

LNG Unlimited

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GAIL India and Petronet LNG make good progress at their own pace

Two of largest Indian importers of cargoes boost earnings amid gas expansion plans
LNG News Editor

Gas Authority of India (GAIL), the nation's main natural gas pipeline operator and a leading LNG importer with US volumes from Cove Point in Maryland and also contracted from Russia's Gazprom, reported record results and aimed to tie-up more gas supplies under contract to cover growing demand.

"We aren't looking at short-term contracts as they are costlier," declared GAIL Chairman and Chief Executive Manoj Jain after presenting the company's earnings.

Supply quest

"We would like 1 million tonnes per annum of long-term supplies to begin with and we are looking at a 10-year deal with supplies from January 2023," he added.

The GAIL Chairman said the company continued to receive deliveries from Gazprom despite Western sanctions enforced by other countries after the invasion of Ukraine.

"There have been some disruptions but Gazprom supplies have been regular," said Jain.

Quarterly revenues from operations in LNG, natural gas pipelines, city gas and liquefied petroleum gas (LNG) amounted to 26,968 crore rupees (\$3.47 billion) to the end of March, up from 15,549 (\$2.04Bln) in the same three months of March 2021.

Annual revenues jumped to 91,646.82 (\$11.81Bln) compared with 56,737 (\$7.31Bln) in the previous fiscal year.

GAIL has six subsidiaries including GAIL Global USA Inc., which



GAIL Chairman Manoj Jain seeks to build on record year

looks after its Cove Point LNG interests. The New Delhi-based company also runs an LNG trading business based in Singapore.

Other assets include a majority stake in Konkan LNG, the ownership company of India's Dabhol LNG import terminal, located south of Mumbai, and with 5 million tonnes per annum of capacity.

It additionally has stakes in Petronet LNG and over a dozen other joint ventures and associated business, mainly in India.

The earnings statement showed that annual profits before tax soared to 15,463.52 crore rupees (\$1.99Bln) compared with 7,725.45 crore rupees (\$995.8 million) in the previous fiscal year.

GAIL has a long-term agreement to import 2.85 million tonnes per annum of LNG from the Gazprom Marketing & Trading unit in Singapore.

"We don't see any disruption in our supplies under the deal as ours is a portfolio contract, meaning Gazprom can supply gas from anywhere in the world," explained the GAIL Chairman.

The GAIL Chairman said he was looking to buy natural gas from domestic gas fields and also the occasional spot LNG cargo about once a month to meet increasing demand from city-gas distributors.

Petronet LNG for its part has outlined details about import expansion plans, and issues like target prices for spot cargoes.

Petronet said it was pushing ahead with plans to expand import capacity by 5 million tonnes per annum from the current 17.5 MTPA to 22.5 MTPA.

"It will be completed in next three years maximum by 2024 or maybe beginning of 2025," said Vinod Kumar Mishra, Director of Finance at Petronet, in an extensive post-earnings presentation.

The next capital expenditure target is a new jetty, which would be a third jetty constructed at a price of around 1,700 crore rupees (\$219 million).

"Apart from that we have ambitious plan of having one terminal on the East Coast which we are planning and if it materializes then it will be costing only say 1,500-to-1,600 crore rupees initially as it will be an FSRU terminal," said Mishra in regard to the facility planned for the Port of Gopalpur in the state of Odisha.

Spot cargoes

The Finance Director noted that spot LNG cargoes have not been the subject of high demand in India because of current costs.

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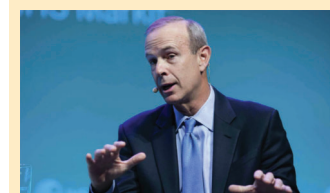
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Shell to proceed with new Australian gas field investment to boost 'Prelude' FLNG capacity

LNG News Editor

Shell has taken a final investment decision to proceed with the Crux natural gas field joint venture offshore Western Australia to provide more feed gas for the "Prelude" floating LNG export plant.

The project has its key regulatory approvals. These include a production licence by the National Offshore Petroleum Titles Administrator.

Cleared

The National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) has also accepted the Crux offshore project proposal.

"Prelude" FLNG only returned to service in April 2022 after resolving some safety issues.

The Australian NOPSEMA body had ordered the closure of the "Prelude" plant in December 2021 after the latest in a series of incidents in an electrical utility on board.



Shell Australia Chairman Nunan says jobs to be created

The Shell-operated FLNG vessel is moored 400 kilometres north of the town of Broome on Western Australia's Kimberley coast and has 3.6 million tonnes per annum of capacity.

Australian regulators had ordered a deeper safety probe by Shell and this meant Shell had to halt the offloading of LNG cargoes from "Prelude" while the unreliable power shutdown issues were investigated.

Resources from the Crux gas field will mean "Prelude" FLNG receiving up to 550 million stan-

dard cubic feet of gas per day.

The Crux project is a joint venture between Shell Australia and its partner, local company SGH Energy.

"This project forms an important part of Shell's integrated gas portfolio," said Wael Sawan, Integrated Gas, Renewables and Energy Solutions Director at Shell.

"Natural gas from Crux will play a key role in helping Asian customers move from coal to gas as a cleaner-burning fuel," added Sawan.

"The project will also boost our customers' security of supply, which is becoming an ever more

significant consideration for global consumers," he stated.

Australian jobs

Shell Australia Chairman Tony Nunan added that developing the Crux project reinforces the company's commitment to Australia, including boosting the regional economy, creating jobs and providing training opportunities.

"The use of Prelude's existing infrastructure enables significantly reduced development costs, making Crux competitive and commercially attractive," added Noonan.

The Crux development will consist of a platform operated remotely from "Prelude". Field construction will start in 2022 and first gas is expected in 2027.

Shell said five wells would be drilled initially, and an export pipeline will connect the platform to "Prelude", which is deployed around 160km to the southwest of the Crux field.

LNG producer Sonatrach signs \$490M deal with Chinese major Sinopec for Illizi basin venture

Sonatrach, the Algerian national energy company and LNG producer, said it signed an agreement worth US\$490 million with Chinese major Sinopec in the form of a production sharing contract for the Zarzaitine block in the Illizi basin of eastern Algeria.

Sonatrach said the 25-year contract was signed on May 28 by the vice-president of exploration and production at Sonatrach, Mohamed Slimani, and the general manager of Sinopec's oil and gas unit, Wu Xiuli, in a ceremony held at the Sonatrach headquarters in Algiers.

Ceremony

The signing took place in the presence of the Algerian Minister of Energy and Mines, Mohamed Arkab, the representatives of the Chinese Ambassador to Algeria, Chen

Zhong, as well as the Chief Executive of Sonatrach, Toufik Hakkar.

Programme

The Algerian agreement with Sinopec follows additional moves in the past month to improve and strengthen energy ties with Italy and Spain for pipeline natural gas supplies and with European Union nations in general as well as Turkey who receive most of Algeria's LNG shipments.

The new Sonatrach-Sinopec agreement followed a previous accord to identify opportunities for joint investment in hydrocarbon exploration and production while integrating cooperation with China in the field of oil and gas and petrochemicals in Algeria.

"Within the framework of this contract, Sonatrach and its Chi-

nese partner undertake to carry out a programme of development and exploration works in accordance with the approved development plan, the objective of which is the recovery and upgrading of hydrocarbons in the field of Zarzaitine," explained Sonatrach.

"This work programme includes, in particular, the revamping of the Gas Lift Unit and the drilling of 12 new development wells," it added.

"It additionally includes workovers for the replenishment of six existing wells, the connection of new development and maintenance of existing surface facilities, as well as the recovery of flared gas and the reduction of carbon emissions," stated Sonatrach.

The Sinopec company has been

present in Algeria since 2003 and operates with Sonatrach on the contractual perimeter of Zarzaitine, within the framework of a contract with the object of increasing the recovery rate of crude oil reserves.

The overall project is backed by a development plan seeking the recovery of nearly 95 million barrels of oil.

"The signing of this contract crowns the negotiations carried out within the framework of the memorandum of understanding signed between the two companies on May 20, 2021 and reflects the desire of the two parties to continue their historic partnership and to strengthen their cooperation in the production of hydrocarbons," the statement concluded.

Grain LNG to expand and offer capacity

The UK Isle of Grain LNG import terminal, located on the Medway River southeast of London in the county of Kent, intends to launch an Open Season to market capacity that will become available in the near future amid record usage and expansion plans.

National Grid Ventures, a subsidiary of National Grid plc, said while all the capacity at the terminal was currently fully contracted capacity would become available from the end of 2028.

The future Open Season plans were mentioned in a statement saying the LNG terminal, the largest in Europe by storage capacity, has already set a new record for utilisation in 2022.

During April, the Grain LNG reported its highest ever monthly utilisation rate, with the terminal exporting a daily average of 431 gigawatt hours of gas, surpassing its previous record of 412.2 GWh recorded in April 2021.

The figure represented 67 percent of the terminals total utilisation and equated to around 13 percent of the UK's total gas demand.

"Current UK gas demand is about average for this time of year. However, the impact of a freeze on Russian gas is being felt across Europe, and as a result we are seeing increased LNG deliveries," said Import Terminal Manager Simon Culkin.

The company noted that Grain LNG is of strategic national importance to UK energy infrastructure and security of supply offering direct access to the UK's National Balancing Point, one of the world's leading gas trading hubs.

Indian LNG deliveries drop again but Punjab gas pipeline opens

LNG News Editor

Shipments of LNG to India dropped for an eighth straight month during April, falling by over 13 percent as costs jumped and rising domestic natural gas production prevented gas shortages while GAIL India also increased pipeline network connections in Punjab.

LNG imports for the month of April 2022 to India's network of six terminals fell to 1.83 million tonnes, or 27 cargoes, from 2.10MT, or 31 cargoes, in April 2021, according to the latest data from the Ministry of Petroleum and Natural Gas.

Costs

India's April LNG shipments had cost around \$1.3 billion, or 16,757 crore Indian rupees, as the rupee fell to an all-time low against the dollar and conversion costs increased.

Cargo costs in April 2021 had come to \$800 million in total for higher volumes that amounted to



GAIL gas pipeline reaches Bathinda refinery in Punjab

four more cargoes. The final whole fiscal-year costs had been \$13.7Bn from April 2021 to March 2022 compared with \$7.9Bn for the previous fiscal year, the Ministry said.

The fiscal-year volumes had come to 23.61MT to the end of March 2022 versus the previous fiscal-year total of 24.44MT, the Ministry had said.

GAIL has also inaugurated a new natural gas pipeline to supply the HPCL Mittal Energy Ltd.'s (H MEL) refinery at Bathinda in the state of Punjab.

The 44.26 kilometres long and

12-inch diameter spur line is from the 500km Dadri-Bawana-Nangal Pipeline (DBNPL) system.

The DBNPL is part of the National Gas Grid and runs from Dadri (Uttar Pradesh state) through Yamunanagar (Haryana state) to Nangal in Punjab to meet growing energy demand in the northern states.

"The pipeline will boost the supply of natural gas in the region, resulting in increased supply for domestic households, vehicles and to commercial and industrial establishments," said GAIL.

Chinese import increases awaited amid 2022 slump offset by pipe gas

Chinese LNG imports have slumped in 2022 so far and they have been offset by increasing pipeline natural gas imports from the Central Asian states of the former Soviet Union.

Lockdowns in large cities like Shanghai because of rising Covid-19 cases curbed economic and industrial activity as well as fuel demand, though China has said these measures will all end in June.

Chinese LNG imports tumbled by 33.4 percent in April 2022 to their lowest monthly total in over two years of 4.34 million tonnes from the April 2021 total of 6.52MT, according to the General Administration of Customs.

Deliveries to China's network of 22 import terminals in the January to April period of 2022

slumped to 21.68MT, a fall of 17.3 percent from the 26.22MT total logged in January-April 2021.

Chinese LNG imports had dropped by 17.9 percent in March 2022 to 4.63MT compared with 5.64MT in the same month of 2021, but still higher than the most recent April total.

China said its pipeline natural gas imports during the first four months of 2022 increased by 7.7 percent to 14.28MT.

The Chinese receive varying volumes of pipeline gas through links from the former Asian republics of Turkmenistan, Kazakhstan and Uzbekistan, as well as from Russia since December 2019 as part of Gazprom's "Power of Siberia" project.

Uzbekistan has restarted gas exports to China after temporarily halting them at the beginning of 2022 to meet its own increasing domestic demand.

The Central Asia-China pipeline originates in Turkmenistan and passes through Uzbekistan and Kazakhstan.

The Central Asia-China gas pipeline, which is 3,665 kilometres (2,277 miles) in length, starts at Gedaim on the Turkmenistan-Uzbekistan border and terminates at Horgos in the Xinjiang region of China before joining with the Chinese grid.

Turkmenistan was China's largest supplier of gas by pipeline in the period January-April followed by Kazakhstan and Uzbekistan.

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NEWS BRIEFS

Italy buys Golar FSRU

Golar LNG Ltd and Italian natural gas grid operator SNAM have signed an agreement for the Italian group to purchase the floating storage and regasification unit (FSRU) "Golar Tundra" for \$350 million to boost LNG imports. The 170,000 cubic metres capacity "Golar Tundra" can operate both as an LNG carrier and as an FSRU. The vessel was built in 2015 and has a regasification capacity of 5 billion cubic metres per year. "In order to maximise its regasification capacity, the vessel will be located in central-northern Italy, close to the areas with greatest gas consumption," said the statement.

Texas LNG contract

Glenfarne Group, the privately-held energy and infrastructure development and management firm based in New York, has signed a contract for its Texas LNG Brownsville project to be built by a joint venture comprising Technip Energies and South Korea's Samsung Engineering. The Texas LNG plant will have 4 million tonnes per annum of output and be constructed in the Port of Brownsville in Texas.

Collision ruling

Awilco LNG, the small Norwegian-based company with two 156,000 cubic metres capacity vessels, the "WilForce" and the "WilPride", said that the company had received the judgement on the liability of the "WilForce" after its involvement in a collision with another vessel off Singapore in May 2019. "As expected, the other vessel was found to have caused the accident and appointed 75:25 liability and the cost of the case. The judgment is open for appeal and an update will be given in due course," said Awilco.

Dutch natural gas trader GasTerra sees rouble payment dispute with Gazprom lead to Russians cutting Netherlands gas

LNG News Editor

Dutch natural gas trader GasTerra said it had decided not to comply with Russian pipeline natural gas supplier Gazprom's payment requirements in roubles and consequently has been cut off by the Russian company.

These payment requirements were set out in a decree passed by Russian President Vladimir Putin regarding payment for the supply of Russian gas.

In response to GasTerra's decision, Gazprom declared it would discontinue supplies to the Netherlands with effect from the 31st of May 2022.

GasTerra, which buys and trades gas on behalf of the Dutch Government, said it had contracted elsewhere for the 2 billion cubic metres of gas it had expected to receive from Gazprom through October 2022.

GasTerra is 50 percent-owned by Dutch Government entities while another joint 50 percent stake is shared between energy majors Shell and ExxonMobil.

Groningen gas field

GasTerra is the sole buyer of Dutch natural gas from the domestic Groningen field, which is being discontinued by the Government because gas extraction is supposedly causing local earth tremors.

In addition to Groningen gas, GasTerra also buys gas from smaller Dutch gas fields. This is a statutory public task under the Dutch Gas Act.

GasTerra in addition to buying Russian gas from Gazprom and declining volumes from the Groningen field, additionally purchases gas from Germany, the UK and Norway.

Dutch Energy Minister Rob Jetten said he understood the reasoning behind the stance of GasTerra on buying from Gazprom.



GasTerra is buyer of Dutch gas from Groningen field

"We understand GasTerra's decision not to agree to Gazprom's unilaterally imposed payment conditions," said Jetten.

"This decision will have no consequences for the physical delivery of gas to Dutch households," the Minister stated. The GasTerra volumes from Gazprom of 2 Bcm are said to amount to just 5 percent of overall Dutch needs.

Russia had earlier stated that gas supplies would have to be paid for in roubles as the sanctions-hit nation tried to offset a plunge in the Russian roubles.

This means that nation and trading companies wishing to continue buying gas amid Western sanctions would have to open both a euro and a rouble account with Gazprombank in Moscow.

"GasTerra will not go along with Gazprom's payment demands. This is because to do so would risk breaching sanctions imposed by the European Union and also because there are too many financial and operational risks associated with the required payment route," said the GasTerra statement.

"The cessation of supply by Gazprom means that, between now and 1 October 2022, the date

on which the contract ends, approximately 2 billion cubic metres of contracted gas will not be delivered. GasTerra has anticipated this by buying gas from other providers," it said.

"The European gas market is highly integrated and extensive. However, it is impossible to predict how the lost supply will affect the supply-demand situation and whether the European market can absorb this loss of supply without serious consequences," it admitted.

Oil cuts

In another sanctions move, EU leaders agreed on "in principle" on May 30 to cut 90 percent of oil imports from Russia by the end of 2022.

However, three nations in the 27-nation bloc Hungary, Slovakia and the Czech Republic will be exempt by the EU from implementing the oil ban.

Two-thirds of the Russian oil imported into the EU is delivered at ports by oil tankers and one third by the Druzhba oil pipeline.

Hungary, Slovakia and the Czech Republic are all connected to the southern leg of the oil pipeline.

Chevron overhauls corporate structure and team for energy, LNG and carbon-capture challenges

LNG News Editor

Chevron Corp., the US oil and gas major with additional successful LNG plants in Australia and in Africa and a pipeline gas supply business in the Middle East, has overhauled its corporate structure and senior executive team to strengthen portfolio operations.

Chevron, based in San Ramon in California, said that from October 2022 the company would consolidate its Upstream, Midstream and Downstream business segments under a new executive vice president for Oil, Products & Gas, who will oversee the full value chain.

Divisions consolidated

As part of this change, the company is consolidating into two Upstream regions, Americas Exploration & Production and International Exploration & Production.

The company is also organizing its Strategy & Sustainability, Corporate Affairs and Business Development functions under a new executive vice president for Strategy, Policy & Development.

"The changes build on the company's enterprise-wide transformation in 2020, which has produced improved operational and financial results," said Chevron.

Chevron believes the new leadership structure will enable a more integrated approach to capital allocation, asset class excellence



Wirth seeks to enhance all aspects of the business

and value-chain optimization, and "facilitate more effective external engagement and business development" impacts.

"We've made significant progress over the last two years, and these changes position us to further enhance execution across all aspects of our business as the energy system evolves," said Mike Wirth, Chevron's Chairman and Chief Executive.

"It will also bring strategy, policy and business development into tighter alignment as we focus on leveraging our strengths to deliver lower carbon energy to a growing world," stated Wirth.

The company made the following personnel appointments, effective October 1, 2022:

Mark Nelson was named executive vice president, Strategy, Policy & Development and Nigel

Hearne is the new executive vice president, Oil, Products & Gas. Nelson and Hearne will report to Wirth in their new roles.

Clay Neff is the new president, International Exploration & Production; Bruce Niemeyer was named president, Americas Exploration & Production; and Balaji Krishnamurthy is taking the vice president role for Chevron Strategy & Sustainability.

Chevron's major LNG activities are as the operator of three plants, Gorgon LNG and Wheatstone LNG in Western Australia and Angola LNG in southwest Africa.

Additionally, Chevron took over natural gas fields and assets offshore Israel when it acquired Noble Energy.

The company made additional personnel announcements regarding other senior executives.

Jay Johnson, executive vice president, Upstream, was named executive vice president, senior advisor, effective October 1, 2022, and will support the transition until January 31, 2023.

Johnson has more than 41 years of service to the company.

Retirees

Jay Pryor, vice president, Chevron Business Development, will retire after more than 43 years of service to the company, effective July 29, 2022.

Steve Green, president, Chevron North America Exploration & Production, will also retire after more than 24 years of service to the company and its predecessors, effective September 30, 2022.

"I'm confident that our new team will continue to effectively lead the company in delivering the affordable, reliable and ever-cleaner energy that enables human progress," said Wirth.

Wirth stated that he especially thanked Jay Johnson, Jay Pryor and Steve Green for all they've done for Chevron, the industry and the company's employees over the course of their careers.

"Each of them exemplifies the finest qualities of character, integrity and excellence, and their influence will be felt for many decades still to come," stated Wirth.

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Chart completes acquisition of US firm

Chart Industries, the US LNG and industrial gases equipment-maker, has completed the acquisition of Fronti Fabrications Inc., a specialist in engineering, machining and welding for the cryogenic and gas sectors.

"With over 20 years of experience in liquefaction, heat exchangers and cold boxes, Fronti adds a known team to expand Chart's cold-box manufacturing capacity and capability, including work currently underway on Chart hydrogen and helium liquefiers," said Chart.

Chart noted that Fronti, which was purchased for \$20 million, also supplies new-build pressure vessels and performs repairs with certification to the code of the American Society of Mechanical Engineers.

Chart, based in Atlanta, Georgia said the acquisition would benefit the company's growing order base in the "Big LNG" and the small-scale sector in the US and elsewhere.

"Given our continued demand for 'Big LNG', small-scale LNG and hydrogen-helium liquefaction, having more than one United States cold-box fabrication facility (in addition to our New Iberia, Louisiana location) adds agility and capacity to further improve our delivery," said Chart.

The company added that the acquisition of Fronti, based in Pennsylvania, prepares the ground for the anticipated increase in LNG and gas equipment demand in the coming years.

Coal-seam gas used in Australia to provide power in Botswana

LNG News Editor

Tlou Energy, a UK-listed company focused on delivering natural gas for power in Southern Africa, has reached a landmark in Botswana with work starting on grid connection for its coal-seam gas project, which is used as LNG feed gas in Australia where Tlou Energy is also listed.

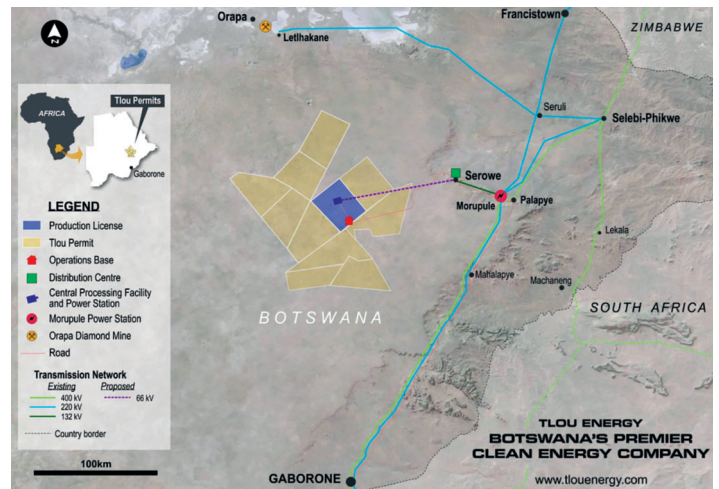
Botswana, South Africa's northern neighbour, has a significant energy shortage and generally relies on imported power and diesel generation to meet its electricity requirements.

Lesedi project

Tlou Energy is the 100 percent owner of the first commercial natural gas venture using CSG in the country, the Lesedi CBM Project.

The Lesedi gas-to-power project is located in Botswana's Central District, approximately 100 kilometres from the existing electricity grid.

"To connect Tlou's gas field and proposed generation site at Lesedi to the grid, a 100 Km, 66kV transmission line and supporting substations are required,"



Southern African nation will use own resources for power

explained Tlou Energy.

The company said the line would join the existing grid near the town of Serowe and would be capable of carrying up to 25 megawatts of power.

"Initial electricity generated will be sold to Botswana Power Corp., the national power utility under an agreed 10MW Power Purchase Agreement (PPA). First revenue under this PPA is expected in late 2023," added Tlou Energy.

The contractor Zismo Engineering Pty Ltd has completed its pre-

liminary work and bush clearing of the route is underway.

"Preliminary work included assembling the project team and resources, mobilisation of plant and equipment, line survey and design, pole structure modelling, and review and approval by Tlou's Owners Engineer, Mott MacDonald," the company said.

Tlou Energy's Managing Director, Tony Gilby, stated that it was great to have the transmission line work underway in the field.

Santos balances exports with domestic gas deals in Australia

Santos, the Asia-Pacific LNG plant operator and Western Australia's biggest domestic natural gas supplier, has renewed a gas supply agreements with Yara Pilbara Fertilisers to supply the Yara liquid ammonia plant on the Burrup Peninsula in Western Australia.

Santos said it would supply more than 120 petajoules of natural gas over five years, starting at the completion of Yara's current agreement with Santos in 2023.

"In addition to the gas supply agreement, Santos and Yara will also work together to explore decarbonisation opportunities in Western Australia, including carbon capture and storage," said Santos.

Santos is a major Australian LNG player, operating the Gladstone plant in Queensland, the Darwin facility in the Northern Territory and with significant stakes in LNG in Papua New Guinea.

Santos Chief Executive Kevin Gallagher said Santos would continue to support Western Australian industry through the delivery of competitively priced domestic natural gas.

"We are delighted to extend our agreement with Yara, reinforcing our position as WA's biggest supplier of domestic gas to the local market," stated Gallagher.

"Santos supplies around 40 percent of the State's total domestic

demand, and we are committed to ongoing investment in developing new gas supplies in WA," he added.

"As Australia's biggest domestic gas supplier and a leading Asia Pacific LNG supplier, we are committed to supplying critical fuels such as natural gas in a more sustainable way through decarbonising projects," said the CEO.

The region has been undergoing some significant consolidation in the oil and gas market with Santos taking over PNG-based Oil Search and Perth, Australia-based Woodside acquiring the energy assets of commodities giant BHP Group.



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Crowley Maritime opens small-scale terminal for LNG in Puerto Rico amid Caribbean fuel growth

LNG News Editor

Crowley Maritime, a leading US shipping line in Central America and the Caribbean, has inaugurated an LNG unloading terminal and supply depot in Peñuelas for small-scale users in the US territory of Puerto Rico where clean energy needs are increasing.

The Crowley facility will receive 10,000-gallon units of LNG in ISO containers delivered by its cargo ships, mostly from Florida, and then distributed by road tanker trucks to customers.

LNG service

The company said that upon arrival at the customer's site, the LNG is regasified and used for power generation and energy needs.

The inaugural event at the Peñuelas LNG terminal was hosted by Crowley Chairman and Chief Executive Tom Crowley and attended by executives and officials, including Puerto Rico Governor Pedro Pierluisi and Puerto Rico's Resident Commissioner in Wash-



Inauguration of Peñuelas terminal hosted by Crowley

ington D.C., Jenniffer González-Colón.

The facility will significantly increase Crowley's service capabilities in Puerto Rico where it currently delivers more than 94 million gallons of LNG annually.

When operating at full distribution capacity, the Crowley LNG will help power an aggregate of 120 megawatts of cleaner energy, replacing diesel and fuel oil, and helping to reduce emissions.

"We continue to expand our capacity and investment in Puerto

Rico with the opening of this special facility, which enhances Crowley's LNG capabilities across diverse industries," said Tom Crowley.

"Our LNG solutions allow industrial and commercial clients to plan, monitor and produce their own energy while protecting their business from potential threats such as power outages or natural disasters," explained the CEO.

Crowley said the company had been fostering strong and transparent relationships with govern-

ment and business leaders in Puerto Rico and allowing the company to play a pivotal role in supplying cost-efficient, sustainable LNG to the island's leading sectors.

"As Puerto Rico moves forward on its quest to transform its dated and fragile electric generation system into a first-class energy network, the use of alternative and transitional fuels like LNG will be critical," said Puerto Rico Governor Pierluisi.

"Crowley's new LNG loading terminal in Peñuelas will foster much needed new economic activity for municipalities in the island, and it will also position Puerto Rico's industrial and commercial sector on a fast-track path toward economic growth by providing reliable and environmentally friendlier energy solutions," added Pierluisi.

"My administration is pleased to join in today's milestone celebration, which further solidifies Crowley's long history of serving the Puerto Rico market," stated the Governor.

Avenir LNG ends first-phase development of global small-scale fleet and terminals plans

Avenir LNG, the Norwegian-listed small-scale LNG project developer and vessel owner, has taken delivery of the "Avenir Achievement" as it expands its small-scale terminal and carrier business.

The "Avenir Achievement" is the second dual-purpose small-scale carrier of 20,000 cubic metres capacity constructed at the Nantong shipyard in China owned by CIMC Sinopacific Offshore and Engineering.

The "Avenir Achievement" is the sixth small-scale LNG vessel to be delivered to the Norwegian company.

Avenir is a joint venture owned by London-based Stolt-Nielsen and shipping company partners Höegh

LNG and Golar LNG Ltd.

"The vessel will be equipped with boil-off gas reliquefaction and simultaneous operations capabilities, making her the world's largest, most efficient and versatile LNG Bunker Supply Vessel," said Avenir.

Six-month charter

From delivery the vessel will initially be employed on a six-month time charter with New Fortress Energy, the US-based LNG-for-power company, before commencing a three-year charter with Shell North America LNG in the first quarter of 2023.

Avenir noted that the charter with Shell has the option to be

extended for up to five years.

"We are delighted to see the delivery of the 'Avenir Achievement' and the completion of Avenir's phase one newbuilding programme," said Peter Mackey, Avenir Chief Executive.

"This has been an enormous joint effort from the ship yard and Avenir team through a challenging period over the past three years," he added.

Mackey stated that Avenir had now concluded its initial asset development programme, having brought six newbuild vessels and a small-scale import terminal in Sardinia over the past 18 months.

"We continue to see enormous growth potential in the small-

scale LNG segment and we expect to announce our phase-two growth programme in the second half of 2022, bringing additional small-scale LNG terminals and vessels into the market," declared Mackey.

Growth

Mackey said that Avenir's assets and partnerships are now in place in China, Malaysia, the Mediterranean, the Baltic Sea and the Caribbean.

Avenir agreed at the end of March to buy out the shareholdings of its Italian partners in the LNG terminal at Port of Oristano in Sardinia.