LNG Unlimited

An LNG JOURNAL PUBLICATION

20 September 2016

Australian GLX prepares launch of Singapore spot LNG trading

Perth-based firm hopes online auctions will replace tenders

Our Asia-Pacific editor

Global LNG Exchange, a company based in the Australian city of Perth, is progressing with plans for its platform to buy and sell spot LNG cargoes via online auctions and expects to begin trading live in the first quarter of 2017.

GLX hopes the online auctions will replace the current system of buy and sell tenders that are issued and bid on by traders through e-mails, instant messages and phone calls.

Registered

The parent company GLX Holdings is based and registered in Perth, while the online exchange would operate from Singapore.

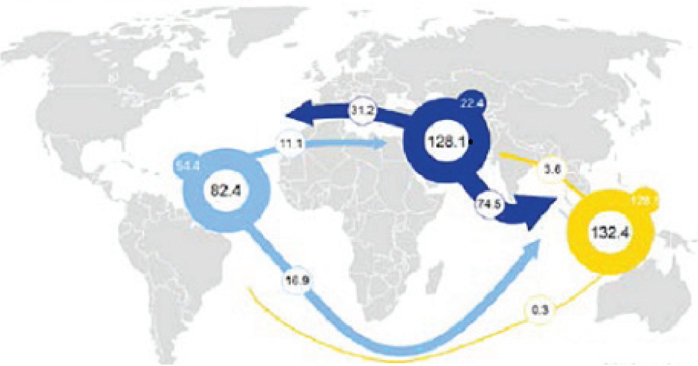
GLX was set up a year ago and as of September 13 this year was a formally registered Australian private company.

The preparations for the launch of GLX come as LNG trading is expanding as more volumes arrive on the market from new liquefaction plants. These are mostly in Australia, though later the US will have more Trains than the two currently operating at the Sabine Pass facility in Louisiana.

LNG spot and short-term deals accounted for around 28 percent of the global trade in 2015 compared with 16 percent of deals 10 years ago, according to the France-based International Group of LNG Importers.

The Perth-based executives launching GLX are led by Damien Criddle, a former Royal Dutch Shell lawyer, and Rob Cole, an ex-Woodside Petroleum director.

Global flows of LNG



LNG spot and short-term deals form 28 percent of total

The planned exchange, which will trade from Singapore as GLX, was conceived by Criddle and he has been giving interviews in Australia about his plans.

Criddle has 18 years of commercial and legal experience with a specialist focus on LNG sales and offtake contacts.

He said he had obtained financial backing from high net worth private investors in Perth, who have committed several million dollars to the venture.

Cole, who was an executive director at Woodside before resigning in 2014 for a short-lived stint as managing director at Beach Energy, has joined GLX as Chairman.

UK-based Phil Home, who was managing director of BP Exploration Australia until January 2015, is a non-executive director.

A further two former Woodside executives, head of commercial activities Cameron Whitton and head of public affairs Roger Martin, make up the rest of the small GLX team. Criddle said the volume of gas traded in the spot and short-term markets had increased substantially in recent years, but there was plenty of scope for improvement.

"The way that is handled is inefficient and outdated. It is not timely and not readily understood," he said.

Transparency

Criddle described current trading as "ad hoc, bilateral, costly and slow" as well as lacking in price transparency.

He said he had held discussions with more than 20 industry participants globally and obtained "very positive" feedback about GLX, which would facilitate online auctions of physical cargoes in real time.

Criddle added that in preparation for the launch, GLX was having discussions with several companies about participating in trials of the trading platform before the end of 2016.

UNLIMITED AGENDA

Air Products produces first large heat exchanger from new Florida factory

Our North America editor in New York

Air Products, the world's leading maker of liquefied natural gas processing equipment, has marked the roll-out of the first completed LNG heat exchanger manufactured at its new production facility in Manatee County, Florida.

The heat exchanger was transported from the Air Products facility to Port Manatee, where it was loaded onto a barge and shipped to the owner of an LNG export plant under construction on the US Gulf Coast.

Contracts

Air Products has won contracts for projects such as the Cameron LNG liquefaction plant, located in Hackberry, Louisiana, the Freeport export facility under construction in Texas and will supply equipment for the Cove Point plant in Maryland.

One of the main attractions of the Port Manatee factory site for Air Products was its ease of access to a port berth for shipping the large equipment.

"I am proud to say that no one in the world builds coil wound heat exchangers as large as we do," said Sandy McLauchlin, general manager of LNG and CryoMachinery Engineering at Air Products.

"The largest LNG plants in the world use our technology. We needed a second manufacturing location, which would eliminate any transportation limitations regarding product size," McLauchlin explained.

"When we selected this site, we believed it provided us with everything we needed in an operational location. I can tell you we made a wise choice. This new facility will help us maintain our market leadership position," he stated.

Typically an LNG heat exchanger can be about two-thirds of the size of a football field and a finished unit can weigh as much as 500 tons.

""It remains to be seen how big we will build one here, but we are confident that at this new location, we can build an LNG heat exchanger to the size of whatever the market requires," McLauchlin said.

Jim Solomon, director of LNG at Air Products

In supplying all the main LNG producing nations around the world with its equipment and processing technology over the years Air Products has shipped 116 LNG heat exchangers to 17 countries.

"As the world's energy needs continue to increase, demand for cleaner energy is at the forefront, and natural gas is the cleanest of all the fossil fuels," said Jim Solomon, director of LNG at Air Products.

"In order to achieve the greatest economies of scale, even larger capacity LNG heat exchangers for LNG plants are being required by our customers," explained Solomon.

"Our process technology and the LNG heat exchanger are the heart of an LNG plant," the Air Products executive said. ■

General Electric wins turbines order for third Train at Indonesian Tangguh plant

General Electric's oil and gas unit said it was awarded a contract to supply gas turbine-driven compressors for the third liquefaction Train planned for the Indonesian Tangguh LNG plant operated by BP of the UK.

The US company's GE Oil & Gas subsidiary, based in Florence, Italy, provided the original equipment for the first two Trains at the Tangguh facility, located in the Papua Barat province in Indonesia.

The additional processing Train will increase capacity by 3.80 million tonnes per annum to a total of 11.40 MTPA.

Most of the Train 3 output has been booked by Indonesia's state electricity company, Perusahaan Listrik Negara, and the balance of over 1 MTPA will be supplied to Japanese power utility Kansai Electric Power Co.

The start-up of production for the third Tangguh Train is expected in 2020.

While BP is the operator several Indonesian companies are part of the production sharing agreement along with a host of Japanese companies, including Mitsubishi Corp., JX Nippon Oil & Gas Exploration, Mitsui & Co. and LNG Japan Corp.

The Japan Bank for International Cooperation, the nation's export credit agency, will provide $1.20 billion in financing with other banks for the construction of Train 3.

The order for the third Train equipment has been placed with GE Oil & Gas by the Indonesian partners.

"The agreement to provide a third natural gas liquefaction train for Tangguh, nearly 15 years after the agreement to install the first two, is a reflection of the enduring performance of the existing plant machinery supplied by GE," said Rod Christie, President and Chief Executive of Turbomachinery Solutions at GE unit.

"The equipment similarity to the other two LNG trains and the single source of the entire shaft line are key factors that will enable smooth and optimized operation and maintenance of the plant.

"GE is committed to strengthening our partnership with the plant by bringing technology enhancements and maintaining the highest levels of performance from our equipment," Christie stated.

GE said the components of the turbo compressor strings supplied by GE Oil & Gas will be manufactured at GE facilities at Greenville in the US state of South Carolina and in the factory in Florence, where the Train will by assembled and load tested.

"It will be fully digitally-enabled, including advanced sensors and monitoring capabilities to allow continuous equipment care to safely maximize availability. The equipment will be ready for shipment to Indonesia in mid-2018," GE said.

"It will be fully digitally enabled, including advanced sensors and monitoring capabilities to allow continuous equipment care to safely maximize availability. The equipment will be ready for shipment to Indonesia in mid-2018," GE's statement said. ■

US state of Maine may have LNG plan after all

The US northeast state of Maine may have finally seen its liquefied natural gas import-export venture run out of regulatory time, but it is currently considering an LNG storage project involving one of the main Japanese terminal and plant builders.

The Maine Public Utilities Commission is considering a proposal to create up to 1.3 billion cubic feet of LNG storage capacity in the New England state to be used for winter season peak-shaving during times of high demand or natural gas supply constraints.

The project company Maine Energy Storage is a joint venture involving Boston-based Energy Management Inc. and Japan's JGC Corp.

It is proposing the project in response to the state realising that LNG storage is a less expensive alternative to investment in new pipeline capacity to the region.

The possible advance of the LNG storage venture follows the August 2016 rejection by the US Federal Energy Regulatory Commission of the Downeast LNG import-export project.

The FERC finally ended Downeast LNG's long-running permit application that was first filed in 2006.

Main Energy Storage said in its proposal it has secured rights to two sites for the proposed LNG storage tanks.

One would be served by Maritimes & Northeast Pipeline while the other would be served by Portland Natural Gas Transmission System. Only one storage project would be constructed and the joint venture has asked Maine state regulators to choose the site.

Equatorial Guinea LNG set for its final investment decision before year-end

Our Europe editor

Ophir Energy of the UK said its Fortuna floating liquefied natural gas project offshore Equatorial Guinea in West Africa was now a low-cost upstream venture and technically ready for a final investment decision soon.

The statement came from Chief Executive Nick Cooper who said Fortuna FLNG was about "constructing a value chain that offers potentially the most cost-effective greenfield LNG supply available today."

Monetisation

The CEO said Ophir would progress with the monetisation of Fortuna in a way that protects the company's balance sheet as it issued its first-half earnings.

He said the company had shortlisted "four high-quality, high credit-rated gas off-takers" for Fortuna FLNG, all of whom are significant players in the market.

"Our innovative approach to the upstream front-end engineering and design has resulted in two world-class consortia bidding for the upstream engineering, procurement, construction, installation and commissioning contract," Cooper added.

"As a result we have reduced estimated upstream costs from circa $1 billion at the end of 2014 to $450 million today. On a point forward basis, these represent an upstream development cost of around $1.70/barrel of oil equivalent," the CEO said.

Ophir's update came as it posted a pre-tax loss of $70 million in the first six months of 2016, though with cash on the balance sheet of $407M.

"Ophir's cash flow and net cash position provide sufficient funding to make discretionary investments across the portfolio," Cooper said.

"Our cost rationalisation programmes have delivered substantial savings in 'running costs' and these efforts continue," he added.

"Having spent two years high-grading our exploration portfolio, we are now preparing to return to a considered, prudent pace of exploration drilling from late 2016 to take advantage of the significantly lower exploration costs, while continuing to focus on monetising our previous exploration successes," Cooper explained.

The UK company said that regarding the midstream portion of the FLNG value chain, Ophir and Golar LNG continue to explore ways to work together to monetise the discovered resource in the Fortuna field.

"Discussions are progressing well and both parties are working towards an FID decision being made before the end of 2016," Ophir added.

CEO Cooper says project most cost-effective available

The UK company also updated shareholders on the state of its LNG ambitions in the East African country of Tanzania, where it holds natural gas assets in offshore Block 1 and Block 4.

"Shell took over the operatorship from BG Group in February 2016 and has since undertaken a review of the project plan, the development scope and the cost stack of the project," Ophir stated.

"Interaction with Shell has demonstrated their appetite to progress this asset and the imminent drilling of two exploration wells on Blocks 1 and 4 are evidence of this.

"Separately, since the late 2015 elections in Tanzania, the new President has taken a more pro-active, hands-on approach to delivering the project.

"We have experienced an increased Government focus on key items to enable the development and there is now a political impetus to accelerate the project," Ophir added.

The company also reiterated the previously announced statement that it had begun production in its Kerendan gas field offshore Indonesia.

Ophir said production started at 3-5 million standard cubic feet per day (MMscf/d) to enable the Indonesian state electricity distributor, Perusahaan Listrik Negara (PLN), to commission an associated power plant and transmission system.

Post commissioning, sales will be initially maintained at a restricted volume of 5 MMscf/d at the request of PLN to enable them to meet demand for power in the immediate Buntok region.

The first 160-kilometre section of the transmission line from the power plant to Buntok is complete and the full 290km transmission line to Tanjung is expected to be completed later in 2016.


FOAMGLAS®
Pittsburgh Corning
FOAMGLAS® INSULATION
Trusted by contractors and engineers worldwide for over 75 years.
TRUST
IS EARNED THROUGH INTEGRITY, QUALITY AND PERFORMANCE.
Contact us to learn more
www.foamglas.com
1-724-327-6100 I 800-545-5001

NEWS NUDGES

Dubai LNG services hub

Excelerate Energy of the US and Dubai Supply Authority have completed the first commercial gas-up operation at the Jebel Ali LNG import facility in the United Arab Emirates via Excelerate's floating storage and regasification unit (FSRU) "Explorer". The FSRU gassed-up all five tanks of a 173,000 cubic metres capacity LNG Carrier in a 17-hour period. "Dubai Supply Authority's ability to utilize the FSRU for these operations will allow LNG vessels departing regional dry docks to avoid having to travel significant distances to perform this required step in the LNG cargo cycle, making Dubai a full-service LNG hub," Excelerate said.

Tokyo Gas sales decline

Tokyo Gas, the third-largest Japanese LNG importer, said total sales volumes for the month of August came to about 1.21 billion cubic metres, the equivalent of 898,000 tonnes of LNG, a decline of 0.4 percent compared with the same month of 2015. In the industrial sector, volumes sold totalled 654 million cubic metres, a rise of 0.8 percent. In the business sector sales were down 1.6 percent to 254.5 million cubic metres. Wholesale volume sales to other city-gas companies dropped 7.6 percent to 169.5 million cubic metres. However, the company said residential sector volumes rose 5.9 percent to 138.3 million cubic metres "due to lower average temperatures."

Dunkirk LNG ready to go

The fourth French liquefied natural gas import terminal, located at the Channel port of Dunkirk, received its second commissioning cargo from the 140,500 cubic metres capacity carrier "Hispania Spirit".

Australia Pacific LNG major stakeholder Origin Energy names CEO to succeed King

Our Asia-Pacific editor

Origin Energy, a stakeholder in the Australia Pacific LNG plant with China's Sinopec and ConocoPhillips, named Frank Calabria as its next Chief Executive and Managing Director following the decision of incumbent Grant King to retire.

Calabria is current head of Origin's Energy Markets business.

Departing: Grant King is handing over Origin helm to new CEO

Prepared

His appointment will take effect after Origin's annual meeting on October 19, 2016, when King will step down from his role and retire from the company at the end of October.

"The Board has been preparing for Mr King's retirement for some time," said Origin's Chairman Gordon Cairns.

"The past year has been a transitional one for Origin with good progress made on debt reduction following last year's fall in oil prices.

"We are also expecting completion of APLNG's LNG project in the next few months. With good progress on these two important priorities it is now an appropriate time for change of leadership at Origin," Cairns added.

"While we will recognise Grant's significant contribution to Origin more fully at the AGM, I want to acknowledge that he's been a wonderful leader of Origin.

"His vision and acumen built Origin into a major Australian company. We will miss him, but we thank him for all he has achieved and all he has done for the company. We also wish him, Jenny and his family every good wish for the future," the Chairman stated.

King is a respected figure in global energy and was chosen as Chairman of the LNG 18 National Organising Committee for the industry conference that took place in Perth, Western Australia, in April 2016.

Cairns said the Board had undertaken an extensive process including a global search for external candidates along with a thorough review and benchmarking of internal candidates and was delighted to appoint Calabria to head Origin.

Calabria joined Origin as Chief Financial Officer in 2001. In 2009, he was appointed CEO of the Energy Markets business. In that latter role, Energy Markets has developed an increasingly strong competitive position with growing earnings, cash flow and returns.

The new CEO and MD has a Bachelor of Economics from Macquarie University in Sydney and a Master of Business Administration from the Australian Graduate School of Management.

He is a fellow of the Institute of Chartered Accountants of Australia and a Fellow of the Financial Services Institute of Australasia.

Commenting on his appointment, Calabria said: "It is a great honour to lead Origin. This is an important Australian company with a strong future. The issues are clear: cut debt and improve performance.

"This twin focus will improve returns for shareholders and position us to drive medium-term growth in a rapidly changing energy market, while delivering on the potential for the major investment that has been made in APLNG."

The APLNG project in Queensland continues to develop and on September 6 said it had signed an agreement for APA Group, Australia's biggest gas transporter, to build and operate a feed-gas pipeline connected to a key supply hub.

APLNG, one of three coal-seam-gas-to-LNG plants built in Queensland, also signed a 20-year gas transportation agreement with APA.

The 50-kilometres bi-directional pipeline, starting from APLNG's Reedy Creek site, is the shortest distance between the facilities and the Wallumbilla Gas Supply Hub, securing firm, direct access to the market.

The Wallumbilla Hub is also the centre of a gas trading exchange opened in April 2014 to facilitate the wholesale trading of natural gas in eastern Australia.

East market

APLNG is the largest producer of natural gas in eastern Australia, currently providing around 25 per cent of domestic supply to the east coast market.

ConocoPhillips and Australian utility Origin each own 37.5 percent of the APLNG project and Sinopec holds the remaining 25 percent.

APLNG shipped its first LNG cargo from Train 1 on January 9, 2016, and the project's Train 2 is scheduled to commence production by the fourth quarter of 2016.

Spanish LNG and utility company Gas Natural sees key stakeholders sell shares to US fund

Our Europe editor

Global Infrastructure Partners (GIP), a US private equity firm, has agreed to buy a 20 percent stake in Spain's Gas Natural Fenosa group, a leading liquefied natural gas operator, for 3.8 billion euros ($4.3Bln) from two current Spanish shareholders, energy company Repsol and the Criteria Caixa banking group.

Repsol and Criteria Caixa each sold 10 percent stakes in the natural gas distributor for 19 euros a share, according to statements from GIP in New York and Madrid-based Repsol.

Barcelona

Gas Natural is based in Barcelona and operates in more than 30 countries, with over 23 million utility customers and a wide spread of assets.

The company has stakes in LNG and natural gas exploration and production activities and in liquefaction plants in two producer countries, namely Oman and the Damietta in Egypt. The Egyptian plant is not currently in operation because of feed-gas diversions to the domestic market.

Gas Natural also has interests and capacity in regasification and import terminals such as Sagunto and Reganosa in Spain, Montoir-de-Bretagne in France and the Puerto Rico LNG importer Ecoelectrica.

The Barcelona company remains Spain's biggest LNG player, along with the network and LNG terminal operator Enagas. Repsol, for its part, sold most of its LNG assets to Royal Dutch Shell in 2014.

Adebayo Ogunlesi, Chairman and Managing Partner of GIP, said the US equity fund was delighted to be entering into "this long-term strategic partnership with Gas Natural" which he described as one of the world's leading energy companies and a recognized leader in the energy sector in Spain.

"This transaction is in line with GIP's strategy of investing in high quality, industry leading companies and assets. We look forward to working with Gas Natural's management and leveraging our considerable experience in the energy sector to support them in delivering on their strategic plan."

Gas Natural additionally manages natural gas pipelines form North Africa to Europe and distribution networks of 120,000 kilometres in Spain, Italy, Brazil, Argentina, Colombia, Mexico and Chile.

The company's diverse LNG supply portfolio includes shipments from Algeria, Qatar and Nigeria. The company also has a small fleet of LNG vessels. "The surplus value generated for Repsol is around 246 million euros," said Repsol.

Spain's Gas Natural has assets across LNG value chain

Osaka Gas joins buyers in campaign over clauses

Osaka Gas Co., one of Japan's largest liquefied natural gas buyers with long-term contracts to receive cargoes from nations such as Qatar and Australia, said it was in talks with some suppliers to remove destination re-sale restrictions.

The company has commitments to take about 8 million tonnes per annum of cargoes and is planning to increase this to more than 10 MTPA with new US supplies.

Osaka Gas said some of its long-term agreements will start to expire after 2020 and need renegotiation, including contracts with Qatar and Indonesia.

"Everyone is demanding an end to destination clauses," said an executive involved in trading activities in the Osaka Gas LNG division.

"When it becomes clear to suppliers they can't sell LNG with such restrictions, we hope it will become the new norm," the company added.

However, the Japanese company also explained that while short-term and spot cargoes are currently less expensive, utilities such as Osaka Gas would have to keep their long-term contracts for the majority of shipments to ensure security of supply.

Osaka Gas is one of the Asian and European companies that have secured US LNG supplies from the production projects being developed along the US Gulf Coast.

It has signed a liquefaction tolling agreement with Freeport LNG at Quintana Island in Texas. This will involve around 2.3 MTPA of shipments from the end of 2018.

There are no destination clauses in most US export plants as the buyers must supply their own feed-gas from the market for liquefaction at the facility.

Japan has led the way in renegotiating destination clauses since Tokyo Electric Power and Chubu Electric joined forces.

India advances with plans for LNG barge services starting in Kolkata

Our Asia-Pacific editor

The Government of India said the northeast river port of Kolkata has recently set aside 10 acres of land to build a liquefied natural gas terminal to mainly provide fuel for river barges and including a storage facility, associated pipelines and unloading arms.

The site of the terminal is the Haldia Dock Complex and it will be located next to an existing oil jetty under a 30-year lease.

Outline

The Port of Kolkata (formerly Calcutta) in West Bengal is on the bank of the river Hooghly near the city and is located around 200 kilometres from the sea.

"The project will be undertaken on a land lease model by granting a lease by the middle of December" the Shipping Ministry said.

"LNG facilities are expected to be developed within 24 months from the date of allotment of the land," the Ministry added.

"This is an important development in the context of the recent efforts to reduce logistics costs and achieve emission reduction targets by introducing the use of LNG as fuel for barges," the statement explained.

"The government is therefore taking measures to facilitate the movement of LNG and its storage at places situated along the inland waterways," it said.

"Only a few advanced countries are using LNG-powered barges at present. Therefore, in that sense, the development at Haldia Dock Complex can be seen as a very positive one," the Ministry added.

The efforts to introduce LNG as barge fuel is part of the overall efforts to promote transport on inland waterways and coastal shipping.

"Inland Water Transport (IWT) is a cost effective and environment friendly system and a lot of importance has been accorded to it over the past two years," the Ministry stated.

The Ministry explained it had been regularly holding discussions with Petronet LNG, the nation's main importer of cargoes, and the Inland Waterways Authority of India (IWAI).

Petronet is in the process of preparing a detailed feasibility report for setting up LNG facilities fuelling and storage facilities at Haldia, Sahibganj, Patna and Ghazipur as per a memorandum of understanding signed with the IWAI during the Maritime India Summit in Mumbai in April 2016.

The LNG-fuelled barges would likely be involved in the transportation of coal from the Eastern Coal Fields to various thermal power stations.

"The construction of LNG barges at Indian shipyards would entitle owners to a 20 percent reduction in costs through the ship-building subsidy scheme whose guidelines have already been released by the Shipping Ministry," the Ministry added.

LNG activity coming soon to Haldia Dock Complex

Japanese spot LNG price reverses recent rise to be at $5.40 per MMBtu

Japan said the price of spot liquefied natural gas cargoes imported into the country in August averaged $5.40 per million British thermal units, lower than last month's price and $2.30 per MMBtu down from the year-ago period as gas-fired power demand was at its lowest during the Northern Hemisphere summer.

The largest power utilities in the country were using just over 65 percent of available power station capacity for natural gas, coal and oil as industries and businesses shut for holidays, while three Japanese nuclear power plants were also now on line. Spot prices for cargoes had begun to edge higher in July when they had cost $6.00 per MMBtu on a delivered basis and $5.80 per MMBtu on a contracted basis.

The average price of spot LNG imported into Japan that arrived in August 2015 had cost 7.70 per MMBtu.

The spot 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.

They show that Japanese companies are paying much lower prices for spot cargoes than they are for long-term contract shipments that are linked to the lower oil price and still costing between $8.50 per MMBtu and $9.50 per MMBtu.

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. Prices prior to averaging are all converted into an equivalent Delivered Ex-Ship basis.

French energy company Total seals shale deal in Texas to complement LNG plans

Our Europe editor

French energy company Total said its US subsidiary would exercise its pre-emption right to acquire the 75 percent interests in a Barnett Shale operating area located in North Texas held jointly with Chesapeake Energy, the second-largest producer of natural gas in the US after ExxonMobil.

Pre-emption rights give existing shareholders first refusal when an asset is put up for sale, rather than it being sold to a third-party.

Shareholdings

Total Exploration & Production USA has owned 25 percent of the Barnett shale-gas assets since December 2009. With the pre-emption, Total will be the 100 percent owner and operator, taking over from Chesapeake.

The Barnett shale stake will underpin Total's plans to purchase up to 3.2 million tonnes of LNG per annum on the US Gulf coast for export in worldwide markets.

Properties in the proposed transaction include around 215,000 net developed and undeveloped acres, wells, leases, minerals, buildings and properties. Associated 2016 net production is around 65,000 barrels of oil equivalent per day.

Under the terms of the complicated transaction, Chesapeake will pay $334 million to Williams, the gatherer and processer of 80 percent of the gas from the Barnett assets, to terminate its gathering agreement, projected Minimum Volume Commitment (MVC) shortfall payments and fees.

Total E&P USA will supplement Chesapeake's payment with $420M to Williams for a fully restructured, competitive gas gathering agreement, free of any MVC and with a Henry Hub-based gathering rate.

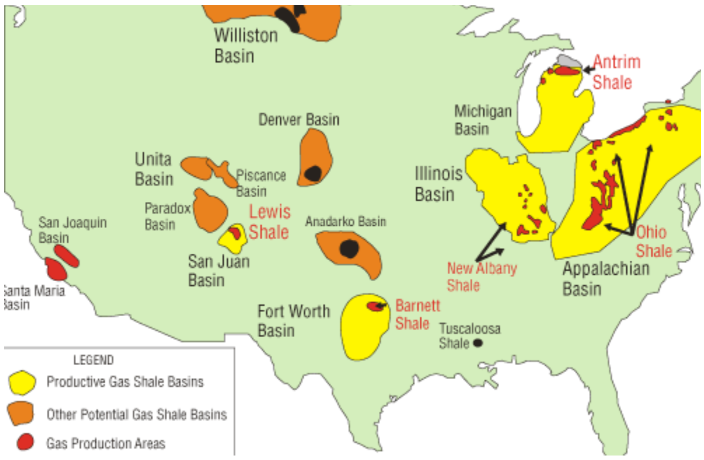
Total's US unit will also pay $138M to be released from three midstream capacity reservation contracts.

Total said it would also use its upstream operating efficiency with the midstream management and marketing know-how of energy trading affiliate Total Gas & Power North America.

"Over the six years that we have been involved in the Barnett, we have gained an in-depth understanding of the play and the technology," said Jose Ignacio Sanz, President and Chief Executive of Total E&P USA.

"With the new conditions created by the exit of Chesapeake and the associated restructuring of the midstream contracts, we believe that we can extract significant value from the substantial, well located resource base of the play," he added.

"As an operator, we look forward to working with all stakeholders, our leaseholders, the Dallas Fort Worth and other authorities," he said.



French firm's Barnett Shale assets in south of map

Anadarko Petroleum puts US oil investments ahead of Mozambique LNG project plans

Anadarko Petroleum Corp., which recently said it would take a final investment decision on the Mozambique liquefied natural gas export project in southeast Africa when political and financial uncertainly ended, has agreed to buy Gulf of Mexico oil assets from Freeport-McMoRan Inc. for $2 billion to push ahead with its US oil field development strategy.

Freeport-McMoRan is selling the offshore oil assets to Anadarko as part of its debt reduction programme. Anadarko said the acquisition would generate $3Bln of additional free cash flow over the next five years.

Anadarko said the deal doubled its ownership in the Lucius development to approximately 49 percent and added 80,000 net barrels of oil equivalent per day, more than 80 percent of which is oil.

The transaction also expanded Anadarko's operated infrastructure throughout the Gulf of Mexico.

Anadarko, which like its peers had been cutting costs and selling assets to weather the oil price slump, said it now planned to boost capital spending.

It would be investing to help boost production in existing assets such as the Delaware Basin of West Texas and the DJ Basin centered in Colorado.

"This immediately accretive, bolt-on transaction strengthens our industry-leading position in the Gulf of Mexico and is a catalyst for the company's oil-growth objectives, with quality assets being acquired at an attractive price to create significant value," said Anadarko Chairman, President and Chief Executive Al Walker

To fund the Freeport-McMoRan transaction, Anadarko is selling about 35.3 million shares to raise about $1.9Bln in an offering it planned to close by September 16.

J.P. Morgan Securities is acting as the sole underwriter for the share sale.

Analysts said the US oil plans raise doubts over Anadarko's future plans as regards Mozambique LNG investment.

Anadarko made its first natural gas discovery in Area 1 of the deepwater Rovuma Basin offshore Mozambique in 2010 and it was one of the most important natural gas discoveries in more than 20 years.

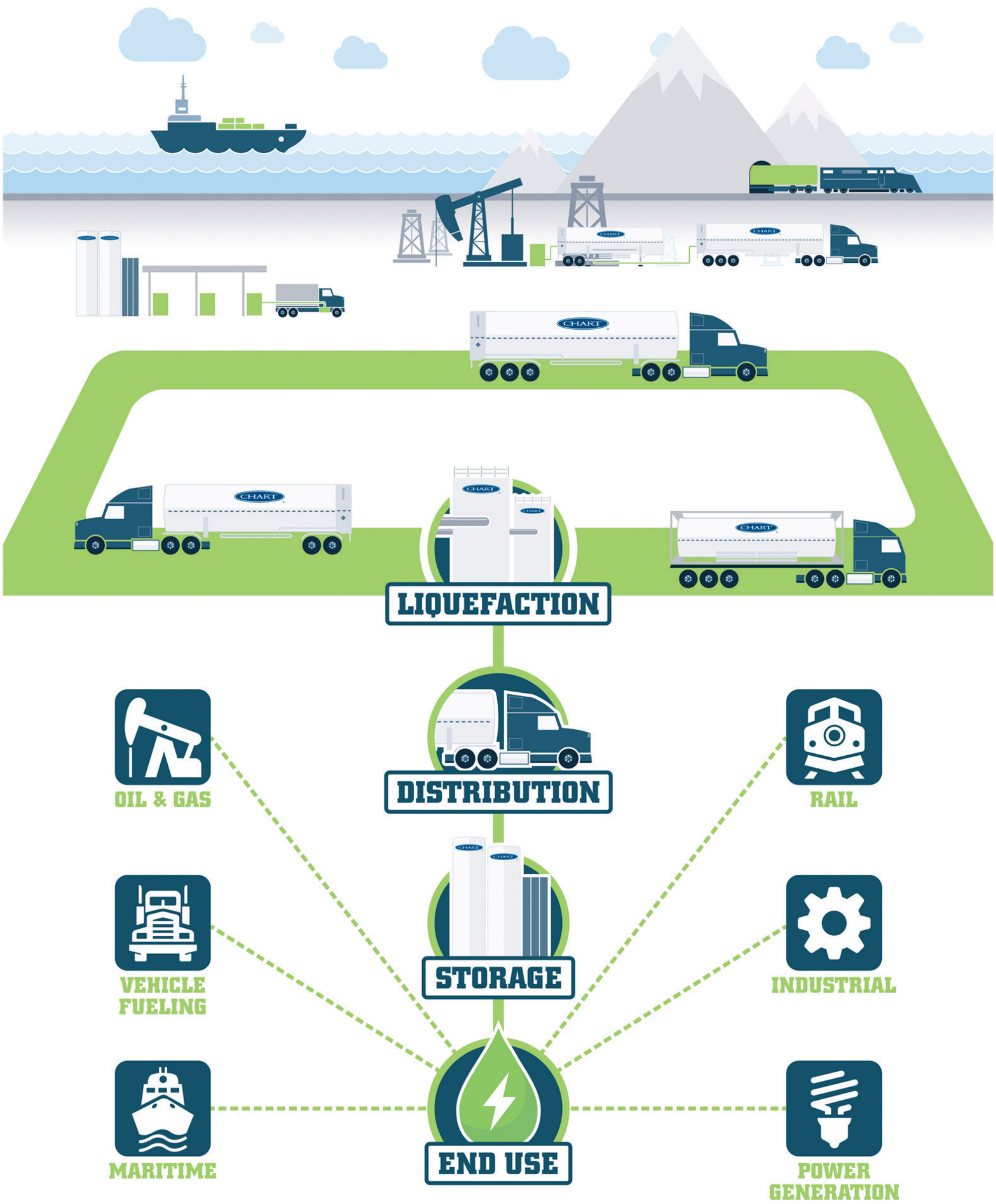
The US company and its partners in the Mozambique exploration licence have 75 trillion cubic feet of recoverable natural gas resources and are continuing to work to develop an onshore LNG project.

However, the final investment decision by Anadarko and the other companies involved in LNG development, including Italy's Eni, have been put on hold after the government in Maputo disclosed earlier in 2016 that it had $1.4 billion of previously hidden debt.

The disclosure led to the World Bank and other donors suspending aid to the African nation and to a downgrading of Mozambique's credit.

The country also missed an interest payment on a government-guaranteed loan.

LNG VALUE CHAIN



www.ChartLNG.com