

LNG Unlimited

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Slow progress on Tanzania plant offset by Equatorial Guinea FLNG

UK's Ophir Energy has disappointed in some ventures and advanced in others
Our Europe editor

Ophir Energy of the UK said it progressed on all fronts on the Fortuna floating LNG project offshore the West African nation of Equatorial Guinea, even as it posted an annual loss of \$376 million.

Ophir said it was on track for a final investment decision on Fortuna FLNG in mid-2016.

The pre-tax loss for Ophir comprised impairments due to lower commodity prices and exploration write-offs of \$149M.

"In the period we delivered material progress on the Fortuna FLNG project, signing gas fiscal terms with the host government, securing Golar LNG as midstream provider, commencing front-end engineering and design, shortlisting binding off-take offers and signing a heads of agreement with Schlumberger to participate in the project," said Nick Cooper, Chief Executive.

Ophir signed an accord in February 2016 paving the way for the purchase by US energy services company Schlumberger of a 40 per cent interest in the FLNG project.

Ophir and Schlumberger are now working towards the project FID. Under the agreement Schlum-



Ophir is part of LNG project in Tanzania, East Africa

berger will reimburse 50 percent of Ophir's past costs.

This is also expected to cover Ophir's share of capital expenditures up until first sales of LNG.

Golar, the Norwegian LNG fleet owner now based in Bermuda, is another stakeholder in Fortuna FLNG.

Golar has signed an agreement to provide the former LNG carrier "Gimi" as a liquefaction hull to be placed over the Fortuna gas field.

"Through these steps, the forward funding requirements of the project will be met. In parallel through 2015, we also high-graded our exploration portfolio," Cooper added in the earnings statement.

"We radically reduced our cost base, and delivered synergies ahead of forecast on the Salamander acquisition," said Cooper, referring to the exploration company it bought with four deep-

water production-sharing contracts in Eastern Indonesia.

Ophir's Fortuna FLNG project would provide Equatorial Guinea with its second production venture.

The nation has had an onshore liquefaction plant on Bioko Island since 2007 with a single Train producing 3.4 million tonnes per annum of LNG.

The plant is operated by Marathon Oil and the volumes are now marketed by Royal Dutch Shell since its takeover of BG Group of the UK.

Ophir is also involved in an LNG production project in the East African nation of Tanzania, where "progress has been relatively disappointing" as momentum on the award of the land was slow prior to the presidential election in November 2015.

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Japanese LNG spot prices can't fall by much more unless shipping is provided for free

Japan said the price of spot liquefied natural gas cargoes imported into the country in February was \$6.90 per million British thermal units compared with \$10.70 per MMBtu in the year-ago period as the worst effects of the oil price slump began to level off in the LNG market after 12 months of declines.

The latest delivered prices show a \$3.80 per MMBtu drop compared with spot shipments received in February in 2015.

Levelling off

The levelling off was clearer in the average price of cargoes contracted in February and to be delivered later.

These were at \$6.50 per MMBtu in February 2016 compared with \$7.60 per MMBtu in February 2015, a fall of just \$1.10 per MMBtu.

The March 2016 spot LNG numbers are expected to be close to or even higher than the March 2015 price of \$7.60 per MMBtu

for delivered cargoes. Analysts said any downward price differentials of \$1 per MMBtu or more can only be expected for the year-on-year comparisons for the rest of 2016 in the unlikely event that LNG carriers are provided free of charge.

The January 2016 figure for delivered spot LNG was \$7.90 per MMBtu and for contracted cargoes that month it was \$7.10 per MMBtu.

The LNG spot statistics are published by Japan's Ministry of the Economy, Trade and Industry and come from the nation's utilities, the main users of the fuel. Trading companies are excluded from the statistics.

Japanese LNG spot prices and those in Asia in general have slumped along with oil since hitting \$20 per million British thermal units in February 2014.

The Tokyo government published spot prices for the first time for delivered and free-on-board

(FOB) cargoes in March 2014 when there was growing concern from the world's largest LNG user that it was paying too much for its cargoes on a spot basis.

The next set of spot prices is published in Tokyo on April 11, 2016.

The Ministry of Finance said last month that overall Japanese LNG imports plunged in January by more than 14 percent even at the current low prices for oil-linked contract deliveries.

The figures showed Japan imported 7.24 million tonnes of LNG last month compared with 8.43MT in the same month of 2015.

The December imports had amounted to 8.07MT to give an LNG import total for 2015 of 85.04MT compared with the record 88.51MT in 2014, a fall of 3.9 percent.

The January deliveries also cost over 55 percent less than a year ago at 349 billion yen (\$3.07Bln) compared with 784Bln

yen (\$6.88Bln) in January 2015.

This means the average price paid by Japan in January 2016 for cargoes was \$424 per tonne, or \$8.20 per million British thermal units, compared with \$816 per tonne, or \$15.78 per MMBtu, in the year-ago period.

The total cost of LNG shipments for the whole of 2015 in dollar terms amounted to \$46.6Bln compared with \$66.1Bln in 2014.

Imports of LNG from the Middle East plunged during last month. Shipments from countries like Qatar, the United Arab Emirates and Oman fell to 1.57MT in January, a drop of 27.3 percent compared with 2015.

Asian deliveries from nations such as Malaysia and Indonesia, Papua New Guinea and Brunei amounted to 2.46MT, a fall of 3.2 percent.

Russian imports by Japan rose by 4.4 percent to 688,000 tonnes from the Sakhalin Island plant.

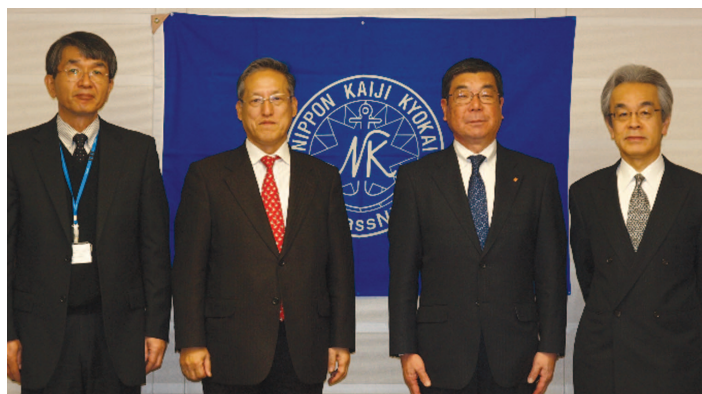
Japan's class society Nippon Kaiji Kyokai names Koichi Fujiwara as Chairman and President

Japanese marine classification society Nippon Kaiji Kyokai, which has almost 60 liquefied natural gas carriers on its books, has named Koichi Fujiwara as its new Chairman and President.

The society, known as ClassNK, said Fujiwara was promoted to the post from executive vice president after incumbent Chairman and President Noboru Ueda stepped down.

Two other current executive vice presidents, Yasushi Nakamura and Tetsuya Kinoshita, would continue in their present roles and be joined by Junichiro Iida as Managing Director.

"Following the recent downturn of the shipping and shipbuilding markets, the business environment surrounding ClassNK has become even more challenging," said Fujiwara on his appointment.



Koichi Fujiwara (second left) with executives from K-Line Group. The new ClassNK President and Chairman has masters in Naval Architecture from Tokyo University

"Under our new executive team, we will work to ensure stable operations and further enhance our corporate governance as required of an independent third-party organization so that the society can continue con-

tributing to the development of the maritime industry in the long term," Fujiwara stated.

The new ClassNK chief holds a Master of Naval Architecture from the University of Tokyo, and served in Japan's Ministry of

Transportation. "Throughout his role in government, he served as an outstanding policy maker in the maritime administration and assumed the role of Director-General of the Maritime Bureau in 2006," ClassNK said.

He joined ClassNK in 2007, and was appointed to Managing Director in 2010, followed by Executive Vice President in 2011.

"He has so far commanded the expansion and development of the Society's certification services," it added.

ClassNK has the world's top share of bulk carriers on its register and recently granted an approval for an LNG-fueled bulk carrier, contributing to the spread of environmentally friendly shipping practices.

Gorgon LNG shipping first cargoes amid Asia optimism

Chevron Corp. said it expected to ship the first cargo from the Gorgon project on Barrow Island off the northwest coast of Western Australia as the US major expressed optimism about the Asian LNG market.

"The long-term fundamentals for LNG are attractive, particularly in the Asia-Pacific region, and this is a significant milestone for all involved," said Chevron Chairman and Chief Executive John Watson, as he confirmed the start of production and impending first cargo loading.

Chevron said it was positioned to become a major LNG supplier by 2020 as its Australian projects are well located to meet growing demand for energy in the region.

The US major said more than 80 percent of its equity LNG from the Gorgon project and the company's Wheatstone LNG venture in Western Australia is covered by firm sales agreements with customers in the region.

"We congratulate the Gorgon workforce on this achievement," said CEO Watson.

"This is the result of the collaboration of hundreds of suppliers and contractors and many tens of thousands of people across the world during the project design and construction phases," he added.

The Gorgon project is supplied with feed-gas from the Gorgon and Jansz-Lo gas fields, located within the Greater Gorgon area, up to 136 miles (220km) off the northwest coast.

It includes the liquefaction plant and its 15.6 million tonnes per annum of output on Barrow Island, as well as a carbon-dioxide injection project and a domestic gas plant to supply the Western Australia market. ■

Germany's Linde and unit of Ebara from Japan to offer small LNG plants

Our Asia-Pacific editor

Germany's Linde has signed an agreement with a US-based liquefied natural gas equipment maker in Pennsylvania, the subsidiary of a Japanese company, to cooperate on small-scale and medium-sized liquefied natural gas production ventures.

Linde and the Jeannette, Pennsylvania-based Elliott Group plan to develop a "highly standardized and modularized" concept for the main refrigerant cycle compression section of Linde's generic liquefaction plants called "Star LNG".

Elliott is a wholly owned unit of Ebara Corp., a major industrial conglomerate headquartered in Tokyo. Ebara employs 15,000 people and has annual sales of \$5 billion.

The Linde LNG concept ranges between 200,000 tonnes per annum of capacity to 1.3 million tonnes per annum.

"The agreement enables Linde Engineering to significantly increase the speed to the market," the German company said.

Linde's Star LNG was developed to standardized and optimise LNG



Linde and US unit of Ebara plan to develop modularized LNG

plant processing variations and among other benefits offers a fast-track engineering, procurement construction schedule.

The German plant equipment also offers competitive capital costs and uses Limum LNG processing.

The generic Linde plant concept offers 200 tonnes per day of net liquefaction capacity and supports other ranges up to 3,000 tonnes per day, using the same pre-engineered plant design.

For liquefaction of feed-gas, two proprietary designs are offered for heat exchanger equipment, which generally lies at the heart of most natural gas process-

ing steps. Linde offers both coil-wound and plate-fin heat exchangers, depending on plant capacity and operational requirements.

"With this initiative we have further enhanced the degree of standardization of our Star LNG family which allows us to combine best-in-class quality with competitive pricing and attractive delivery times," said Marcus Lang, Executive Vice President of LNG and Natural Gas Processing at the Linde Group's Engineering Division.

John Rann, Vice President of Engineered Products at Elliott, expressed the company's enthusiasm for signing the accord with Linde. ■

Belgian LNG shipping firm Exmar settles Caribbean hull charter issue

Exmar, the Belgian LNG shipping and project development company has signed a settlement agreement with Pacific Exploration and Production, the successor company to the Pacific Rubiales and its Caribbean Floating LNG project in the South American country of Colombia.

The Exmar group controlled by Nicolas Saverys ordered the FLNG vessel under a contract with Pacific Rubiales.

The LNG production venture on the Caribbean coast of Colombia had originally been set to become the world's first FLNG production plant.

It was to process feed-gas delivered by pipeline from onshore

to a hull berthed at a jetty. The gas would have come from the onshore Creciente natural gas field.

Exmar and the CFLNG venture had signed a 15-year charter agreement in 2012 for the FLNG hull with capacity to produce 500,000 tonnes per annum and with storage of 16,100 cubic metres.

"Since the execution of the agreement the domestic natural gas market in Colombia and international LNG market have changed substantially making the liquefaction of LNG in Colombia no longer economic," Exmar said.

The marketing and trading arm of Russia's Gazprom in 2013 even signed a contract with Pacific Rubiales for 500,000 tonnes per

annum of cargoes from Caribbean FLNG production for five years.

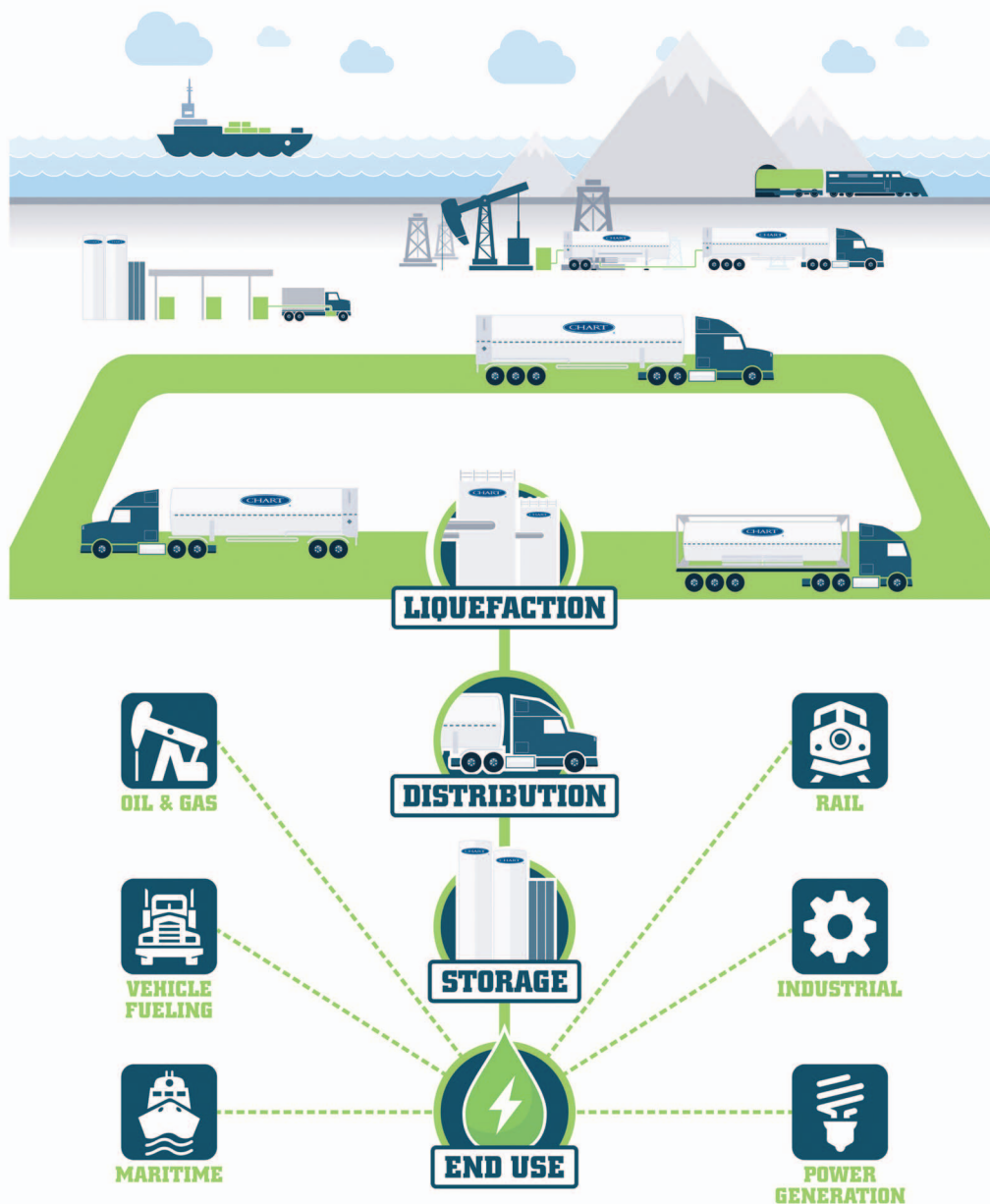
Exmar is still expecting delivery of the Caribbean FLNG hull from its Chinese shipyard in the port of Nantong, owned by Wison Offshore & Marine, in the second quarter of 2016 and is seeking another customer.

"By virtue of the settlement agreement, any and all obligations in connection with the Tolling Agreement have been terminated.

"CFLNG is available for other projects around the world and Exmar is actively negotiating new employment of the CFLNG with several counterparts," said the Antwerp-based company. ■



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NEWS NUDGES

TransCanada takeover talks

TransCanada Corp., the main builder of feed-gas pipelines from the shale-gas basins of northeast British Columbia to proposed LNG export plants on the Pacific coast, has issued a response to reports regarding a potential acquisition. "While we are in discussions regarding a potential transaction with a third party, no agreement has been reached and there is no assurance that these discussions will continue or that any transaction will be agreed upon," the company said. TransCanada was responding to reports it was in talks to take over Columbia Pipeline Group Inc. of the US, a natural gas pipeline operator with a market value of about \$9 billion.

LNG loses race for shale cargo

The multigas carrier "INEOS Intrepid" left the Markus Hook terminal near Philadelphia bound for Rafnes in Norway carrying 27,500 cubic metres of US shale-gas ethane. "This is the first time that US shale gas has ever been shipped to Europe and represents the culmination of a long-term investment," said Swiss-based chemicals company INEOS. Danish shipping company Evergas is the main operator of multigas shipping for INEOS and the ships sometimes carry small-scale LNG shipments.

US benchmark natural gas

US benchmark Henry Hub spot prices are forecast to average \$2.25 per million British thermal units in 2016 and \$3.02 per MMBtu in 2017, compared with an average of \$2.63 per MMBtu in 2015, according to the short-term energy outlook of the US Energy Information Administration.

Plaquemines LNG plant on Mississippi River seeks permits for 22 MTPA

Our North America editor in New York

The US Venture Global Plaquemines LNG project, one of two in Louisiana being developed by a Washington DC-based company, has applied for permits from the Department of Energy to export the equivalent of 22 million tonnes per annum of cargoes.

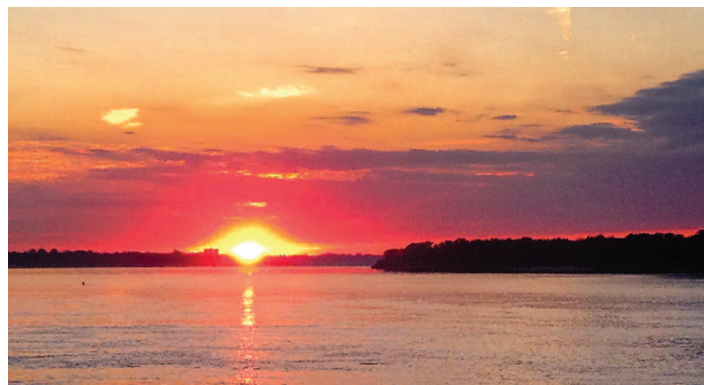
Plaquemines LNG is seeking to ship 1,240 billion cubic feet of natural gas a year over a 25-year period from its proposed liquefaction plant on the banks of the Mississippi River in Plaquemines Parish.

Start date

The company anticipates using the licences for exports to Free Trade Agreement nations as well as Non-FTA countries from 2020 and noted it had already entered the Federal Energy Regulatory Commission's permitting process.

The VG Plaquemines project will be located near river mile-marker 55 on the west side of the Mississippi.

The project would include 20 small-scale liquefaction trains, four LNG storage tanks, and three



Plaquemines project will be at river mile-marker 55

marine loading berths for ocean-going vessels.

The Venture Global development company, comprising Plaquemines LNG and another project on the Gulf Coast, was founded by a banker and a lawyer.

The two are Michael Sabel, an equity fund manager and venture capitalist, and Robert Pender, a former partner at Hogan Lovells, a global law firm.

Both are now joint chief executives and co-chairmen of the VG LNG company.

Venture Global is also developing the 10 MTPA Calcasieu Pass facility on a 1,000-acre site located at the intersection of the

Calcasieu Ship Channel and the Gulf of Mexico.

The Calcasieu Pass liquefaction plant is expected to be operational by the end of 2019.

In February 2016, Venture Global signed a sales and purchase agreement with Shell North America for 1 MTPA of LNG from the Calcasieu Pass plant.

The accord with Shell is for 20 years with the cargoes being supplied on a free-on-board basis (FOB), whereby the Anglo-Dutch company supplies the ships, for a purchase price indexed to the monthly Henry Hub price plus a facility fee indexed to inflation.

French group Engie to supply LNG cargoes for Panama Canal terminal

Our Europe editor

French energy company Engie has signed a preliminary 10-year agreement to supply 400,000 tonnes per annum of liquefied natural gas cargoes to an import terminal planned for the Central American nation of Panama.

The binding memorandum of understanding was signed with Gas Natural Atlántico for its planned Costa Norte import facility to be located near the Panama Canal.

US power company AES, which has an import terminal in the Dominican Republic, is developing the project with the two Pana-

manian companies to start commercial operations in 2018.

The project involves an integrated LNG-to-power project at the Atlantic coast entrance to the Panama Canal.

The project includes an LNG import terminal with 180,000 cubic metres storage capacity, which will supply natural gas to a 350 megawatts combined-cycle.

"This new combined-cycle gas turbine facility will contribute to developing and securing Panama's power demand by complementing the country's hydro-power generation," Engie said.

Gerard Mestrallet, Chairman

and Chief Executive of Engie, commented: "We are pleased to enter into this long-term relationship with AES in Panama, with the perspective of broader common developments in the region in the field of natural gas."

"We consider natural gas as a key component, alongside the renewable energies, of the energy transition which is currently taking place on a global scale."

"It is Engie's commitment to foster its expansion worldwide, in particular in the form of LNG as a flexible, clean and competitive energy supply."

Qatar's RasGas expresses satisfaction with valued LNG customer Chinese Taiwan

Our Middle East editor

Qatari liquefied natural gas producer RasGas Co. Ltd. celebrated a landmark in its LNG export operations at Ras Laffan when it loaded its 500th cargo to Taiwan under a long-term contract with CPC Corp.

The cargo was loaded on March 5 on board CPC's "Taitar No 4" carrier. The vessel's name comes from the words Taiwan and Qatar.

Contract

RasGas and CPC signed a second long-term contract in 2011 for the supply of cargoes. That accord increased the annual volume to over 5 million tonnes per annum.

In addition, RasGas said it had delivered 72 cargoes, around 4.4 million tonnes of LNG to CPC on spot basis since 2007.



Carrier called 'Taitar No 4', mixing 'Taiwan' and 'Qatar'

RasGas and affiliated company Qatargas have 14 LNG Trains in production, including six of the world's largest, enabling Qatar to produce 77 MTPA.

Of this total, Qatargas has 43 MTPA of deliveries to make and RasGas produces around 37 MTPA for its customers. Taiwan

previously imported more LNG than China, though Chinese Taiwan was overtaken in 2011 by the mainland.

It still has significant contracts, including one with Malaysia that was renewed in 2014, and it also receives cargoes from the Asia-Pacific's newest producer, Papua

New Guinea. Taiwan, which most recently had LNG imports of 13.45 million tonnes, compared with 19.63MT imported by China, has two LNG import terminals at Yung-An and Tai-Chung compared with 14 now operated by the mainland.

The Taiwanese are planning a third import terminal with capacity for an additional 5MT of imports and the facility is expected to be operational in two years.

"As a long-term LNG supplier to CPC, RasGas is pleased to achieve this major milestone with our long-standing partners," said Khalid Sultan R. Al Kuwari, Chief Marketing and Shipping Officer of RasGas.

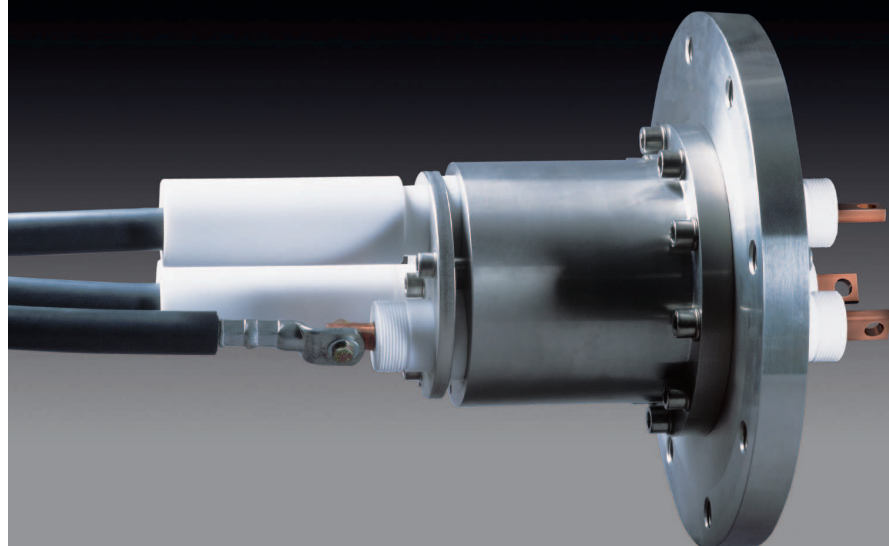
"We have come a long way since signing our first ever Sales and Purchase Agreement with CPC in 2005."

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Fuel company Clean Energy sees surge in its volumes

Clean Energy Fuels Corp., the US builder of natural gas filling stations and a fuel supplier to the trucking industry, delivered 308.5 million gallons last year, a more than 16 percent surge from the 265 million gallons sold the previous year.

Clean Energy said in its latest results that it delivered 78.3 million gallons in the fourth quarter, an increase of more than 8 percent from the prior-year period.

Revenue for the fourth quarter of 2015 was \$119.3 million, a 9.7 percent decrease from \$132.1M in the same three months of 2014.

Income in the quarter included \$31M in excise tax credits for alternative fuels (VETC) and overall revenue totalled \$384.3M for the year, down 10.4 percent.

Natural gas fuels in the US like LNG cost up to \$1.00 less than gasoline or diesel, depending on local market conditions.

"The revenue decreases in the fourth quarter and year were primarily due to the lower cost of natural gas, continued softness in the company's global compressor business due to low oil prices and a strong US dollar," said Clean Energy, listed on the Nasdaq stock exchange.

The company, based in Newport Beach, California, supplies liquefied natural gas, compressed natural gas and bio-methane as trucking and transport fuel.

The forerunner company of Clean Energy was Pickens Fuel Corp., founded by US oil tycoon and LNG-fuel pioneer T. Boone Pickens.

"We continue to make progress and improve our results in a tough low oil price market," said Andrew J. Littlefair, Clean Energy's President and Chief Executive.

UK engine-maker Rolls-Royce builds up its LNG fuel propulsion portfolio

Our Europe editor

Rolls-Royce, the UK company known for powering Airbus and Boeing passenger jets, has won a contract to provide a propulsion package for a liquefied natural gas-fueled Norwegian cargo vessel being built at a Turkish shipyard and to be delivered in 2017.

Larger

Rolls-Royce said the contract with Tersan Shipyard was worth US\$6.5 million and the marine engine using LNG will be fitted to a new-build ordered by Norwegian shipowner NSK Shipping. The vessel will deliver fish food on behalf of the BioMar Group.

"The new cargo carrier will be a slightly larger sister ship to NSK Shipping's 'MS Hoydal' which was the world's first LNG-powered cargo vessel and was delivered from Tersan Shipyard in 2012," Rolls-Royce said.

The 81.5 metres long vessel will be able to carry 2,700 tonnes of fish food to fish farms along the Norwegian coast.



LNG fuel will be used for cargo ship in Norway waters

Helge Gjerde, Rolls-Royce President for Offshore and Merchant Solutions, said: "BioMar and NSK Shipping invest in modern technology that helps reduce fuel costs and environmental footprint. They are among the absolute frontrunners in the area of short sea shipping."

The LNG propulsion system comprises one eight cylinder Bergen C26:33 natural gas engine rated at 2160kW, a Promas combined rudder and propeller system, one tunnel thruster in the bow and one in the aft and a Rolls-Royce automation and dynamic positioning system.

The vessel is also equipped with

the Rolls-Royce hybrid shaft generator (HSG) propulsion system.

"This means the main engine also generates electricity for the ship. The Hybrid Shaft Generator will generate electrical power for the ship even if the engine power output varies, saving fuel.

"The HSG can also act as a propulsion motor (PTI) providing an alternative power source should LNG becomes unavailable - a prerequisite for class approval," Rolls-Royce added.

Bergen Gas Engines from Rolls-Royce are the only pure gas engines on the market using a spark-plug ignition.

US shipping group Crowley plans truck-ship exports from Canada plant

US shipping group Crowley has applied to the Canadian National Energy Board for an export permit to ship LNG south by truck, barge or ship from small-scale liquefaction plants currently operating or being expanded in Canada.

Crowley has filed an application with the NEB for its LNG unit to export up to 10 billion cubic feet per annum for 25 years to the US and its territories.

The US company said the LNG would be provided by Tilbury plant in the town of Delta, British Columbia, or the Mount Hayes plant on Vancouver Island, both owned by FortisBC Energy Inc.

"LNG for export may also be sourced from the Elmworth LNG Plant in Elmworth, Alberta, which

is owned by Ferus Natural Gas Fuels," Crowley said.

"The LNG may be exported via vessel or containers loaded onto trucks or barges," it added.

While large-scale Canadian LNG export projects have been stalled or delayed, there are several plants originally started as peak-shaving facilities and which are now being expanded for domestic retail and commercial sales.

Crowley's petroleum distribution unit has already been granted authority by the US Department of Energy to import LNG shipments from Canada.

The company is also a main established provider of marine and road petroleum and fuel distribu-

tion and energy support services throughout Alaska. The Crowley company is part of the group that owns Crowley Maritime Corp., based in Jacksonville, Florida.

Crowley is separately having LNG-fuelled vessels constructed for its trade routes to the US territory of Puerto Rico and to supply LNG in containers for use as fuel.

The company's Canadian permit will allow it to ship LNG from the loading area at any marine cargo terminal in the metropolitan areas of British Columbia.

It will also permit land border-crossings by LNG trucks between BC and Washington State, BC and Alaska or between the Yukon and Alaska.

Djibouti signals start of LNG plant project backed by China and using Ethiopian gas

Our Europe editor

Djibouti, the small Horn of Africa nation and former French colony on the southern side of the Gulf of Aden, has started a \$5 billion liquefied natural gas export project with backing from a powerful industrial group in China and using feed-gas imported from neighbouring Ethiopia by pipeline.

A ground-breaking ceremony has just been held in Damerjog, Djibouti, to mark the start of construction of the LNG export plant, according to the Djibouti Ports & Free Zones Authority.

Developers

The facility will be developed by Poly-GCL Petroleum Group, a joint venture between China's Poly Group and GCL Group.

The Poly Group was started by the China's People's Liberation Army in 1993 during democratization in China and has expanded into many fields, including mining



Poly-GCL Petroleum Group exploration well in Ogaden region

and energy and property. He Ping, the son-in-law of former Chinese leader Deng Xiaoping, was president of the Poly conglomerate for several years after its founding.

According to Poly-GCL, the project's estimated cost is at \$5Bln with first LNG export expected by 2019.

The facility will have one liquefaction train in the first phase, allowing for the production of 3 million tonnes of LNG per annum, with an option to expand to 10

MTPA, Poly-GCL said.

Feed gas will be delivered via an 800-kilometre pipeline from Ethiopia's Ogaden Basin to Djibouti, with a planned phase one throughput of 4 billion cubic metres per annum.

In February 2015, the President of Djibouti, Ismail Omar Guelleh, welcomed Ethiopian Premier, Hailemariam Desalegn, for a three-day state visit when they signed a framework agreement for a cross-border pipeline between the two

countries as well as a joint operating agreement for the pipeline.

The agreement states that POLY-GCL will cooperate in building the pipeline from the Ogaden region in Ethiopia to Djibouti, where it will be processed and exported from a marine terminal.

"The LNG will be shipped from Djibouti to China by 170,000 cubic metres LNG carriers," said POLY-GCL.

"The location of the export terminal in Damerjog is optimal because it is relatively flat and the sea is very calm in the area," it added.

POLY-GCL Petroleum Holdings also has five production sharing agreements (PSAs) with the Ministry of Mines of Ethiopia.

The group has oil and gas exploration and development contracts for 10 blocks with an area up to 117,000 square kilometres in the Ogaden Basin in cooperation with the Ethiopian government.

UK brokerage Clarksons says building blocks in place for healthier shipping charter market

UK shipping brokerage Clarksons, which last year completed the takeover of Norwegian broker and investment bank Platou ASA, reported a 9 percent drop in earnings per share amid "unprecedented challenges" in 2015, though with building blocks in place for a more positive market.

The results in 2015 included 11 months contribution from the Norwegian brokerage and underlying profit before taxation was 50.5 million pounds (\$71.6M) compared with 33.8M pounds in 2014.

However, underlying earnings per share dropped to 121.9 pence in 2015 from 134.2 pence the previous year.

The EPS was before exceptional items and acquisition costs of 18.7M pounds in 2015 and 8.6M in 2014.

In addition to its brokerage activities, Clarksons also provides re-

search and analysis of shipping markets, including the LNG sector.

Clarksons Chief Executive Andi Case said the offshore sector had experienced the most difficult environment, whereas significant movements in commodity prices changed trade flows, creating "both positive and negative impacts" to shipping demand as the volatility has played out.

"Once again, seaborne trade grew in 2015. However, the primary concern remains the oversupply of tonnage in a number of the shipping markets, combined with the additional challenge of debt and equity funding increasingly witnessed across the global shipping industry," Case stated.

"The geopolitical and macro-economic environment remains very uncertain and, as such, we do not anticipate any changes to our

markets in the near term.

"However our business model has proven to be robust and the strategic advances we have made in 2015, coupled with our strong balance sheet, ensure that we are 'fit for the future'.

"As we continue to see building blocks for the creation of healthier shipping markets, we feel best placed to capitalise on new opportunities," the Clarksons CEO said.

Clarksons completed the acquisition of the offshore and shipping market player Platou in February 2015.

"Through this acquisition we have combined two leading businesses and highly experienced and proven management teams to create a fully integrated offer across shipping and offshore, broking and banking.

"The board firmly believes that

this deal sets new standards in the broking industry. The integration of our two businesses has continued at great pace over the course of the year and is now effectively complete," Clarksons said.

The company said research and analysis continued to play a crucial role in underpinning its offer to clients.

"We are the industry's leading provider of data and market intelligence on the shipping and offshore industries and our trusted research team is by far the largest commercially-led unit in the maritime world.

"Despite the challenging markets, the increasing strength of our research business reflects the importance we and our clients place on this valuable market insight," it added.

Wartsila CEO apologizes for marine engine test faults and blames some Italian staff

Our Europe editor

Wartsila Corp., the Finland-based maker of propulsion systems for the liquefied natural gas carrier fleet as well as LNG-fueled engines, has admitted that internal audits reveal “deviations in a limited number of fuel consumption tests”.

Wartsila blamed the “deviations” on a small number of employees at an Italian test centre and the company’s Chief Executive has apologized to customers.

Initiative

The company said it had on its own initiative conducted an internal audit of test processes globally.

“This was done to secure compliance and to ensure operational excellence within the company,” it said.

“The investigation has revealed



Wartsila President and CEO Jaakko Eskola

deviations in certain fuel consumption measurement tests conducted for marine engines in Wartsila Delivery Centre Trieste in

Italy before customer dispatches.

“The deviations are on average 1 percent of fuel consumption. Of all Wartsila engine deliveries a

total of 2 percent may have been affected.

“Engines for power plant customers are not impacted, and we have no evidence of deviations in other operations,” Wartsila stated.

Marine propulsion system makers and auto engine manufacturers worldwide have taken a closer look at their testing processes following the scandal involving Volkswagen’s diesel engines in the US that had software installed to improve environmental test results.

The Finnish company explained that the engines in question have fulfilled the regulatory and classification society requirements, and the potentially affected vessels have met sea trial requirements.

“According to our evaluation, the customer impact of the deviations is marginal,” it said.

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