

LNG Unlimited

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Atlantic LNG in Trinidad agrees overhaul of BP and Shell stakes

Accord will mean higher pricing and bigger equity stake for Trinidad & Tobago
LNG News Editor

UK-based oil and gas majors BP plc and Shell plc have agreed to re-structure their ownership in Trinidad and Tobago's Atlantic liquefied natural gas project at Point Fortin in Trinidad.

The Atlantic LNG facility, which used to be the biggest supplier of LNG to the US before the shale-gas boom and the US become an exporter, has four liquefaction Trains with a total capacity of about 15 million tonnes per annum.

Key supplier

The overhaul in shareholdings was outlined in a statement from BP and comes as Atlantic LNG is now a key supplier to European nations such as the UK and also ships cargoes to South America as well as Asia.

Other countries supplied in the past year included India, Italy, Brazil, Caribbean neighbour Jamaica and the US territory of Puerto Rico.

A statement explained that the new agreement has resulted in higher pricing and more Trinidad & Tobago Government participation.

Each Train has different shareholder structures and trading agreements and Atlantic LNG still plays a key role in the development of the country's natural gas resources which have been pursued by both BP and Shell.

Trinidad's National Gas Company has shares in the facility's liquefaction Train four and the company has now increased its ownership to Trains two and three.



National Gas Company signs LNG deals with UK majors

Chinese Investment Co. used to hold 10 percent of Train one, though is no longer actively involved in the project.

Stuart R. Young, the Trinidad and Tobago Minister of Energy and Energy Industries and Minister in the Office of the Prime Minister, said that the Ministry had reached agreement with the Atlantic LNG shareholders on "substantive commercial terms" for the revised structure of the Atlantic LNG venture.

This followed the signing of a Heads of Agreement in January 2022.

The long talks were first initiated by the Government in 2018 with Atlantic shareholders following which the parties agreed that the Atlantic facilities and its complex shareholder structure and commercial agreements needed to be simplified.

"The Government and Atlantic shareholders, inclusive of companies affiliated with BP Trinidad and Tobago, Shell Trinidad and Tobago Limited, and T&T's NGC have agreed on a restructured ownership and commercial framework to see the Atlantic business operations consolidated into a single entity," explained the Government.

In the revised structure, NGC will increase its equity share in the Atlantic project, consistent

with the commitment by the Government to maximise value to the country from the sale of hydrocarbon resources.

Pricing mechanism

"The new contracts will also facilitate a market-reflective pricing mechanism that provides fair value from the sale of LNG for both the country and the shareholders," said the Government.

Shell's equity stake in the Atlantic plant ranged from 46 percent to 57.5 percent in each of the four Trains at the facility.

Under the new ownership agreement, Shell and BP have reduced participation in two Trains.

However, BP and Shell remain owners of the facility's three active liquefaction Trains.

This will result in a unitized facility owned by one joint venture with a common ownership and commercial framework for gas supply, processing, LNG production and natural gas liquids offtake.

"The agreement will lead to greater commercial certainty by freeing up billions of dollars in investment for exploration and production," said the statement.

"It will help develop the Manatee project, which holds 2.7 trillion cubic feet of gas reserves on the Trinidad side," it added.

UNLIMITED AGENDA

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Asia-Pacific LNG player JX Nippon signs accord on developing Malaysian gas fields

LNG News Editor

JX Nippon Oil & Gas Exploration Corp., a participant in Asia-Pacific LNG projects in Malaysia, Indonesia and Papua New Guinea, has signed an accord to initiate discussions about acquiring interests in five natural gas fields offshore Peninsular Malaysia.

The move to set up talks comes in the form of a Heads of Agreement (HOA) between JX Nippon and Petronas Carigali, an exploration and production unit of Malaysian state energy company Petronas.

Feasible

The five Petronas gas fields are called Bujang, Inas, Guling, Sepat and Tujoh and are located offshore Kerteh in eastern Malaysia.

JX Nippon said it conducted a joint study with Japanese state agency Japan Oil, Gas and Metals National Corp. (Jogmec) from April 2020 until September 2021 to commercialize the fields which



JX Nippon-Petronas signing ceremony, including second left in front row (PCSB) Hasliza Othman, Chief Executive and third left in front row JX's main Malaysia executive Yasuto Ariga. Second left in back row (Petronas) is Aidil Shabudin, Head of Resource Development & Management. Third left in the back row is Mohamed Firouz Asnan Petronas, Senior Vice President MPM and with other JX Nippon and Petronas executives

have a particularly high carbon-dioxide level.

The Japanese plan involves bringing the gas fields into production and in an environmentally-friendly way by capturing CO₂ from the produced gas and reinjecting it into nearby mature

gas fields by using Carbon Capture and Storage (CCS) technology.

"Since the study concluded that the development of such high CO₂ gas field is feasible with low environmental impact by utilizing CCS technology, JX came to the decision to further evaluate these

gas fields and work together towards submitting the business value proposal to Petronas," explained JX Nippon.

The Japanese Jogmec agency has since the study with JX Nippon changed its name to the Japan Organization for Metals and Energy Security.

"JX Nippon said that it understood that this initiative contributes to not only stable supply of natural gas to Peninsular Malaysia but at the same time expands its business in Malaysia which is one of the core countries for JX," said the Japanese company.

Adopting the CCS solution is in line with the strategy of JX Nippon, which is part of the Japanese ENEOS Group.

A signing ceremony on the JX Nippon-Petronas accord was held in the Malaysian capital Kuala Lumpur involving Chief Executive Hasliza Othman and JX Nippon's Managing Director in Malaysia, Yasuto Ariga.

Novatek is on track for Arctic LNG II to come on stream in a year with China-Japan cargoes

Novatek, the Russian energy company and developer of the Arctic LNG II project to double up on the existing Yamal LNG plant, said it was still on track for the first Train to come on stream by year-end 2023 and Japan and China would be key customers.

"The launch of Novatek's first Train of the Arctic LNG II plant is still on scheduled and the second and third Trains for 2024 and 2026 respectively," said Timofey Sazonov, Deputy General Director for capital construction of Arctic LNG II.

Launch

"The goal is to launch in December 2023 and we are not reconsidering deadlines," he added.

It was reported in November that Russia may start deliveries of

LNG to Japan from the Arctic LNG II plant at the end of 2023 as the Japanese were key shareholders in Arctic LNG project while still importing volumes from Gazprom's Sakhalin LNG plant.

"This project is developing successfully. We hope that next year Japan will receive additional volumes of Russian LNG, in addition to what is already supplied from Sakhalin," said Mikhail Gauzin, Russian Ambassador to Tokyo.

The Arctic LNG II project construction on the Gydan Peninsula involves three processing Trains each with capacity of 6.6 million tonnes per annum.

The Novatek company holds a 60 percent shareholding in Arctic LNG II and there are four other 10 percent stakeholders.

The 10 percent holdings in Arctic LNG II belong to TotalEnergies, China National Petroleum Corp., China National Offshore Oil Corp. and a Japanese investor group comprising Mitsui & Co. and the government institution, the Japan Organization For Metals and Energy Security, previously known as Japan Oil, Gas and Metals National Corp.

TotalEnergies also has a 19.4 percent stake in the actual Novatek company, though recently withdrew its two directors from the Novatek board.

Additionally, Novatek's most recent Sales and Purchase Agreements were signed at the start of 2022 with two Chinese companies.

Novatek signed two new supply agreements in January 2022 with

units of China's ENN Group and Zhejiang Energy Gas Group.

The Russian company's subsidiary, Novatek Gas and Power Asia, signed a deal with the ENN's trading firm ENN LNG (Singapore) Ltd.

The SPA stipulates cargoes from Arctic LNG II amounting to a total of 600,000 tonnes per annum for a term of 11 years.

LNG deliveries will be on a delivered ex-ship (DES) basis whereby Novatek supplies the shipping to ENN's Zhoushan LNG receiving terminal in eastern China.

The second Novatek 2022 deal was with Zhejiang Energy in the form of a long-term SPA from the Arctic LNG II.

Lebanon closer to joining gas hub in Med

TotalEnergies Chairman and Chief Executive Patrick Pouyanné has met Lebanese Minister of Energy and Water Walid Fayad at the French major's Paris headquarters to mobilize drilling teams for the Block 9 offshore resource that will make Lebanon an energy producer in what is becoming the Eastern Mediterranean LNG and pipeline gas hub.

CEO Pouyanné also called for tenders to secure the drilling rig and the selection of the rig would be made in the first quarter of 2023.

"Pre-orders have also been placed with suppliers for equipment required for the well," added Pouyanné.

"In parallel, offshore resources are being mobilized to contribute to the environmental studies which will be finalized by the end of June 2023," the CEO stated.

Total Energies and its partner Eni of Italy aim to complete their drilling campaign as soon as possible in 2023.

Lebanon and Israel, who have no diplomatic ties, finalised a US-brokered maritime demarcation deal on October 27, 2022, allowing the exploration and production plans to advance.

Under the agreement, the disputed waters will be divided along a line that straddles the Qama gas field prospect.

Production and exploration will be based on the Lebanese side, but Israel will be compensated for any gas extracted from its side of the line.

"Following the signature of this Framework Agreement, the Block 9 partners will initiate the exploration of an already identified prospect, which might extend both in Block 9 and into Israel waters south of the recently established maritime border line," explained Total Energies.

Wintershall Dea advances with spend of \$825M on Norwegian gas field

LNG News Editor

Wintershall Dea, the company viewed as Germany's national oil and gas player and which is a shareholder in the Norwegian-run Hammerfest LNG export project, has submitted a plan for development of the Dvalin North gas field in the Norwegian Sea to help boost pipelines gas supplies for Europe.

The Plan for Development and Operation (PDO) was handed over at a brief ceremony at the Norwegian Ministry of Petroleum and Energy.

Fast progress

Wintershall Dea said the handover marked "rapid progress" from exploration to execution for the Dvalin North field, which was the largest discovery offshore Norway in 2021.

The company said that Dvalin North was the latest in a line of Wintershall Dea-operated and partner-operated project sanctions on the Norwegian Continental Shelf this year.



Plan handover: Roy Padget, Wintershall Dea; Christian Hoist, Sval; Michael Zechner, Wintershall Dea; Terje Aasland, Minister of Petroleum and Energy; Kjell M. Lund, Petoro and Connie Wergeland, Wintershall Dea. (Photo: Wintershall Dea/ Kjetil Hjertvil)

"This field builds on our existing position as one of the largest producers of Norwegian gas at a time when Europe needs more energy," said Dawn Summers, Wintershall Dea's Chief Operating Officer.

"Committing to a development only the year after discovery is very rare, but shows our determination to supply natural gas to Europe through a major investment in Norway," she stated.

The Dvalin North gas field is located around 200 kilometres (125 miles) off the coast of Northern Norway, west of Sandnessjøen, and at a water depth of 420 metres.

It is estimated to contain around 84 million barrels of oil equivalent and the gas will be exported via the Polarled pipeline to Nyhamna near Kristiansund in mid-Norway.

Equinor boosts feed gas for LNG and sees output lasting decades

Equinor, the Norwegian oil and gas company, is boosting the feed-gas supplies from another field in the Barents Sea to produce more LNG from the Hammerfest plant on Melkøya Island in northern Norway.

Equinor said that first phase development of the Askeladd field will bring 18 billion cubic metres of gas and two million cubic metres of condensate to the market via the Hammerfest LNG plant on Melkøya.

Satellite

Askeladd is a satellite field of the Snøhvit field and has been developed as a subsea tie-in to the Snøhvit facility and Hammerfest LNG.

"Askeladd is now producing and

the gas and will help extend plateau production from Hammerfest LNG on Melkøya by up to three years," said Thor Johan Haave, Equinor's Vice President for Operations and Maintenance at Hammerfest LNG.

During normal production, Hammerfest LNG delivers 18.4 million standard cubic metres of gas per day, or 6.5 billion cubic metres per year, for annual LNG output of around 4.8 million tonnes from the single liquefaction Train.

Equinor said this corresponded to the needs of around 6.5 million European households, or 5 percent of all Norwegian gas exports.

The Askeladd field is located 180 kilometres (112 miles) from land and in the first phase, Aske-

ladd will consist of three wells in two templates, as well as a pipeline and umbilical tying back the new templates to the existing Snøhvit facility.

"Hammerfest LNG delivers significant volumes to customers in Europe, and the gas from the Barents Sea reinforces our position as a predictable and reliable gas supplier," added Haave.

"Askeladd and other projects in the region will ensure further value creation and production from HNLG for decades," he stated.

The project was originally completed in 2020, but start-up had to wait until the Melkøya plant resumed operations after the fire the same year.

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NEWS BRIEFS

German LNG plan

FNB Gas, the German Association of Gas Transmission System Operators, said its members started the consultation process on December 16 for the Gas Network Development Plan 2022-2032. "The new LNG-plus supply security variants take into account the far-reaching changes in the energy supply situation," said FNB Gas. "Measures to provide the necessary transport capacities are being implemented at full speed by the TSOs. The first grid connections for LNG terminals will be completed by the end of 2022," it added.

FSRU deal for Germany

Höegh LNG Holdings said it signed a binding 10-year time charter contract with the German Federal Ministry for Economic Affairs and Climate Action. The Norwegian shipping company added that its floating storage and regasification unit (FSRU) "Höegh Esperanza" had been allocated to the contract. The company said the vessel would be located at the North Sea port of Wilhelmshaven and be operated by German utility Uniper acting as agent on behalf of the charterer.

NFE revenue growth

New Fortress Energy, the New York-based LNG projects developer, said it expected the business to generate more than \$11 billion of additional liquidity over the next three years and more cash would be returned to shareholders. "Our business is now generating significant, stable, and growing cash, which we believe affords us the ability to both retain capital necessary to grow and return excess capital to shareholders in the form of meaningful dividends," said Wes Edens, Chairman and Chief Executive of NFE.

Australian LNG operator Woodside says government market interference will hit power and gas investments

LNG News Editor

Woodside Energy, the leading Australian oil and gas company and LNG operator in the state of Western Australia, has criticised Federal Government moves to intervene in the Australian natural gas market, including with the imposition of price caps, and said the action was likely to make matters worse.

The Australian Treasury and the department of energy are seeking input on the design of domestic gas trading to address high energy prices and "ensure that our wholesale gas markets deliver adequate supply at reasonable prices and on reasonable terms" for domestic users.

Wholesale gas

"A mandatory code of conduct is proposed to address systemic issues within the wholesale gas market and guide participants' behaviour," stated the Government.

"As part of the code, a reasonable pricing framework will provide a basis for producers and buyers to negotiate domestic wholesale gas contracts at 'reasonable prices', which should reflect the cost of domestic gas production, including a reasonable return," it added.

The Government under Prime Minister Anthony Albanese said it planned to impose a temporary, emergency price cap to ensure industry remains viable and to limit the impact of global energy pressures on households and businesses.

The Labor Party-led government planned to introduce primary legislation as soon as possible to put in place "a strong enforcement framework for the mandatory code and price cap" for the gas market.

Woodside criticised the move by the Government in Canberra, saying it was being brought in with



Woodside CEO O'Neill warns on unprecedented market intervention by ministers that could damage trading

"without any meaningful consultation with industry" and it would create an environment of uncertainty that will result in investment activity dropping across energy markets.

"This will make solving the underlying structural problems in the energy market harder, not easier," said Woodside in a statement.

"Woodside calls on the Federal Government to reconsider this unprecedented intervention and bring energy companies, retailers, manufacturers and infrastructure owners together to properly engage on a solution," said the Perth-based company.

Woodside Chief Executive Meg O'Neill expressed her concerns about the Government's current proposal.

"The Prime Minister last Friday correctly acknowledged that Australia has not invested enough in its own energy security," said O'Neill.

Market intervention

"And yet the unprecedented market intervention announced risks driving investment out of the system," added the CEO.

"That investment, including in natural gas, is crucial to support renewable energy sources as we strive to decarbonise without the

lights going out," stated O'Neill.

The CEO said that in her opinion the policy would not address falling domestic gas supply and the increasingly critical role of gas in providing power.

"These are the primary factors that are driving higher energy prices in the east coast gas market, rather than solely the impact of the tragic war in Ukraine," stated O'Neill.

"We need to unlock gas supply now. For example, Woodside has been looking at options to increase supply, including through new LNG import terminals, exploration spending and further development on the east coast," she explained.

"Unfortunately, the proposed market intervention will make it very difficult for industry to economically invest to increase supply," added the CEO.

Woodside said that no one wanted to see energy shortages and gas rationing.

However, the company stated that it was important to develop a comprehensive, longer-term solution that addresses gas supply and reliability, the overall energy mix and infrastructure "without undermining the market-based economy" of the country.

Construction starts on pipeline loop for first Australian LNG regas terminal at Port Kembla

LNG News Editor

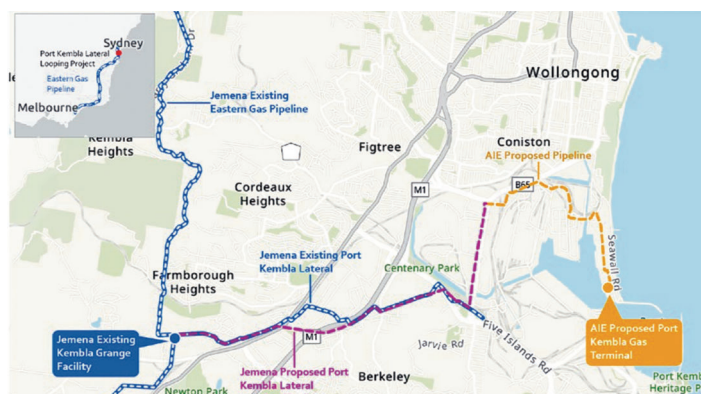
Australian energy infrastructure company Jemena is starting work on the upgrade of the Port Kembla lateral pipeline for the nation's first LNG regasification facility being deployed to strengthen the security of gas supply for the state of New South Wales and the East Coast gas market.

The proposed Port Kembla Lateral Looping Project will connect the floating LNG terminal being developed by Squadron Energy, owned by billionaire businessman Andrew Forrest, to transport regasified LNG from the port to domestic customers via Jemena's Eastern Gas Pipeline.

Schedule

Construction is starting now and commissioning of the pipeline project is expected by the end of 2023.

Jemena, whose formal name is SGSP Assets Pty Ltd, owns, manages or operates energy infras-



Jemena's map for Port Kembla LNG lateral project

structure assets in the eastern states of Queensland and New South Wales and gas pipelines and gas and power distribution networks in Victoria and the Northern Territory.

Jemena's Port Kembla lateral loop involves the construction of a 7.8-kilometre buried gas pipeline from Spring Hill to Kembla Grange in the Wollongong City Council region.

The project will also see Jemena's Kembla Grange facility

upgraded to include a new metering station.

"The Port Kembla lateral looping project complements Jemena's efforts across northern Australia and New South Wales to make more gas available to Australian gas users including the 500 heavy industrial users and 33,000 NSW businesses who rely on natural gas for their operations," explained the company.

Jemena said it had chosen Nacac Australia as its pipeline

construction contractor.

"The gas pipeline will be constructed using standard techniques which involve a combination of open trenching and horizontal directional drilling," said Jemena.

For the Kembla Grange Metering Station project Jemena said it had chosen Wasco Australia to build the facility.

"Construction of the metering station will be confined to the Wyllie Road location in a relatively small defined area," it added.

A charter deal for the LNG FSRU was signed back in 2021 with Norwegian shipping company Høegh LNG Holdings.

The term of the FSRU charter is 15 years with early termination options available after the fifth year and the 10th year.

Forrest and his development company is entitled to time the start-up of the FSRU charter between 2023 and 2025, depending on requirements.

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Turkish President holds talks on gas hub

Turkish President Recep Tayyip Erdogan has held bilateral talks with Russian President Vladimir Putin covering a proposed natural gas hub and other energy projects for both countries flowing through Turkey.

"The issues of the expanding bilateral cooperation in various fields were discussed in detail," said a statement from Turkey and Russia.

"In particular, a record growth of trade turnover was noted. The particular meaning of joint energy projects, mainly in the gas sector, was emphasized," added the statement.

"Considering the results of the recent talks of Gazprom Chairman Aleksei Miller in Istanbul, the exchange of views on the initiative of the creation of a regional gas hub on Turkey territory continued," they stated.

The leaders also discussed the way of implementation of the Istanbul agreements dated July 22 on the supply of Ukrainian grain from Black Sea ports and the export of Russian agriculture products and fertilizers.

"The deal is comprehensive, which requires removal of obstacles for respective supplies from Russia for meeting the demands of the countries most in need," added the statement.

Putin and Erdogan also mentioned the issue of the Syrian settlement in the context of observance of the provisions of the Russian-Turkish memorandum of understanding signed in 2019.

Russia proposed Turkey as a base for some of its sanctioned natural gas supplies in October 2022 after the Nord Stream pipelines under the Baltic Sea to Germany were damaged by blasts.

ExxonMobil targets projects in LNG, in the Permian and South America

LNG News Editor

ExxonMobil said upstream earnings potential was expected to double by 2027 from three years ago with more than 70 percent of capital investments being deployed in strategic developments in LNG projects around the world and in the US Permian Basin as well as in the South American nations of Guyana and Brazil.

The Irving, Texas-based major said that by 2027, upstream production is expected to grow by 500,000 oil-equivalent barrels per day to 4.2 million oil-equivalent barrels per day with more than 50 percent of the total to come from these key growth areas.

Upstream

"Around 90 percent of upstream investments that bring on new oil and flowing gas production are expected to have returns greater than 10 percent at prices less than or equal to \$35 per barrel, while also reducing upstream operated greenhouse-gas emissions intensity by 40-50 percent through 2030, compared to 2016 levels," said ExxonMobil.

The details came in ExxonMo-



Darren Woods has drawn up list of investment priorities

bil's just issued corporate plan for the next five years, with a sizeable increase in investments aimed at emission reductions.

ExxonMobil's priority LNG production areas are at the Golden Pass project in Texas, in the south-east African nation of Mozambique, in Papua New Guinea and in Qatar where its main partner is QatarEnergy.

The corporate plan through 2027 maintains annual capital expenditures at \$20 billion to \$25 billion, while growing lower-emissions investments to about \$17Bln.

ExxonMobil forecast that earnings and cash flow growth was expected to double by 2027 compared with 2019.

There would also be share-repurchase program expanded up to \$50Bln through 2024, including \$15Bln in 2022.

"Our five-year plan is expected to drive leading business outcomes and is a continuation of the path that has delivered industry-leading results in 2022," said Darren Woods, Chairman and Chief Executive.

"We view our success as an 'and' equation, one in which we can produce the energy and products society needs - and - be a leader in reducing greenhouse-gas emissions from our own operations and also those from other companies," added Woods.

Pembina Pipeline sells stake in Key Access Pipeline System

Pembina Pipeline Corp., the Canadian pipelines company and joint owner of the Cedar floating liquefied natural gas project, has issued a business update for 2023, including the sale of the company's interest in Pembina Gas Infrastructure's Key Access Pipeline System.

PGL, which is owned 60 percent by Pembina and 40 percent by US investment firm Kohlberg Kravis Roberts (KKR), has through its subsidiary entered into an agreement to sell its 50 percent non-operated interest in the Key Access Pipeline System.

Under the agreement, PGL will

continue to fund its share of the project costs under the current scope until the end of 2023.

The pipeline system will bring condensate and other petroleum liquids produced with natural gas in the Montney and Duvernay regions in northwest Alberta to the processing and storage hub in Fort Saskatchewan.

Pembina said the current scope aligns with the capital cost estimate of C\$1 billion (\$733M), net to PGL, most recently disclosed by the operator.

Upon closing of the sale, PGL will receive cash proceeds of C\$662.5 million (US\$485.4M).

PGL will use the proceeds to repay drawn credit facilities associated with the KAPS construction funding.

Deal closing

Closing is expected to occur in the first quarter of 2023 and is subject to approval by the Canadian Commissioner of Competition as well as satisfaction of other closing conditions.

Pembina and the Haisla First Nation have a 50-50 partnership joint venture to develop a floating LNG export plant near Kitimat in British Columbia.



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A handwritten signature in black ink, likely belonging to Jill Evanko.

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Wood Mackenzie reports higher storage even amid heating demand surge and sees LNG price easing

LNG News Editor

Wood Mackenzie, the UK energy consultants, said colder temperatures across Europe had increased month-on-month heating demand by 20 percent in December and forecast a softening of LNG prices in 2023.

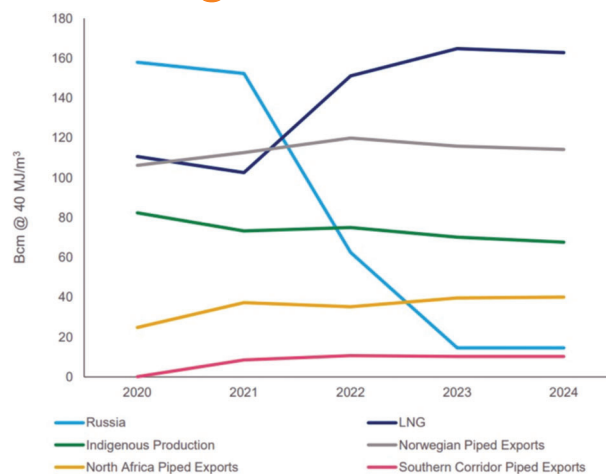
Wood Mackenzie, a unit of the Nasdaq-listed Verisk business, said behavioural change in households and services meant that the amount of gas used in these sectors was 16 percent lower than previous average consumption patterns for similar temperatures.

EU targets

Despite the recent cold weather, Europe was still on track to end this winter with gas storage levels at 38 percent and looks set to meet the 2023 European Union target of having inventories up to 90 percent by November next year.

The findings were published in Wood Mackenzie report entitled "Europe Gas & Power Markets Short-Term Outlook Q4 2022".

"Gas demand has decreased by 10 percent in 2022, equivalent to



European natural gas supply mix (Wood Mackenzie graphic)

50 billion cubic metres," said Penny Leake, Wood Mackenzie research analyst for European gas.

"In 2023, gas demand will continue falling, albeit at a slower rate year-on-year, under normal weather conditions," added Leake.

"Demand in the residential sector will reduce by 12 percent compared to the five-year average, however, it will be similar to levels in 2022 as this was a relatively warm year," she explained.

Industrial sector demand is forecast to fall by an additional

7 percent and gas demand in the power sector will decline by 4 percent as the renewable build-out continues to grow and despite nuclear and hydro-electric output remaining weak.

"From April to October 2023 there will be up to 25 Bcm less Russian gas. But with storage levels reaching 38 percent at the end of this winter, Europe's requirement to refill storage levels next summer will fall by 19 Bcm compared to the corresponding period of 2022," explained Leake.

"This, combined with 9 Bcm additional liquefied natural gas imports, will help hit the 90 percent gas storage capacity target set by the EU," according to her forecast.

The report said that the EU and UK combined are projected to import 164 Bcm of LNG in 2023, a record high, and 13 Bcm more than 2022.

"This will be supported by accelerated regasification capacity projects that are currently underway and will help Europe's storage levels refill by next summer," she stated.

Price forecasts

Pricing in the EU and in the UK are forecast to soften in 2023.

"Prices will need to remain high to keep demand low and to attract LNG," said Mauro Chavez Rodriguez, Research Director European Gas & LNG markets.

"However, if Europe's storage levels reach 38 percent by March as forecast, there is a downside risk to the current forward curve, which is trading at US\$40/million British thermal units," he said.

International Gas Union says upsides of crisis are re-emergence of energy security and investment

The past 12 months have been the most turbulent and testing year ever for the energy industry, in particular the natural gas sector and the markets, according to the International Gas Union President Li Yalan.

The IGU President also noted in the December issue of the IGU's monthly publication that there had also been hard times in many other sectors of the economy and for populations in general.

"The global energy crisis continues and energy markets are rocked by conflict, high and volatile prices, low supply and demand destruction," stated Li, who was nominated as head of the IGU from the Beijing Gas Group.

"Energy consumers are directly exposed to the energy crisis, with people struggling to pay their bills due to high energy cost," she said.

"Many had to turn down their heat this winter, several regions have had to endure power shortages and others are walking through darker streets or working remotely to conserve energy," she added.

Coal use

"Many factories were forced to stop producing, or close down faced with unaffordable energy and deficiency in raw materials. To navigate through the crisis, many countries had to prioritize energy security over energy transition as a result we see a growing number of

countries adding coal-power capacity, and increased use of coal - the most emitting fossil fuel - all across the world, rich and developing alike," she explained.

The IGU President emphasized that there was an upside as there were positive signals that investments were increasing for natural gas projects and for renewables and that these trends needed to continue for the global energy balance to be restored.

"As we wrap up this year and reflect on its many stresses, I hope that a key lesson that can be learned from it is that energy systems cannot be changed overnight," noted Li.

"In the recent years leading up

to this crisis, energy security became forgotten and long-term planning for secure and reliable supply was seemingly forgotten with it," she explained.

"This crisis reminds us that energy security should be brought back in balance with economic and environmental policy considerations," Li declared.

Li added that it was imperative that the world arrives at a "real plan" for an achievable transition toward a clean, secure and affordable energy system.

"Most importantly, it will require an honest dialogue between all key players, including the gas industry," she said.