LNG Unlimited
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Asia-Europe trading consolidation planned as LNG futures evolve

Japanese and French firms set to combine their LNG trade efforts

Our Europe editor

EDF Trading and Jera in talks for closer relationship

Global LNG trading is evolving in terms of the development of futures and pricing products and in the consolidation of partnerships, the latest being between Jera Co Inc. of Japan and France's EDF Trading.

In latest market events, the Singapore Exchange (SGX) cleared the first futures contract for LNG delivered into the Dubai, Kuwait and India (DKI) index market at a price of US$9.85 per million British thermal units.

A total of 100,000 MMBtus of the February 2018 Futures traded and cleared at the price, said the SGX in a statement.

Brokered

The futures were brokered by inter-dealer global brokerage Tullett Prebon, whose headquarters are in London, and traded by Italian energy company Eni and leading commodities firm Trafigura.

This is a trading boost for the DKI SGX LNG Index, the first derivative based on delivered LNG cargo prices in the Middle East and India region.

The DKI futures contract is based on a price assessment formulated for Singapore on values of physical cargoes to be delivered ex-ship (DES) to the specified ports within a designated delivery period.

The assessment on which the futures contract is based is for a cargo of between 138,000 cubic metres capacity and 170,000 cubic metres capacity.

The SGX noted that the LNG market is in a period of transition as it is moving away from long-term oil-linked contracts to increased spot market activity.

That's as Japanese LNG player Jera, the procurement company set up by Tokyo Electric Power Co and Chubu Electric, signed an agreement to cooperate on LNG with European company EDF Trading, a subsidiary of Electricite de France.

The non-binding accord may lead to a merger of the Jera-EDF LNG trading businesses and negotiations will continue into 2018.

Their initial cooperation will be through a company called Jera Trading International (Jerat), already in existence and in which Jera holds 67 percent of the shares and EDF Trading has 33 percent.

This two firms aims to build on the successful completion in April 2017 of collaboration on coal and freight trading through the Jerat joint venture.

"With demand for LNG in Japan becoming increasingly variable and difficult to predict and the ramp up in US LNG liquefaction, Europe has become a key balancing market for excess global LNG," the companies said.

Jera was founded as a procurement company for Tepco and Chubu with their more than 40 million tonnes per annum of LNG needs.

However, it has developed into a full trading concern focusing on developing flexible LNG supply sources and creating new demand in other markets where a participation can be secured.

EDF Trading is already a successful third-party LNG business with access to the European LNG infrastructure and gas markets. EDF is additionally one of the largest financial Japan-Korea Marker index traders in the Asian market.

"By bringing together their resources, the parties will be in a better position to respond to uncertainties of LNG demand in Japan and Europe and supply Jera and EDF's wider global portfolio, to optimise their operations and improve the competitiveness of LNG in the market," they stated.

"Subject to the completion of binding agreements and approval by the respective corporate governance bodies of both parties, Jera and EDF Trading would combine their LNG trading activities through Jerat, and Jerat would become the exclusive LNG optimiser for Jera and the EDF Group," said the companies. ■

UNLIMITED AGENDA

GTT CEO says upswing in LNG charter rates and expansion of US shipments will help whole industry

Our Europe editor

Gaztransport and Technigaz (GTT), the French LNG maritime storage tank firm, and its leading executives had their annual meeting with investors recently to highlight the positive trends in the current market, reflected in the upswing in ship charter rates on the spot market, the rise in LNG imports and the benefits of competition provided by US shipments.

GTT Chairman and Chief Executive Philippe Berterottiere also focused on several other topics, including the company's increase in research and development to consolidate its market position, GTT's technological leadership, the expansion of the LNG fuel sector and GTT's growth through a recent acquisition.

CEO Berterottiere focused on R&D and strategy

Validation

"A new validation phase was launched for the Mark V technology following the detection of technical difficulties," the CEO said at the investor day event.

"Efforts are continuing to produce an improved version of the Mark V in terms of performance as well as installation costs.

"At the same time, GTT finalised and put on the market the Mark III Flex-plus, a new version of Mark III Flex, a proven technology whose thermal performance level is now comparable to that of the current Mark V version," added Berterottiere.

The company noted that in November it won a major contract regarding the design of LNG fuel tanks for nine new giant container vessels intended for France-based shipping line CMA CGM.

"Moreover, at the beginning of December, the company signed a cooperation agreement with the Finnish group Wartsila, a major player in the maritime industry and LNG fuel solutions.

"These two successes have consolidated the Group's position on this highly promising market," he added.

Berterottiere also explained more about the acquisition of 75 percent of the shares in Singapore-based company Ascenz, giving GTT access to new "smart shipping" solutions in LNG.

"This operation will enhance the range of GTT's services and boost the Group's growth in this field," said the CEO. Berterottiere explained that the company was following the path it had outlined at the time of its initial public offering of shares to become listed on the Euronext exchange in February 2014.

"We are progressing along our strategic roadmap thanks to major successes in segments with a bright future," said the CEO.

"CMA CGM's order of nine giant container vessels is highly significant, but also emblematic of the confidence of major maritime industry players in the widespread adoption of LNG as a fuel.

"The partnerships we are forming with major industry players enable us to step up the deployment of GTT's solutions in a field which is undergoing a real technological transformation," added Berterottiere.

"The acquisition of Ascenz also gives a new dimension to our strategy through the support of shipowners looking to increase the efficiency of their vessels," stated the CEO. ■

Kosmos Energy will drill West African Tiger Shark prospect to determine if FLNG projects will multiply

Kosmos Energy, the stakeholder with BP of the UK in two floating LNG production projects for natural gas discoveries in the Greater Tortue fields offshore Senegal and Mauritania in West Africa, said it completed its latest drilling in a Mauritanian exploration well and would be moving on for a two-month drilling campaign near existing feed-gas finds.

Kosmos said the Lamantin-1 well located in Block C-12 in about 2,200 metres of water drilled to a total depth of 5,150 metres and was regarded as a failure in the previously untested area of the Campanian reservoir.

"As interpreted from logs and samples collected during drilling and wireline operations, our evaluation suggests the Campanian reservoir objective was water bearing with some residual hydrocarbons," said Kosmos.

"The well will now be plugged and abandoned and the well results integrated into the ongoing evaluation of the significant remaining prospectivity in Kosmos's large acreage position," said the Dallas, Texas-based company.

Andrew G. Inglis, Chairman and Chief Executive of Kosmos, said the company was still in the early stages of exploring this newly emerging basin and its forward drilling programme remained unchanged.

The Kosmos-BP LNG proposals for the Tortue discoveries, with resources estimated at 25 trillion cubic feet of gas, are to deploy two FLNG production hulls.

The first gas from the first Kosmos-BP FLNG Train 1 is scheduled for 2021 and the start of the second FLNG Train 2 is set for 2023.

However, Kosmos is continuing with its drilling campaign in the already prolific area of the Atlantic Margins.

"The drillship will now proceed as planned to test the independent Requin Tigre prospect offshore Senegal, which will be followed by two high-impact oil tests offshore Suriname in mid-2018," added CEO Inglis.

The Requin Tigre (Tiger Shark) prospect is about 150 kilometres offshore and 60 kilometres west of the Tortue discoveries, as well as 80 kilometres north of the Yakaar gas find in about 3,100 metres of water. It is estimated that drilling will take 60 days.

Analysts say that more substantial discoveries could open the way for additional ventures to be considered for the future.

Kosmos holds rights in the C-6, C-8, C-12, C-13, and C-18 contract areas under production sharing contracts with the Government of Mauritania's state energy company, Societe Mauritanienne Des Hydrocarbures et de Patrimoine Minier (SMHPM). ■

Tellurian gets $94.8M from share to spend on LNG project

Tellurian Inc. closed its public offering of 10 million shares at $10.00 per share and its net proceeds amounted to $94.8 million to spend mostly on engineering and development expenses for the Driftwood LNG project in Louisiana.

Swiss bank Credit Suisse Securities acted as sole bookrunning manager for the offering, and Tuohy Brothers Investment Research Inc. was co-manager.

"The company has granted the underwriters a 30-day option to purchase up to 1.5M additional shares of common stock to cover over-allotments, if any," said Tellurian.

Tellurian shares were last down 0.63 percent at $9.63 on the Nasdaq global exchange, giving the company a market value of $2.15 billion.

The shares had reached a year-high of $16.08 in May 2017 just after its listing.

Tellurian, founded by former Cheniere Energy Chief Executive Charif Souki and by Martin Houston, who ran the operations of the LNG portfolio company, BG of the UK, has already purchased shale-gas assets while its project is going through the regulatory process.

Tellurian had previously planned to sell 10M shares to investors in May 2017 and surprisingly withdrew its public offering just 24 hours after first announcing the transaction, citing adverse stock market conditions.

Tellurian confirmed in November 2017 that it had engaged US energy project construction company Bechtel Inc. to conduct additional engineering through 2018.

ExxonMobil-Eni Mozambique deal puts new projects under US major

Our Europe editor

ExxonMobil CEO Woods pledges to grow value of gas

Italian energy company Eni said it completed its sale of a 25 percent indirect interest in the Area 4 licence block in the Rovuma Basin of Mozambique to ExxonMobil, including a payment of $2.8 billion that gets the US major on board to run all other ventures after the first floating LNG project in the Coral South field.

The Italians said that their Eni East Africa subsidiary would be renamed the Mozambique Rovuma Venture, which owns 70 percent of the Area 4 concession.

Shuffle

The shuffling of the shareholdings now gives Eni 35.7 percent, ExxonMobil 35.7 percent and China National Petroleum Corp. 28.6 percent.

The remaining interests in Area 4, each of 10 percent, are held by Mozambican state-run energy company Empresa Nacional de Hidrocarbonetos, Korea Gas Corp and Portugal's Galp Energia.

"Eni will continue to lead the Coral South floating LNG project and all upstream operations in Area 4, while ExxonMobil will lead the construction and operation of all future natural gas liquefaction and related facilities," a statement said.

"This operating model will enable the use of best practices and capabilities between Eni and ExxonMobil, with each company focusing on distinct and clearly defined scopes while preserving the benefits of fully integrated projects," it stated.

The final investment decision for the Coral South FLNG Project, the first development of the considerable gas resources discovered by Eni in Area 4, was reached in May 2017, just three years after the drilling of the final exploration well.

"ExxonMobil brings our LNG leadership and experience to support development of Mozambique's high-quality natural gas resources," said Darren W. Woods, ExxonMobil's Chairman and Chief Executive.

"We are confident that our project and marketing expertise, coupled with our financial strength, will help grow the value of Mozambique's energy resources. We will work closely with our partners to develop this world-class resource," stated Woods.

The deepwater Area 4 discoveries contain an estimated 85 trillion cubic feet (2,400 billion cubic metres) of natural gas, positioning Mozambique to be a major global supplier for the next 40 years and beyond.

LNG equipment maker Air Products wins second Coral South FLNG order

US liquefied natural gas equipment maker Air Products has won its second order from the engineering and construction joint venture of TechnipFMC and Japan's JGC Corp. for the Coral South floating production project offshore Mozambique.

Air Products said it would supply its "Medium and High Purity Nitrogen Package' for the FLNG hull being constructed for Indian Ocean waters.

This represents the US company's second supply contract from TechnipFMC-JGC for this LNG project, led by Italian energy company Eni. Earlier in 2017, Air Products announced an accord to supply its proprietary cryogenic, coil-wound heat exchanger technology and liquefaction process license for the facility.

Coral South FLNG is the first project sanctioned by the Area 4 Partners for the development of the considerable gas resources discovered by Eni and its Partners in the Rovuma Basin offshore Mozambique.

The first phase of the Coral field development will involve 5 Tcf of gas and production is expected to begin by 2021.

The Eni-led project is targeting the southern part of the Coral reservoir of the prolific Rovumo Basin with an FLNG hull to produce 3.4 million tonnes per annum.

The FLNG facility is being built by TechnipFMC-JGC in a venture with the Samsung Heavy Industries shipyard in South Korea.

Air Products said it would use the company's PRISM Membrane Separators to produce both medium - purity and high-purity nitrogen.

The combined nitrogen production will exceed 100,000 Nm3/day. The FLNG plant will be moored and operate on the surface above 6,500 feet of water in the Indian Ocean.

NEWS NUDGES

Skangas-UK LNG accord

Skangas, the Nordic LNG operator and supplier, signed a preliminary accord with the UK National Grid and its Isle of Grain LNG import terminal to acquire supplies to be loaded onto small-scale carriers at the facility, located on the Medway River southeast of London. "Grain LNG, which operates primarily as a large-scale import terminal, is firmly committed to developing an LNG break-bulk marine facility to make it possible for small vessels to reload and bunker LNG," said Skangas. The UK facility is set to offer small-scale ship reloading at its terminal in Kent.

Korean-GTT agreement

French LNG storage technology firm GTT and South Korean naval engineering company DSEC have signed a technical assistance and licensing agreement for the construction of GTT's membrane containment systems. The companies said the accord addressed the requirements of clients wishing to fit membrane-type LNG fuel tanks to all types of vessels, including cruise ships, container vessels, bulk carriers or ferries. "Moreover, DSEC is already recognized for its ability to implement complete solutions including fuel gas supply systems and cargo-handling systems," said GTT.

Teekay $816M ship loans

Teekay LNG Partners, the US-listed fleet owner, completed an $816 million long-term debt facility agreement to finance all six of the partnership's 50-percent owned ARC7 LNG carrier newbuilds, with the first vessel to be delivered in January 2018 and the remaining vessels through to early-2020. The ships will service the Yamal LNG project under charter contracts with firm periods out to 2045 plus options.

Japanese average spot LNG cargo contracted prices at $9.00 and rising

Our Asia-Pacific editor

Tokyo Bay is still largest recipient of global cargo shipments

Japanese government figures show that average spot liquefied natural gas cargo prices for Northeast Asia in November rose by $2.00 per million British thermal units to $9.00 per MMBtu compared with the same month a year ago.

The latest average contracted price is more than 28 percent higher than the $7.00 per MMBtu average cargo price in November 2016 and a more than 9 percent rise on the $8.20 per MMBtu logged in the previous month of October.

Increases

The price of LNG cargoes that actually arrived in November was $7.10 per MMBtu versus $6.10 per MMBtu in the previous month and $5.90 per MMBtu in November 2016.

The spot cargo numbers come from the commerce division of the Japanese Ministry of Economy, Trade and Industry and are only issued if a minimum number of two trades are recorded.

The Ministry emphasizes that "spot LNG" refers to fuel traded on a cargo-to-cargo basis and does not mean shipments under contracts on a short-term, medium-term or long-term basis. The statistical accounting of the spot prices started in March 2014.

"Subjects of these statistics are companies which are end-consumers of spot LNG. In order to avoid double counting, companies that mediate transactions (for example trading companies) are excluded from subjects of these statistics," the Ministry noted.

Overall Japanese LNG imports dropped for a third month in October, with falling Middle East cargoes being partially offset by Asian deliveries as the nation opted for fewer shipments.

The LNG imports for October amounted to 6.13 million tonnes, down 2.3 percent from the 6.28MT registered in October 2016.

The latest imports of LNG cost Japan a total of 280.05 billion yen ($2.50Bln), up 15.5 percent from 242.4Bln yen ($2.16Bln), according to the trade figures from the Japanese Finance Ministry.

Shipments of thermal coal, a competitor to LNG for power generation, were down 0.8 percent in October compared with a year ago.

Japan's nuclear power plants, numbering more than 50, were largely still offline in October with only four currently operating.

Chart Ferox continues natural gas fuel station build-out in Europe

The Chart Industries fuel infrastructure subsidiary Chart Ferox has commissioned a fourth permanent fueling station in Finland for natural gas vehicles, located close to Vantaa airport in the Finnish capital Helsinki in a project also involving natural gas company Gasum.

The latest public LNG station is owned and operated by Gasum, a developer of LNG fuel infrastructure in the Nordic region alongside Chart.

Chart has designed and built three other Finnish natural gas stations in the Vuosaari district of Helsinki and in the towns of Turku and Jyvaskyla. "Chart shares the view that natural gas will play an increased role in the transport sector," said Pavel Mátl, Business Director of Chart Ferox.

"Strict emissions targets and concerns about carbon-dioxide footprints, mean that LNG and liquefied biogas are fast becoming accepted as the future fuel for heavy haulage vehicles," added the Chart executive.

"It's very exciting to see the commitment of major truck operators, through the availability of modern LNG-powered vehicles, and progressive companies like Gasum investing in the fueling infrastructure to keep demand and supply in tandem," he stated.

Chart noted that as the market evolves so does the fueling station design of Chart Ferox.

"This latest one is equipped to serve various types of LNG-fueled trucks and incorporates a CNG module and dispenser for cars and vans, which can accommodate two vehicles simultaneously.

"Safety, reliability, zero emissions to atmosphere and operator comfort are paramount and the station incorporates many associated features," the company said.

Commodities firm Trafigura is optimistic on LNG front and progresses with northeast UK imports plan

Our Europe editor

Global commodities company Trafigura said its liquefied natural gas traded volumes rose more than 26 percent in the past year to 8.1 million tonnes of LNG compared with 6.4MT in 2016 as it boosted its personnel in Singapore for the Asian market and continued work in Europe on a UK LNG import infrastructure.

Trafigura said annual net profits from all its trading, including LNG, amounted to US$887 million, 9 percent below the level of US$975M recorded in 2016.

Trafigura CEO Jeremy Weir reported overall net profit fall

Volumes

Gross profit came in at US$2.23 billion, 2 percent below the year-ago figure of US$2.29Bln.

"Our gross margin for the year was 1.6 percent, down from 2.3 percent recorded in 2016," the company said.

In LNG, Trafigura established itself as a leading independent trader some years ago and "extended this lead" in 2017.

"During 2017 the LNG market continued its dramatic growth with production ramping-up notably in Australia, the US and Angola, which was met by a strong increase in Far East demand, particularly China," said Trafigura in its full-year earnings report.

"Another factor contributing to the growth of the market was the displacement of coal by gas in the power generation mix in Europe.

"The market reached new levels of liquidity, transparency, and competitiveness, as well as more integration with natural gas markets in the US and Europe," the company said. "Unfortunately, these improved conditions have yet to create sufficient momentum for the establishment of an internationally recognised price benchmark to trade and hedge against," it added.

"In April 2017 Trafigura made its own contribution to the development of a transparent and liquid market by launching an initiative to promote a standard Master Sales and Purchase Agreement (MSPA) for LNG," the company said.

"All these factors have helped Trafigura continue its profitable growth in LNG and maintain its position as the world's largest independent trader while also developing an important position in natural gas trading in the US and Europe," it stated.

Trafigura noted that it expanded the global trading team to prepare for further growth and added strength in Singapore to react to the increased geographical diversification of its LNG business and to sharpen its focus on the Asian market.

"We also invested in infrastructure, continued our work on an import facility that can accept floating storage and regasification units (FSRUs) in Teesside, North-Eastern England, and taking a minority stake in an FSRU project at Port Qasim, Pakistan.

"We expect these, along with the development of our natural gas trading activity in the US and Europe, to help drive further growth in the coming years," added Trafigura.

UK-listed SDX Energy makes third gas find in Morocco

SDX Energy Inc., the UK-listed oil and gas company, has made its third successive onshore natural gas discovery in Morocco as the North African country pursues an LNG import project to improve gas availability for industry and power.

SDX said the latest gas find was at its KSR-16 development well on the onshore Sebou permit located in Morocco's Rharb Basin, a 135 square kilometres concession located between the coastal city of Tangier and the capital Rabat.

The company had previously made discoveries at its KSR-15 well following an earlier find at the KSR-14 development, all within the Sebou permit in which it has a 75 percent interest.

"The KSR-16 well was drilled to a total depth of 1,896 metres and encountered 14.2 metres of net conventional natural gas pay," said SDX, also listed on the Toronto Stock Exchange.

The company expects that the well will be connected to the existing infrastructure and placed in production within the next 30 days.

The latest Moroccan gas discovery comes as the nation plans to follow the path of Egypt, Jordan, Kuwait and the United Arab Emirates to import LNG shipments.

Morocco's Office National de l'Electricite et de l'Eau Potable (ONEE) first revealed plans in January 2017 to import an initial 5 million tonnes per annum of LNG for a gas-fired power venture.

It has appointed consultants to advise on an import terminal and power plant project.

Paul Welch, President and Chief Executive of SDX, said he was pleased to have made another onshore discovery during a nine-well drilling campaign. ■

Korean government signs industry accord on LNG-powered shipping

Our Asia-Pacific editor

The South Korean government along with shipbuilders and port authorities have signed an agreement to place orders for vessels powered by liquefied natural gas in 2018 as part of the development plan for LNG fuel infrastructure in the country.

The Korean Ministry of Oceans and Fisheries said it signed an accord on December 13 with state-run Korea Gas Corp. and the shipbuilders to begin constructing an 80,000-ton LNG-propelled vessel by the end of 2018.

"For that goal, a working group will conduct a feasibility study of the project in the coming months and explore ways to foster related industries," the Korean ministry said.

Time-lag

As it usually takes two to three years to build a ship, the government launched its initial task force in January 2017 to develop the emerging marine transport sector to meet stricter global environmental regulations.

해양수산부
MINISTRY OF OCEANS AND FISHERIES

Ministry is leading infrastructure and fuel efforts

The parties to the agreement said it was part of broader efforts to comply with the International Maritime Organization's sulfur cap on bunker fuel, which is set to take effect in 2020.

South Korea dominates the LNG shipbuilding business with its three world-leading yards, Hyundai Heavy Industries, Samsung Heavy Industries and Daewoo Shipbuilding & Marine Engineering.

This pilot programme is aimed at building the world's largest LNG-propelled ship, which is expected to pave the way for related industries to take root in the nation.

LNG-powered ships are considered an eco-friendly option to meet strengthened international regulations, though high costs have posed challenges for shipping companies.

Korea's shipyards have long experience in building LNG carriers, LNG-fueled ships and bunkering shuttles but are still in the early stages when it comes to LNG-powered ships as well as bunkering infrastructure. ■

Chinese shipbuilder Wison advances with smaller LNG ships for break-bulk

European maritime classification society DNV GL is enabling Chinese company Wison Offshore to progress with the development of its liquefied natural gas break-bulk distribution vessel.

The LNG Distributor (LNGD) design received approval in principle from DNV GL in a formal ceremony at a four-day Marintec China 2017 shipping conference in Shanghai that ended on December 8.

"This AiP has been granted upon the validation of LNGD design with a specification of 10,000 cubic metres capacity of storage," said Wison.

The Chinese company said its small-scale distribution ship was intended to "affordably deliver small LNG parcels to multiple locations" and is particularly suitable for a large-scale importer like China with a network of 16 regasification facilities around its coastline.

"We are honoured to cooperate with Wison Offshore and Marine and to present the AiP Certificate for this innovative LNG Distributor," said Torgeir Sterri, DNV GL Vice President and Regional Manager for China.

The new small-scale LNG carrier is regarded as ideal for use at regional LNG distribution hubs already in existence or planned in some parts of the world, including Asia.

"Since the product launch back in April, it has brought strong interest from ship-owners, gas infrastructure companies and other potential end-users," said Wison.

"The market-ready product is capable of partial cargo delivery and quick turn-around at the terminal," said Wison whose shipyards and facilities in Nantong and Shanghai have experience in LNG vessel construction.

"Its superior manoeuvrability eliminates the need for tug assistance while shallow draft design enables better accessibility to waters than conventional LNG carriers," said the Chinese company.

"The ability to handle ISO containers is particularly attractive to a market where onshore LNG trucking is in growing demand," it added.

Wison's Nantong shipyard has built an LNG production hull and regasification barges and is increasing investment in designs for the small-scale and medium-scale markets. ■

AWE of Australia is target of new bid battle amid proposal to ship LNG from West to East in ISO tanks

Our Asia-Pacific editor

Australian Energy company AWE, a stakeholder in the largest onshore natural gas discovery in Western Australia for 40 years, has become the subject of a takeover battle between a Chinese state-owned company and an Australian mining business, Mineral Resources, amid plans for gas to be shipped as LNG from western to eastern Australia.

The Chinese company China Energy Reserve and Chemical Group (CERCG) had made an initial bid amounting to US$325 million and then came back with a higher offer.

CERCG suggested LNG containers would be transported

Premium

CERCG's first offer was a more than 30 percent premium on AWE's last closing price of A$0.54 cents a share at the end of November.

AWE said on December 11 it had received a rival all-share proposal from Mineral Resources after the close of trading on Friday 8 December to acquire it at $0.80 per share, structured as one new MRL share for each 22.325 AWE shares held. While AWE shares are priced at under A$1, MRL's were last at A$16.39 per share.

"The AWE Board will evaluate the MRL proposal and the proposed takeover offer from China Energy Reserve and Chemical Group Australia and provide shareholders with a recommendation in due course," said the AWE statement.

"Until that recommendation is provided shareholders should take no action in relation to the MRL proposal or the proposed offer from CERCG Australia," added AWE.

The bidding for AWE between Beijing-based CERCG and MRL comes as the Chinese company said it was studying the viability of transporting LNG by road, rail and ship from Western Australia to the East Coast.

CERCG Australia's business manager Kevin Gao said the company would use LNG container tanks which can maintain liquefaction for 110 days.

"It should be possible for us to ship 100 or 200 of our 40-foot ISO containers, each containing 18 tonnes of LNG, from Australia's West Coast to customers on the East Coast," said Gao.

The MRL all-share offer values AWE at A$0.80 per share and is not conditional on due diligence.

The offer would see AWE shareholders collectively become one of the larger shareholders in MRL, owning just over 13 per cent of the combined group.

MRL said the acquisition was part of its strategic push into oil and gas.

"The acquisition of AWE fits within Mineral Resources' clean energy strategy of securing gas assets to vertically integrate the energy supply chain, including the use of LNG plants to provide power solutions to a wider range of end users," said MRL.

CERGC withdrew its first bid before AWE's board was able to finish an assessment of the proposal, before coming back with a slightly higher offer.

MRL said it did not currently intend to sell any gas from AWE's Waitsia onshore gas project as it was committed to supplying domestic gas in Australia and is a large consumer of domestic gas in its own right. ■

Inpex and Santos at forefront of activities to point more feed-gas resources at North Australia plants

Australian natural gas explorers are turning to prospects in areas such as the Bonaparte Basin offshore northwestern Australia to point more feed-gas at projects such as the Inpex-led Ichthys LNG plant and the existing Darwin liquefaction facility, operated by ConocoPhillips, in the Northern Territory.

Energy company Santos, a shareholder in the Darwin plant, has just signed an agreement to partially fund and operate a seismic survey over the undrilled Beehive prospect in return for a farm-in option for the licence WA-488-P in the Bonaparte Basin.

Santo said the option would be acquired from Melbourne-based Melbana Energy.

"WA-488-P is located adjacent to Blacktip production infrastructure and within reach of Ichthys infrastructure, providing good potential pathways for early commercialisation of any discovery," stated Santos.

The Adelaide-based company explained that funding and execution of the survey over Beehive would give Santos the right to earn up to an 80 percent interest in WA-488-P through the subsequent funding and completion of an exploration well in partnership with the smaller company Melbana.

Santos Executive Vice President Exploration & Appraisal Bill Ovenden said the transaction puts the company in a good position to boost its strategic acreage in offshore Northern Australia.

"The Beehive prospect is a large undrilled structure with great hydrocarbon-bearing potential and, being immediately adjacent to the Blacktip facilities and within reach of Ichthys infrastructure, a commercial discovery could be quickly delivered to market," said Ovenden.

"This option adds to our diverse portfolio of core production, appraisal and exploration assets in Northern Australia, including our foundation interest in Darwin LNG and the Barossa field which is the leading candidate to backfill Darwin LNG as Bayu-Undan comes off plateau in the next few years," added the Santos executive.

Inpex, the main developer with France's Total of the Ichthys LNG plant in the Northern Territory and nearing completion, has plans to expand the facility in the future and is focused on serval blocks.

Inpex said its Block WA-532-P covers an area of 26,300 square kilometres in water depths of between 60 metres to 50 metres.

The permit is close to the Ichthys gas-condensate field from where feed-gas is transported by an 890-kilometres pipeline to the liquefaction plant at Bladin point near Darwin.

Inpex said that in the vicinity of that Block there were other promising gas fields in which Inpex holds equity interests.

The Ichthys export project is costing around US$37Bln to complete with two processing Trains and 8.9 million tonnes per annum of capacity. ■