dynamics. At the same time, Eni, as a shareholder, maintains a strong and cohesive relationship with its satellite companies, providing continuous technical support through its internal competencies and proprietary technologies, while also benefitting from robust dividend flows and a constant growth in production.

Coral South FLNG (Mozambique)

Our upstream satellite ventures—Azule Energy, Var Energi and Ithaca Energy—have demonstrated that combining assets under a focused structure unlocks cost synergies, operational efficiency and growth potential, while freeing up capital for other portfolio priorities.

Eni CCUS Holding is a further example of Eni's satellite model, applied to its energy transition businesses. By grouping CCS projects into a single structure, Eni maximises their industrial potential and market value: this approach makes the portfolio more attractive to specialised investors and allows Eni to unlock capital through dedicated partnerships, such as the co-control stake sold to BlackRock's GIP fund.

How has Eni sought to strike a balance between generally higher-return oil and gas operations and the development of low-carbon technologies?

Brusco: Eni's energy transition strategy is embedded within its business model, ensuring emissions reduction is incorporated into project design and capital allocation to strengthen portfolio resilience and economics.

Against a backdrop of global energy challenges, seeing rising demand, geopolitical tensions and the surge in energy-intensive technologies such as AI, we recognise the need for a pragmatic transition. Natural gas plays a pivotal role in the energy transition, offering a lower carbon footprint than other fossil sources and the flexibility and speed of use that allow it to integrate effectively with renewable sources. Accordingly, Eni aims to increase gas to over 60% of its production mix by 2030 and over 90% by 2050.

In addition to driving a stronger focus on natural gas, we are implementing concrete actions such as improving energy efficiency, eliminating routine flaring, reducing methane emissions and using carbon offset solutions to compensate for residual emissions. At the same time, we are investing in a diverse portfolio of technologies, including renewable energy, biofuels for mobility and aviation, blue hydrogen, and CCS, adopting a technologically neutral approach that balances technical, economic and social considerations.

CCS has emerged as a key low-carbon technology and has evolved into a strategic business opportunity. By leveraging our expertise and our distinctive model based on the conversion of our offshore depleted gas fields and the possibility of reusing existing infrastructure, we are developing cost-effective large-scale CCS hubs with an accelerated time to market, such as Ravenna in Italy, L10 in the Netherlands and HyNet in the UK, that enable us and our partners to reduce hard-to-abate emissions while creating a competitive edge in the rapidly growing low-carbon market.

This integrated strategy positions Eni to meet energy transition goals while building a diversified and resilient portfolio of products, ensuring stable cash flows and high margins and maintaining competitiveness in an evolving global energy landscape.

What are the rewards and risks of Eni's push to significantly expand the share of gas/LNG in its hydrocarbons portfolio over the years to come?

Brusco: Rewards include supporting the energy transition: gas and LNG play a major role in the energy transition, as they have a lower carbon footprint than oil and complement renewables, granting security and continuity of supply, consistent with Eni's roadmap towards its carbon neutrality targets. Also, gas and LNG allow portfolio diversification, resilience and flexibility: the combination of upstream projects and gas/LNG supply contracts ensures robust portfolio diversification, both geographically and across supply sources and routes. This reduces dependency on specific regions and mitigates geopolitical risks, while enhancing resilience against market volatility. Moreover, we benefit from market growth and demand: global gas/LNG demand is expected to rise, especially in Asia and emerging economies, driven by coal-to-gas switching, energy security needs and an increase in demand linked to the development of new technologies such as datacentres.

Nguya LNG (Congo)

Eni's strategy to increase contracted LNG volumes to 20mt/yr by 2030 positions it to capture this growth. Finally, the prominent equity LNG increase is assuring, and will continue to assure, competitiveness, adequate margins and important value generation.

On the other hand, there are risks—notably price volatility and market uncertainty, which are being mitigated by implementing more FLNG projects, with a 3–4-year delivery time, rather than onshore LNG plants, with a delivery time of 5–6 years.

How would you distinguish Eni's gas/LNG strategy from those of its peers, including its approach to the development of new liquefaction projects. What would you say are the company's core competencies?

Brusco: Eni's gas/LNG strategy stands out for its ability to combine speed, flexibility and integration across the value chain. Unlike peers that rely on larger, long-cycle projects, Eni leverages its fast-track, low-carbon development model, which enables rapid monetisation of resources and reduces pre-FID timelines, but not pre-FID commitments.

This approach is coupled with the extensive expertise Eni has built in FLNG technology. Eni already boasts a robust pipeline of gas and LNG projects worldwide: in Africa we have Congo LNG and Mozambique's Coral South and Coral North projects; in Asia, we have the Northern and Southern Hub assets in Indonesia; in the Mediterranean Sea, the Cronos project in Cyprus. With these, Eni has set, and continues to set, global benchmarks for speed, innovation and sustainability as one of the strongest players and operators in the FLNG business.

Another of Eni's strong suits is its integrated approach: by combining upstream development with LNG trading, flexible contract structures and direct maritime logistics management, Eni can pivot between markets and capitalise on price arbitrage opportunities. This flexibility, supported by a mix of long-term, short-term and spot contracts, ensures adaptability to market dynamics.

Eni's core skills include low-carbon fast-track execution, technical excellence in exploration and FLNG technology, and global LNG marketing and trading capabilities, positioning Eni as a resilient and innovative player in the evolving LNG landscape.

Finally, Eni's direct management of maritime logistics enables the company to quickly adapt to market price fluctuations, capitalising on arbitrage opportunities between European and Asian markets. In addition, the combination of free-on-board (FOB) and delivered-ex-ship (DES) contracts ensures optimal flexibility in operations. This approach expands Eni's supply base and contributes to the economic development of new gas-producing regions.

How does Eni deliver such fast project delivery?

Brusco: The uncertainties and volatility of costs and price of our business, particularly in the last few years, pushed us to create and apply a development model that could enhance the fast monetisation of our discovered resources and strengthen our economics.

Our prioritisation starts with the exploration phase. Our excellence in exploration is a combination of several factors: our in-house expertise, our proprietary technologies—including high performance computing (HPC)—and our centralised, selective strategy focused on near-field, ILX and high-impact discoveries in strategic areas. In this way, we can focus on advantaged, quickly monetisable resources.

From exploration, we move swiftly into development. Our low-carbon fast-track and phased model reduces the overall development project schedule by performing various technical activities in parallel, allowing us to reduce time-to-market and decrease capex exposure and geological risk, while also implementing solutions that have the lowest possible environmental impact.

Congo LNG is a clear example of our phased and fast-track approach. Using FLNG technology, we've unlocked Marine XII's vast gas resources. By leveraging synergies with existing infrastructures, repurposing floating units and applying cutting-edge technology, we delivered Phase 1 in slightly more than one year with Tango FLNG. Phase 2, with Nguya FLNG, is raising the capacity to 3mt/yr, making Congo LNG a global benchmark for realisation time, innovation and sustainability. Built with zero routine flaring and low emissions, it reflects Eni's commitment to rapid execution and responsible energy delivery.

Coral South marked Mozambique's entry into LNG production and set a global benchmark. Delivered on time and on budget, despite the pandemic, it was Africa's first ultra-deepwater FLNG unit, with a capacity of 3.4mt/yr. Since first gas in 2022, Coral South has consistently met targets, shipping more than 135 LNG cargos and achieving zero routine flaring and high energy efficiency, defining the new industry benchmark for operational uptime in the sector.

Coral North FLNG will be an enhanced replica of Coral South FLNG, with an increased capacity of 3.6mt/yr. Adopting a validated concept has allowed for lower capex, faster execution timelines and more efficient overall delivery with a significant reduction of the execution risk. At the same time, capitalising on the experience of Coral South will result not only in a faster and more cost-effective facility, but also in a stronger, safer and more performant one. •

Managing Costs, Risk and Emissions in LNG

With its technologies embedded across much of the world's liquefaction capacity, Honeywell outlines how integrated process technology, modularisation, automation and digitalisation are helping developers manage costs, execution risk and emissions as the LNG sector enters a new growth cycle, John Palamara, vice-president and general manager for the company's LNG business, tells *Petroleum Economist* | **Joseph Murphy**

Can you walk us through Honeywell's key recent achievements across LNG projects globally and provide an overview of the company's position in the sector?

Palamara: Honeywell has supported the LNG industry for more than 50 years and today plays a central role across the global value chain. Our technologies are used to pretreat about 40% of the world's LNG and provide liquefaction technology for roughly two-thirds of global capacity. About 80 LNG trains around the world are automated by Honeywell, and that installed base gives us unmatched operational insight as the industry enters a period of accelerated capacity growth, which is expected to double over the next two decades.

Over the past two years, we have further strengthened our position by expanding our end-to-end LNG portfolio, including the acquisition of Air Products' liquefaction process technology and equipment business and Sundyne, a leading pump and gas compressor manufacturer.

These acquisitions have helped differentiate and strengthen our market position, establishing Honeywell as the only technology provider offering an integrated portfolio that combines LNG process technology, equipment, automation and digital connected solutions. For developers, this integrated approach reduces complexity and execution risk.

Cost inflation and execution risk have become central concerns for LNG developers. How is Honeywell adapting its process technologies and project delivery models to help projects remain competitive on the global LNG cost curve?

Palamara: Cost inflation and execution risks such as supply chain volatility are reshaping LNG project economics at a time when spending on new LNG facilities is on a strong upward trajectory, as shown in the IEA *World Energy Investment 2025* report. Honeywell is responding by simplifying project designs and reducing interfaces to reduce cost and schedule risk. Our integrated process and automation solutions are engineered together, which helps avoid fragmented optimisation and excessive design margins.

We are also adapting delivery models to improve execution certainty. Modular LNG pretreatment and liquefaction solutions allow critical equipment to be fabricated off-site, improving quality control, reducing on-site construction risk and improving overall project schedule certainty. This approach is particularly important for projects seeking faster schedules and improved capital efficiency.

Importantly, our focus extends beyond initial capital expenditure. By designing for lower energy intensity, higher reliability and predictable lifecycle performance, we help projects remain competitive across the full LNG cost curve.

Modularisation is often cited as a way to reduce construction risk and shorten schedules. Where does Honeywell see modular LNG solutions delivering the greatest value today, and where do their limitations remain?

Palamara: Modular LNG solutions deliver the greatest value where speed to market and scalability are priorities, and they are a necessity for projects in locations with labour or logistical challenges. This includes mid-scale projects, phased developments and large facilities that want to standardise elements such as pretreatment or liquefaction modules.

Honeywell's modular LNG pretreatment and liquefaction units are designed to reduce capital costs, expedite project timelines and improve scalability. These designs can be replicated, which helps streamline approval and permitting processes. Modular deployment also enables LNG to be produced in locations close to where there is a high demand for energy, reducing transportation costs and emissions.

However, modularisation is not universally applicable. Very large baseload projects, site-specific constraints and local content requirements can limit the extent to which modular solutions are practical. In practice, the most successful developments balance modular and conventional construction approaches based on capacity, location and project objectives, and we expect modular solutions to continue gaining traction as we collaborate with engineering, procurement and construction partners on integrated delivery models.

By combining process technology, automation and digital solutions, we aim to support the next generation of LNG projects in the Middle East and globally as the sector evolves

With many LNG projects facing tighter emissions standards, how is Honeywell helping operators reduce energy intensity and emissions across the development and operation of LNG projects?

Palamara: Reducing energy intensity is central to lowering emissions from LNG projects, and it begins with process design. Honeywell's LNG technologies are optimised to minimise pressure losses and power demand, delivering lower fuel consumption over the life of a facility.

We are also working on all-electric liquefaction projects, or e-LNG. Honeywell has been on the forefront of electrification of LNG facilities, with several facilities around the world already in operation. We're also working with TotalEnergies' all renewable e-drive Marsa LNG project in Oman and with ADNOC on the Ruwais LNG export facility, which will deliver the first LNG project in

the MENA region designed to run nuclear power, demonstrating how electrification can materially reduce operational emissions at scale.

In addition, our digital solutions provide real-time emissions monitoring and performance optimisation, helping operators meet tightening regulatory requirements while improving efficiency.

What about ensuring operational efficiency, reliability and safety?

Palamara: Operational reliability and safety are non-negotiable in LNG, where unplanned outages carry significant commercial and safety consequences. Honeywell designs reliability into the process from the outset, supported by integrated control, safety and automation systems.

Our integrated control and safety systems (ICSS) provide continuous visibility across LNG facilities, enabling early detection of abnormal conditions and rapid response.

One example of this is our AP-OptiPlus™ programme, which guides operators and engineers through troubleshooting and performance optimisation of the liquefaction unit of an LNG plant. It incorporates Honeywell's LNG expertise into an easy-to-use software programme that collects data from the plant's ICSS historian and assesses the condition of the liquefaction unit through monitoring of key process parameters. By facilitating proactive troubleshooting and providing tailored support, we help customers maintain peak performance and safety standards. Advanced pretreatment technologies also protect downstream equipment, extending asset life and improving reliability.

Another example is Honeywell's life extension and assessment programme (LEAP) which enables us to thoroughly review operational data and perform physical inspections of our proprietary equipment, including coil wound heat exchangers, helping assist owners and operators extend the life of their LNG trains.

These systems and Honeywell's integrated approach help operators maximise annualised production while maintaining safety standards, even as facilities grow more complex and operate under tighter constraints.

How is Honeywell deploying digitalisation and AI to enhance operational performance across its LNG business?

Palamara: Digitalisation is a core enabler of LNG performance across the asset lifecycle. Honeywell integrates digital tools directly with process technology and automation platforms.

AI-driven analytics help operators anticipate equipment issues, optimise maintenance and maintain peak performance. In many cases, these tools can improve plant efficiency by 1–2%, adding millions of dollars in value over the life of a facility.

These insights are informed by data from assets worldwide, allowing operators to move from reactive to predictive decision-making.

Looking ahead, how does Honeywell view the long-term role of LNG in the global energy system, as well as the company's role in driving the sector's future development?

Palamara: LNG will play a critical role in supporting energy security and expanding access to reliable supply, particularly as electricity demand rises due to AI and datacentres. Global LNG demand is forecast to increase by around 60% by 2040, according to Shell's *LNG Outlook 2025*, while global natural gas demand is expected to rise by 25% between 2024 and 2050, BloombergNEF's *New Energy Outlook 2025* shows. We see these trends as indicative of LNG's growing importance in an evolving energy system.

The Middle East will be pivotal in this next phase of supply growth. Qatar, one of the world's leading LNG exporters, is advancing one of the largest LNG expansion programmes globally. Its North Field Expansion development will add 65mt/yr of liquefaction capacity by the end of the decade, materially increasing global supply and providing greater optionality to LNG markets as new volumes come online.

Honeywell's role is to help ensure this new capacity is delivered competitively and responsibly. Our long-term LNG vision focuses on expanding all-electric liquefaction, deploying AI-driven automation to improve efficiency by 1–2% and integrating carbon capture technologies to further reduce emissions. By combining process technology, automation and digital solutions, we aim to support the next generation of LNG projects in the Middle East and globally as the sector evolves. •

Veritas: A Standardised Approach to Measuring Methane

Launched publicly in 2023, Veritas provides the technical foundation to move methane disclosures from estimates to measurement-informed, audit-ready inventories, the project's executive director and director of zero emissions systems at GTI Energy, Amanda Harmon, tells *Petroleum Economist* | **Joseph Murphy**

What makes Veritas a unique and valuable system for consistently measuring and verifying methane emissions?

Harmon: Veritas is an open-source, science-based ecosystem led by GTI Energy to tackle one of the most stubborn problems in global climate mitigation: the lack of consistent, comparable and verifiable methane emissions data across the natural gas value chain. Methane is a potent greenhouse gas, and transparent measurement and reporting are increasingly central to market access, regulatory compliance and corporate credibility.

Launched publicly in 2023, Veritas provides the technical foundation to move methane disclosures from estimates to measurement-informed, audit-ready inventories. It is designed for operators, regulators, buyers and civil society groups who need trusted, reproducible information about methane leaks and must demonstrate real progress in reducing them.

What makes Veritas unique:

- Measurement-informed, not assumption-driven: Many methane inventories still rely heavily on emissions factors or engineering estimates. Veritas, instead, provides guidance for direct measurements from technologies such as ground-based sensors, aerial systems, satellites and advanced mobile leak detection systems. These measurements are then reconciled with traditional inventories to produce a measurement-informed inventory (MII), a more accurate representation of actual emissions.
- Open-source and technology-neutral: Veritas protocols are publicly available and designed to work with any measurement technology. This avoids vendor lock-in and encourages innovation across the industry.
- Full value-chain coverage: Protocols span the entire natural gas system: production, gathering and boosting, processing, transmission, storage, distribution, and LNG. This end-to-end structure allows for supply-chain methane intensity values that can be communicated to regulators, investors and downstream buyers.
- Built and tested collaboratively: Since 2021, GTI Energy has convened dozens of operators, environmental organisations, academics and investors to co-design and test the protocols. Approximately 20 operators field-tested the first release in 2023, directly informing later refinements.
- Ready for regulatory and market demands: As Europe prepares to enforce the EU Methane Regulation and global buyers request transparent emissions data for LNG imports, Veritas provides the consistent, auditable MRV (measurement, reporting, and verification) system needed to demonstrate compliance.

How does Veritas work? What are its core technical protocols?

Harmon:

- Measurement & reconciliation: This is the backbone of Veritas. This ten-step process guides operators through planning measurement campaigns, collecting real-world data, quantifying uncertainty and reconciling measurements with traditional bottom-up inventories. The outcome: a defensible MII at the site and source level.
- Methane emissions intensity: This accounts for the throughput to enable comparisons among users. Several approaches for calculating

emissions intensity exist, and these calculations must consider factors such as the gas-to-oil ratio and changes in production over time. The most important consideration in the intensity calculation, addressed in this protocol, is the divisor used. The intensity divisor, when discussing the entire industry, is usually the net amount of methane produced to sales in a country. This results in a ratio of national total industry methane emitted over total methane produced. While this is normally presented as the ratio value (i.e., 0.03), it can also be presented as a percent (i.e., 3%). The percentage of gas emitted along the entire natural gas value chain (from producer to end-user) is the most common means of discussing the emissions performance of the natural gas value chain as a whole.

- Supply chain intensity: This protocol provides a methodology for producing comparable (in boundary and units) methane emission intensities of natural gas supply chains, using an approach that accounts for downstream losses to scale emissions occurring upstream relative to the output of the defined supply chain (custody transfer point). This is essential for LNG and pipeline-gas exporters facing due-diligence requests from global buyers.
- Assurance: Guidance for third-party verification, aligned with established assurance standards. This turns MIIs and intensity calculations into audit-ready disclosures for regulators, investors and trading partners.

What progress has been made on Veritas since its launch in 2023?

Harmon:

- 2023: The release of Veritas Version 1; field testing by c.20 operators; early adoption in upstream, transmission and distribution segments.
- December 2023: The release of Version 2 with simplified steps, streamlined data handling and improved consistency based on industry feedback.
- February 2024: The publication of source-level methodologies aligned with the UN Environment Programme's OGMP 2.0 framework, enabling Veritas users to meet global methane reporting expectations.
- 2025: The release of decision-tree tools—including the Upstream Aerial Measurement-Informed Inventory Decision Tree—helping operators translate aerial survey data into MIIs. Updates to Supply Chain Intensity and Assurance Protocols.
- Ongoing: Developing a global measurement, monitoring, reporting and verification (MMRV) ecosystem.

More than 35 organisations—spanning operators, technology vendors, NGOs and investors—have participated in Veritas development, testing or early implementation

How widely has Veritas been adopted and what has been its real-world impact?

Harmon: More than 35 organisations—spanning operators, technology vendors, NGOs and investors—have participated in Veritas development, testing or early implementation. Examples of real-world impacts (anonymised):

- Distribution utility: Annual advanced mobile leak detection paired with Veritas reconciliation reveals patterns in low-level leaks, driving targeted infrastructure renewal and lowering emissions intensity in subsequent reporting cycles.
- Upstream producer: Crewed aerial surveys, supported by the Veritas decision tree, identify intermittent 'super-emitter' events that would be missed by conventional inventories. Operators use these findings to update maintenance intervals and reduce episodic emissions.
- Production basin: Developed production basin data set for methane emissions intensity.

What are the Veritas project targets for 2026?

Harmon: Veritas's goal is to implement a practical system that is consensus-based among operators, ENGOs and regulators. Our targets for this year are to:

- Create guidance for companies along the supply chain to create an MII.
  a. Sampling, technology deployment decision-tree and measurement reconciliation guidance.
  b. Support for multiple entry points for companies beginning to develop MII.
- Prescriptive guidance on regulations for MII. Examples: US Department of Transportation's Pipeline and Hazardous Materials Safety Administration, state regulations, LNG, EU Methane Regulation, Coalition for LNG Emission Abatement toward Net-Zero.
- Continued source-level MII operational guidance document.
- Mitigation MII-operations guidance.
  a. Guidance on hard-to-quantify sources.
  b. Link MII to the mitigation effort.
- Continued outreach to industry conferences (LNG 2026, AGA, ONE Future, Veritas Spring and Fall TPC meetings/workshops, others) and support for MMRV. •

LNG Steps in as Brazil's Gas Boom Masks Tight Marketable Supply

With marketable supply unlikely to grow significantly and limited scope for pipeline imports, Brazil is expected to continue relying on LNG to cover supply shortfalls, Ieda Gomes, senior advisor of Brazilian think tank FGV Energia, tells *Petroleum Economist* | **Joseph Murphy**

Brazil has seen a sharp rise in gross gas production in recent years, but infrastructure bottlenecks, high upstream infrastructure and transport costs, and the need to reinject volumes into reservoirs to bolster oil production has meant that little of this growth has translated into additional gas reaching domestic consumers, Ieda Gomes, senior advisor at Brazilian energy thinktank FGV Energia, told *Petroleum Economist*.

With marketable supply unlikely to grow significantly in the short term and limited scope for pipeline imports, Brazil is expected to continue relying on LNG to cover supply shortfalls.

National gross gas output climbed to a record 194mcm/d in October 2025, up from an average of 149mcm/d in 2023, driven largely by rising production from offshore pre-salt fields. Yet net average domestic supply increased only marginally over the same period, to 51.1mcm/d in 2025 from 47.1mcm/d two years earlier.

"Despite the substantial increase in gross domestic production, there is no surge in marketable gas supply," Gomes said.

Around 93% of Brazil's gas production is associated gas, most of it produced offshore in very deep waters. On the one hand, producers are incentivised to reinject much of this gas to maintain reservoir pressure and support the country's lucrative oil exports. On the other hand, high upstream and transport costs and a lack of existing offshore pipeline capacity limit the volume of gas that can be economically brought onshore.

Brazil has just three offshore pipelines delivering gas to onshore demand centres in the southeast. Building new pipelines would require heavy capital expenditure, and according to a study by the Ministry of Mines and Energy, offshore transport and processing costs amount to about $8.58/m Btu, on top of wellhead inferred transfer prices of $3.50/m Btu, transportation costs of $2.04/m Btu and distribution costs of $1.98/m Btu. The ministry believes that offshore pipeline and gas processing costs should fall to around $2.32/m Btu, but efforts to persuade the incumbent operator, Petrobras, to lower tariffs have so far not been fruitful.

Gross supply is on track for further growth, with NOC Petrobras commissioning a series of new floating, production, storage and offloading (FPSO) vessels to serve pre-salt fields. The producer announced plans in 2024 to install 14 of these FPSOs across key pre-salt hubs such as Buzios, Mero, Atapu and Sepia by 2028, with additional units penciled in for launch towards the end of the decade.

But without progress on the aforementioned issues, the increase in gas available to the domestic market is likely to remain modest. This said, additional marketed supply is expected later in the decade from the Equinor-operated Raia field, which is forecast to produce about 16mcm/d from 2028–29, Gomes said. There is also scope for new gas exporting FPSOs by the end of the decade.

Role of gas in Brazil

Natural gas typically occupies a relatively modest space in Brazil's energy mix, producing just over 6% of electricity last year. Meanwhile hydropower is responsible for over half of national electricity supply, and wind, solar and biofuels contribute another third. Still, gas can prove critical for energy security during periods of drought, when hydroelectric generation can plummet, and during heatwaves, when power demand can soar. It is also used as fuel and feedstock in industry.

To supplement domestic gas supply, Brazil has three options. It receives pipeline gas from Bolivia, but these volumes have fallen considerably in recent years, from roughly 20mcm/d in 2021 to around 12.6mcm/d in 2025, reflecting declining Bolivian output. Part of the shortfall has been offset by new infrastructure, such as Route 3, which pipes gas from Brazil's offshore Santos pre-salt basin to Rio de Janeiro, as well as subdued demand growth in Brazil. Ex-

cluding power generation, consumption from other segments has barely increased, constrained by high end-user prices and sluggish industrial activity. Average industrial demand stood at about 40.1mcm/d in 2025, compared with 39.6mcm/d in 2023, including around 11mcm/d consumed by refineries. In June 2025, industrial consumers with demand of 50,000cm/d were paying $18.21/m Btu.

Another potential source, Argentine gas transiting Bolivia, remains limited to 2–3mcm/d until Argentina expands its transport system. Several import operations were attempted in 2025, but Gomes said prices at Brazilian city gates were not competitive with current import prices.

As a result, Brazil depends on LNG to cover shortfalls in domestic supply, although prices remain volatile and relatively high, limiting the role of the fuel source outside the power sector. Brazil has eight LNG import terminals in operation and one deactivated, with total regasification capacity exceeding 130mcm/d. But the terminals are significantly underutilised, with LNG send-out averaging only 5.2mcm/d in 2025. However, send-out surged to 26.2mcm/d in 2021, when there was low hydropower availability.

Looking ahead, Gomes said natural gas is likely to remain a balancing fuel rather than a driver of broad-based energy growth. "Unless there is a substantial reduction in gas prices and more competition in supplies, the role of natural gas in Brazil will continue to be limited to smoothing the intermittency of renewable energy in the power sector and supplying consumers for technical reasons and those segments which cannot migrate to other more competitive energy supplies."

Regulatory reform

Regulatory reform has made some progress in recent years, but some key regulatory elements remain unresolved, Gomes said.

The Gas Law, enacted in 2021, was designed to encourage the development of new infrastructure and clarify third-party access rules, increasing competition and helping gas flow more efficiently to consumers. However, the law left access to essential infrastructure—including offshore pipelines, gas processing plants and LNG terminals—subject to negotiation rather than regulated tariffs. The sector regulator, the ANP, is currently holding public hearings on LNG terminal access and pipeline transportation tariffs, and is seeking ways to resolve access disputes.

Regulation is also pending to provide detailed criteria for classifying infrastructure. Under the law, the ANP has the power to define which pipelines and facilities count as transportation assets rather than local or dedicated systems, but detailed technical criteria—such as pipeline diameter and pressure thresholds—have yet to be established.

Unless there is a substantial reduction in gas prices, the role of natural gas in Brazil will continue to be limited to smoothing the intermittency of renewable energy in the power sector and supplying consumers for technical reasons and those segments which cannot migrate to other more competitive energy supplies

The law mandates non-discriminatory third-party access to transportation pipelines, but access to essential infrastructure—including production pipelines, gas processing units and LNG terminals—is subject to negotiation between owners and interested third parties. However, the definitive rules are still not in force, including remuneration formulas for infrastructure owners.

Regulatory fragmentation persists between federal and state authorities. While the ANP oversees activities upstream of city gates, gas distribution remains under the jurisdiction of individual states. Although the law calls for closer coordination to harmonise state and federal regulation—particularly with respect to free consumer access and distribution markets—a fully uniform and harmonised legal framework has yet to be achieved.

The regulation of gas commercialisation also remains incomplete. The ANP is tasked with overseeing gas traders and establishing clear authorisation and oversight regimes for long-term trading activity, but rules continue to vary widely across states, and the federal regulation governing commercial agents is still evolving.

While the New Gas Law sets out broad principles for tariff-setting, specifics of the pricing framework are still under discussion, such as how capacity will be priced and how entry and exit tariffs are determined.

National planning instruments remain underdeveloped. New instruments, such as the proposed National Integrated Natural Gas and Biomethane Infrastructure Plan (PNIIGB), are intended to guide infrastructure development, but the planning processes, implementation timelines and mechanisms for aligning stakeholders across the sector are still only partially defined or at an early stage.

At the same time, Gomes noted signs of greater market dynamism. Petrobras has reduced its role as a supplier in northeast Brazil, creating space for smaller independent suppliers. Upstream partners are increasingly able to sell gas directly into the market rather than at the wellhead to Petrobras, while the number of free consumers able to contract transport capacity and purchase gas from producers or traders has grown, she said. •

The New LNG Wave Is Finally Here

Growth in LNG supply will surpass the rise in demand in 2026 for the first time in years, according to Mike Fulwood, senior research fellow at the OIES, but lower prices are likely to encourage fuel switching and could create more demand on a permanent basis | **Joseph Murphy**

The long-anticipated surge in new LNG supply is finally arriving, with growth in global volumes set to outpace the increase in total demand in 2026 for the first time in years, Mike Fulwood, senior research fellow at the Oxford Institute for Energy Studies (OIES), told *Petroleum Economist*. This is likely to start translating into lower prices, which in turn could spur higher demand over the years to come.

There has been a steady stream of new projects starting up in North America over the past year, including Cheniere's 10mt/yr Corpus Christi LNG Stage 3 expansion, Venture Global's 20mt/yr Plaquemines LNG project and the Shell-led, 14mt/yr LNG Canada plant. QatarEnergy and ExxonMobil's 18mt/yr Golden Pass LNG plant is, meanwhile, undergoing commissioning. The first train of QatarEnergy's 32mt/yr North Field East expansion is on track for launch around the middle of the year, with a new train starting up every few months.

"The new wave of LNG is finally here, is the main message," Fulwood said, arguing that the scale of new supply coming to market was likely to overwhelm even the most optimistic demand forecast. "Clearly the amount of LNG coming on is going to exceed anyone's projection of the underlying level of demand."

Demand response

Lower prices are likely to stimulate additional consumption. In a paper released last October, Fulwood and other OIES researchers projected that prices could shift closer to $6/m Btu from $8/m Btu by 2030. In major importing regions—Europe, China, India, Japan/Korea/Taiwan, Emerging Asia, Africa and Latin America—this could trigger a short-term increase in demand of 26–94bcm as gas use rises at the expense of competing fuels such as oil and coal. This is equivalent to 3.5–12% of projected global LNG imports in 2030.

If prices are sustained at $6/m Btu for years, then a total of 65–175bcm of gas demand could be added on a permanent basis, as gas displaces coal and oil and potentially slows the expansion in renewables. This is equivalent to 7.5–21% of projected global imports in 2035.

"Asia will be the main source of the response," Fulwood said. In China, the short-term demand response could be 16–70bcm by 2035, according to the paper, with half of this coming from the industrial sector. The long-term response could be 25–115bcm in 2035, although Chinese authorities are eager to maintain domestic production at 50–60% of demand, and so only half of the growth would be met by LNG imports.

Lower prices would also spur higher demand in India, chiefly in industry in the short term and city gas distribution and transport in the long term. Taiwan is already expanding its gas-fired power generation as it phases out coal and nuclear, while there is strong potential for oil- and coal-to-gas switching in Japan and Korea. In Emerging Asia markets, the paper argued there was some of the highest potential to absorb the new wave of LNG, as demand rises rapidly and domestic production either stagnates or declines.

Europe, by contrast, is unlikely to see a resurgence in coal-to-gas switching as coal use continues to decline structurally, Fulwood said. The role of gas is evolving there, towards use as a backup for intermittent renewables.

The shift towards supply outpacing demand will be felt most acutely in Europe, Fulwood said. Golden Pass, on track for launch in either 2025 or early 2026, will notably deliver most of its gas to Europe. After several years of tight market conditions caused by the drastic reduction in Russian pipeline gas, the balance is now tilting in the opposite direction.

Russian gas phase-out

Fulwood expressed scepticism that Europe would fully phase out Russian gas by the end of 2027 as planned. "There's a big question mark over whether that will ac-

tually happen," he said, citing resistance to the plan from Hungary and Slovakia, the largest importers of Russian gas left in Europe.

As for Russian LNG imports, there is more uncertainty, according to Fulwood. It is unclear how the EU regulation will affect existing LNG contracts held by companies such as TotalEnergies. While Brussels may try to prevent European companies from lifting Russian cargoes, the volumes could simply be delivered elsewhere, Fulwood said, pointing to Asian markets, but also others in South America, as potential destinations. He expects shipments from Russia's Arctic LNG 2 project, under US sanctions, to continue to China but did not foresee any meaningful ramp-up in volumes.

"The Chinese are testing the waters with an underutilised terminal," he said, referring to cargoes delivered to the Beihai terminal in southern China and efforts to gauge whether the US will respond.

Peak US LNG

US LNG exporters have benefitted the most from the demise of Russian pipeline gas in Europe over the past few years. In contrast, Fulwood noted that Qatar's LNG deliveries to the region have declined, leaving it behind the US and Russia as Europe's third-largest LNG supplier. That trend could persist as Golden Pass ramps up, even as Qatar brings onstream North Field East, Fulwood said.

At the same time, Fulwood sees signs the momentum behind US LNG development may already have peaked, after FIDs on a record amount of new capacity were reached in 2025. The collapse of the 16.5mt/yr Lake Charles LNG project, where Energy Transfer suspended development in mid-December, underscores the challenges that US LNG projects now face in a lower price environment.

"We've already seen the peak of US FIDs," Fulwood said. "I wouldn't expect to see many more this year." •

We've already seen the peak of US FIDs

A New Force in US LNG

With Texas LNG approaching financial close, Alaska LNG advancing toward a phased buildout and Magnolia LNG positioned for future optionality, Glenfarne CEO Brendan Duval says the coming year will demonstrate how the company's more focused, owner-operator approach is reshaping LNG infrastructure development in the North America | **Joseph Murphy**

How do you define Glenfarne's role in strengthening US LNG leadership, and what differentiates your owner-operator model from traditional LNG developers?

Duval: During a time when global energy security is at the centre of geopolitics, Glenfarne Group is building one of the most ambitious LNG portfolios in North America, simultaneously advancing multiple large-scale projects at once.

From the US Gulf Coast to Alaska's North Slope, Glenfarne is demonstrating the advantages of a nimble, more focused owner-operator: one shaped by experience across power generation, grid stability and long-lived infrastructure, and one that is comfortable navigating complexity. Glenfarne's approach has positioned the company to advance projects that others have struggled to execute—and to advance them in a way that pairs entrepreneurial decision-making and speed with institutional discipline.

Glenfarne is now employing this approach across LNG projects on the US Pacific and Gulf Coasts, helping drive the growth of US LNG global leadership.

Glenfarne has built a large global operating portfolio through EnfraGen and has received multiple "Deal of the Year" awards for project finance. How does this operating experience shape your approach to financing, risk management and long-term ownership of LNG and energy infrastructure assets?

Duval: Glenfarne, through the company's EnfraGen subsidiary, already has a well-established energy and infrastructure presence across Central and South America, operating solar, hydro, wind, gas and battery power projects as well as grid stability infrastructure. In Colombia, the company provides LNG import and storage capabilities and supplies the local gas market to help ensure security of supply. In Chile, at the end of 2025, Glenfarne completed the acquisition of four integrated solar and battery projects with a combined 909MW of installed capacity comprising 588MW of solar and associated battery energy storage system facilities with a capacity of 1.61GWh.

In total, Glenfarne has built a portfolio of nearly 60 owned-and-operated projects in just over ten years, with 11 offices in eight countries across four continents. That operating experience matches Glenfarne's approach to project finance—one focused on long-term ownership, balance-sheet discipline and structuring projects that can withstand market volatility. In fact, Glenfarne has been widely recognised for its investment and financial savvy, particularly around complex project finance deals. Its projects have earned three different "Deal of the Year" honours over just the last four years from such outlets as Project Finance International and LatinFinance.

The Glenfarne team has rapidly emerged as one of the most agile players in energy and power infrastructure and is now opening new sources of US natural gas supplies for high-demand global markets in Europe, Asia and around the world. Through disciplined project execution, innovative commercial arrangements and strategic partnerships, Glenfarne is simultaneously advancing major LNG projects with commercial momentum and disciplined financing.

Texas LNG is often cited as a clear example of Glenfarne's development strategy. How does this project demonstrate your approach to commercialisation, execution risk control and long-term competitiveness?

Duval: One of Glenfarne's flagship projects is the Texas LNG project, located in the Port of Brownsville, Texas. Designed with a "green by design" strategy that utilises electric motor drives to minimise emissions, Texas LNG embodies Glenfarne's approach to sustainable and responsible energy production.

Texas LNG is fully subscribed, with all announced volumes secured under long-term binding offtake agreements, reflecting strong market demand as the project nears an early 2026 FID. Engineering is being led by Kiewit and offtake partners include North American producer EQT, European utility RWE and global traders Macquarie and Gunvor. Glenfarne expects to commence commissioning in 2030.

Texas LNG is sited in an area of the Gulf Coast with low hurricane risk, a solid seismic foundation that reduces construction costs and short, unimpeded access to deep-water Gulf shipping channels. The project's site plan includes ample room for future expansion.

Why is Alaska LNG such a strategically important project for Glenfarne, and how does it fit with your broader vision for combining domestic energy security with global LNG markets?

Duval: For Glenfarne, the 20mt/yr Alaska LNG project represents the kind of challenge the company is built to tackle—integrating domestic energy security, international markets, large-scale logistics and long-term financing into a single execution plan.

When Glenfarne acquired a 75% stake in the project in March of 2025, Alaska LNG had been studied and debated for decades. Alaska's Cook Inlet basin, which has supplied most of the state's natural gas for generations, is no longer reliably meeting demand. Without new infrastructure, Alaska faces a growing risk of energy shortages later this decade, with direct consequences for households, industry and public services.

From the US Gulf Coast to Alaska's North Slope, Glenfarne is demonstrating the advantages of a nimble, more focused owner-operator: one shaped by experience across power generation, grid stability and long-lived infrastructure, and one that is comfortable navigating complexity

Representation of the 20mt/yr Alaska LNG project

Glenfarne's entry marked a reset. Rather than pursuing a single, monolithic development, the project has been restructured into financially independent phases, allowing domestic energy delivery to move forward while using large export capacity for volume economics. This phased approach reflects a broader rethinking of how Alaska LNG should be built—aligning execution with prudent risk management.

By delivering North Slope gas to Alaska population centres and stabilising the state's domestic energy system, Alaska LNG is designed to efficiently and flexibly address Cook Inlet shortfalls. Alaska LNG's export terminal includes infrastructure that can also serve import needs, including jetties, piers and LNG storage, enabling Glenfarne to simultaneously develop import and export capacity to build resilience without resulting in stranded infrastructure.

Beyond its domestic role, Alaska LNG offers distinctive advantages in global LNG markets. It is the only federally authorised LNG export project on the US Pacific Coast, with direct shipping routes to Asia that avoid maritime chokepoints and reduce transit times. These structural advantages have attracted preliminary commercial agreements with buyers in Japan, South Korea, Taiwan and Thailand, reflecting continued interest from Asian customers seeking reliable, long-term supply from geopolitically stable sources.

Taken together, Alaska LNG illustrates the kind of complexity Glenfarne is prepared to manage: a project where local energy security, national strategic interests and global markets intersect—and where execution, not ambition, ultimately determines success.

How does Magnolia LNG complement Texas LNG, and what role does it play within Glenfarne's broader Gulf Coast LNG portfolio?

Duval: Magnolia LNG complements Glenfarne's Texas LNG project by providing additional permitted capacity in the heart of the US Gulf Coast LNG corridor. Located near Lake Charles, Louisiana, the 8.8mt/yr export project benefits from proximity to multiple major interstate pipelines and an experienced LNG workforce.

Backed by robust local and state stakeholder support, Magnolia LNG represents a mature development opportunity that can be advanced as market conditions warrant. Together with Texas LNG, the project demonstrates

Glenfarne's flexibility within distinct Gulf Coast LNG models—one focused on early execution, the other offering scale and flexibility within an established LNG hub.

Glenfarne has attracted a wide range of financial institutions, EPC firms, technology providers and LNG buyers. What is your philosophy toward partnerships, and how do you align counterparties with each project's risk profile and development stage?

Duval: Across all LNG projects, Glenfarne has pursued a partnership-driven strategy designed to align capital, execution expertise and long-term ownership, attracting high-quality financial institutions and strategic counterparties suited to each project's risk profile and stage of development.

For Texas LNG, momentum on securing project financing—led by advisors CIBC and Mizuho—reflects confidence not only in the project's fundamentals but also in Glenfarne's track record as a developer capable of reliably delivering complex infrastructure. In Alaska, Glenfarne has engaged leaders across the LNG industry for investment, supply, offtake or other participation, including Baker Hughes, Worley, ExxonMobil, POSCO International, MasTec, JERA, Tokyo Gas, CPC and numerous others—an indication of the market's recognition of the value Glenfarne adds to these LNG assets.

For Glenfarne, the 20mt/yr Alaska LNG project represents the kind of challenge the company is built to tackle—integrating domestic energy security, international markets, large-scale logistics and long-term financing into a single execution plan

Looking to the next year and beyond, how do you see Glenfarne's owner-operator model reshaping LNG infrastructure development in North America, and what milestones should the market be watching most closely?

Duval: For decades, the US has largely followed a familiar pattern: a small number of mega-projects, concentrated in the Gulf Coast, led by the same handful of established players. Glenfarne's success embodies a new model of LNG development built around private ownership, disciplined financing and a willingness to tackle projects defined as much by strategic value as commercial return.

With Texas LNG approaching financial close, Alaska LNG advancing toward a phased buildout and Magnolia LNG positioned for future optionality, the coming year will offer a clear demonstration of how this more focused, owner-operator approach is reshaping LNG infrastructure development in North America. •

A Transitional Year for Gas Markets in Europe and Beyond

As the third wave of global LNG arrives, Wood Mackenzie's director for Europe gas and LNG, Tom Marzec-Manser, discusses with *Petroleum Economist* the outlook for Europe's gas market in 2026 | **Joseph Murphy**

This year will be a transitional one for global gas markets, marking the shift from the tightness seen since 2021 to more ample supply, Wood Mackenzie's director for Europe gas and LNG, Tom Marzec-Manser, told *Petroleum Economist*. For the first time in several years, supply growth will outpace demand growth, he said.

"We definitely see 2026 as a transitional year," Marzec-Manser said. "We're entering what we call the third LNG wave."

That wave began last year but will gather momentum in 2026. Overwhelmingly, it consists of extra supply from the US and Qatar. Europe's critical role in absorbing the new supply is already evident in import data.

Woodmac had expected 2025 to be a record year for LNG imports into the EU-UK market, surpassing the previous high set in 2022, and this expectation was realised. Even before factoring in the cold snap that Europe experienced in early January, Woodmac had already pointed to a record-breaking year in 2026, and forecasts for continued low temperatures later this winter have only reinforced that view.

"There's going to be a lot of LNG needed in Europe to get us through to the end of winter, and then through the summer to get us ready for the winter after," Marzec-Manser said.

On storage, Wood Mackenzie continues to expect inventories to end 2026 in a strong position, despite higher-than-expected withdrawals this winter.

"We expect storage levels to be in a robust place by the end of the year," Marzec-Manser said, noting that the recent cold snap has changed the near-term picture. "It does look like storage will be lower by the end of March than we previously expected, because there's been greater withdrawal recently."

That does not materially alter the end-summer outlook, he added, given the volume of LNG coming to market. "There is enough additional global LNG coming to market that our overall view is still that storage by the end of October will be pretty full," he said. Even if inventories fall short of earlier projections, they are expected to be well above the roughly 82–83% utilisation level seen at the start of the previous heating season.

We don't see a world in which Russian LNG works its way back into the European market, even if there is peace

Marzec-Manser, Wood Mackenzie

Geopolitical uncertainty

Geopolitics remains a major uncertainty, particularly the possibility of a ceasefire in Ukraine and its implications for sanctions and Russian LNG. Marzec-Manser said a ceasefire could allow the US to lift sanctions on Russia's Arctic LNG 2 terminal, even if the EU likely does not reciprocate by lifting its restrictions on the project. That would mean increased global LNG supply, lowering prices, even if those volumes do not go to EU ports.

"We don't see a world in which Russian LNG works its way back into the European market, even if there is peace," Marzec-Manser said.

Still, Arctic LNG 2 exports would remain constrained by shipping limitations—namely the lack of Arc7 LNG carriers needed to traverse Russia's Northern Sea Route during winter.

That said, Wood Mackenzie's modelling assumes some Russian pipeline gas will still reach Europe beyond 2027. Slovakia and Hungary continue to buy large volumes of this gas under long-term contracts and have staunchly opposed ending those imports.

Short-term contracts and spot purchases are expected to fall away, but Marzec-Manser said baseline contractual volumes are likely to persist.

"Peace deal or no peace deal, we assume that some Russian gas is still going to make it into the EU market post-2027," he said. "We think Slovakia and Hungary will find ways to continue to import gas under their long-term contracts."

Limited demand growth

Despite falling prices and rising LNG availability, Woodmac forecasts only limited growth in EU-UK gas demand in 2026, reflecting structural headwinds across key sectors.

In the residential and commercial segment, weather remains the dominant variable, and recent colder weather will result in higher demand in the first quarter of 2026. Industrial demand, however, faces deeper challenges. "Lower prices alone aren't the problem for industry," he said. "There are macro-economic headwinds, including the tariff situation with the US, and we also have global overcapacity in certain industrial processes." That has left some European manufacturing structurally uncompetitive, limiting the scope for a gas-led recovery.

In the power sector, the role of gas continues to narrow. "The renewable rollout means the opportunity to run thermal capacity is ever decreasing," Marzec-Manser said. "Any incremental growth we see in power demand on a year-by-year basis is typically met by new renewable capacity."

Cheaper gas does improve competitiveness against coal, but the effect is fading. "The optionality for power producers to switch between coal and gas is ever decreasing as more coal capacity is decommissioned," he said.

Turkey's LNG-driven leverage

Turkey stands out as one of the most dynamic gas markets in the region. The country is expanding domestic production rapidly with the development of the Sakarya gas field in the Black Sea. It is also expanding its storage capacity, giving the market greater optionality.

Turkey has also been "on a shopping spree for LNG", Marzec-Manser said, with state gas importer Botas having signed nine new contracts in September last year alone. The country has focused on securing supply from multiple sources and avoiding oil-indexed contracts. This has strengthened its negotiating position with its long-time pipeline supplier, Russia's Gazprom.

In December, Botas extended its contract with Gazprom for 21.75bcm of gas annually, but only for one year. Awaiting the arrival of more LNG on the global market, Turkey is likely holding out for better pricing terms from Russia that are competitive with this LNG, according to Marzec-Manser.

A recent gas deal that Turkey struck with Azerbaijan covering volumes from the Absheron field is best seen as a backfill arrangement, he said, offsetting production decline at the Shah Deniz Stage 1 project.

The renewable rollout means the opportunity to run thermal capacity is ever decreasing. Any incremental growth we see in power demand on a year-by-year basis is typically met by new renewable capacity

Ankara's ambitions to turn Turkey into a regional gas hub remain under discussion, but physical constraints are a barrier. "Capacities on the Turkish-Bulgarian and Turkish-Greek borders are not huge," Marzec-Manser said. "To make those flows significant, you would need capacity upgrades."

Regulatory headwinds

Regulation is another key variable in Europe's LNG outlook. The EU is preparing to introduce rules on the reporting of methane emissions related to its hydrocarbon imports over the coming years, with a view to setting performance-based standards for maximum allowable methane intensity by 2027. There is also the EU's Corporate Sustainability Due Diligence Directive (CSDDD), for which the European Parliament and EU governments reached a provisional agreement in December on introducing simplified rules.

"If Europe wants to import more LNG from the US and Qatar, those two things don't work hand in hand with the CSDDD as it was," he said. "Change to that directive has to happen to facilitate the volumes of LNG that Europe wants to import."

Asked about the biggest uncertainties for European gas markets in 2026, Marzec-Manser pointed to geopolitics above all. "The Ukraine dynamic is probably the biggest uncertainty," he said, noting that even the prospect of negotiations late last year had a strong bearish impact on prices.

"A peace deal would have a bearish impact on prices in its own right, even if it doesn't change Europe's willingness to buy Russian gas," he said.

Beyond Europe, Asia remains central to the outlook. "What happens in Asia, particularly China, has a huge impact on how much LNG ultimately ends up in Europe," Marzec-Manser said, adding that monitoring Asian demand growth remains essential for European policymakers and market participants alike. •

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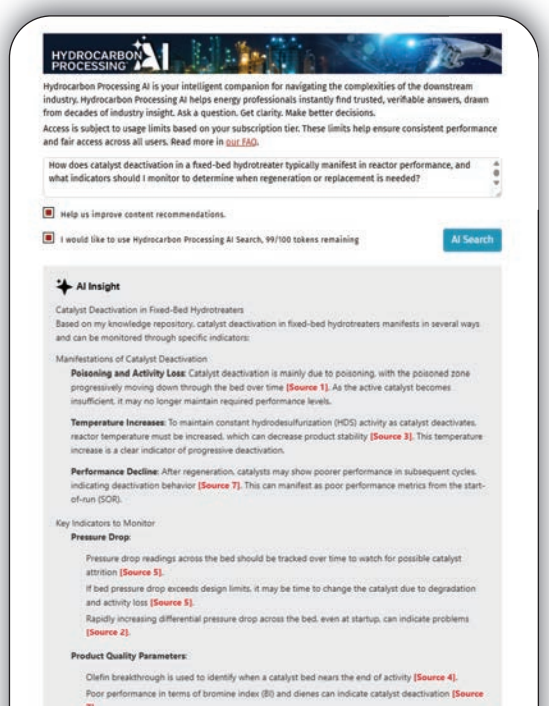

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Attendees will be asked to present government-issued photo ID at security every time they enter LNG2026. This can be in the form of a valid passport or a Qatar ID (QID) for residents.
Attendees are required to wear their badge AT ALL TIMES during LNG2026, including networking functions. Attendees will only be able to access the areas of the event included in their registration.

Dress Code

Business attire is requested for attendance at the Conference, Exhibition and all networking functions.

Download the Event App

The Event App is an essential tool to help you navigate the event and contains the programme for the week, speaker profiles, exhibition layout, networking features and much more.
For any questions on the Event App, our staff at the Event App Support Desks would be delighted to assist you. The desks are located in the Spider Area, Level 1 and the Registration Area in the Exhibition Foyer, Ground Level.
For any assistance, you can also email support@allintheloop.com.

Conference and Exhibition Refreshments

Morning coffee, lunch and afternoon tea are provided to all Conference delegates.
Kiosks are open in the Exhibition foyers for food and beverage purchases for exhibitors and trade visitors.

Prayer Rooms

Prayer rooms, male and female, are available in the Conference area located on Level 1, by the QNCC Spider Café.
Additional prayer rooms are also available on the Exhibition Mezzanine Level, Hospitality Suite 4 for female attendees and Hospitality Suite 7 for male attendees.

Accessibility

The QNCC is designed to ensure equal access for all attendees with limited mobility. If you require any assistance, please ask the Organisers.

Water Stations

Water fountains are available at your disposal throughout the venue.

Photography

Professional photographers are taking photos throughout the event. These images may be used in post-event reports and marketing collateral, and supplied to industry media. If you do not want your photo to be taken, please advise the photographer.

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We have a dedicated Media Centre and Press Conference Room at the following locations:

- Room 105: Press Conference
- Room 106: Media Centre

For media and PR enquiries, please visit the Media Team at the Media Centre or contact the team at media@lng2026.com.

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The Executive and Technical Delegate Gift Bag may be redeemed upon presentation of your registration badge at the Delegate Bag Collection Desk located on Ground Level, near Auditorium 2.

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