

New York-based equity funds sign first deal with Mideast producer

LNG exporter Adnoc signs partnership accord with leading investors BlackRock and KKR
LNG Journal editor

LNG producer Abu Dhabi and its oil company, the first regional operator of liquefaction and export facilities at Das Island since 1977, has signed a transaction that marks the first time the largest New York-based global equity funds have invested in key midstream infrastructure assets of a national oil company in the Middle East.

The Abu Dhabi National Oil Company, the oil, natural gas and LNG producer, has signed a landmark midstream infrastructure partnership with two of America's largest equity funds, BlackRock and Kohlberg, Kravis Roberts (KKR), for an initial upfront payment to Adnoc of \$4 billion.

Midstream

The deals were signed in Abu Dhabi by Ahmed Al Jaber, the United Arab Emirates Minister of State and Adnoc Group Chief Executive and Laurence D. Fink, BlackRock Chairman and CEO and Henry Kravis, Co-Chairman and Co-CEO of KKR.

The UAE is the oldest LNG producer in the Middle East from its plant offshore Abu Dhabi consisting of three Trains with capacity of around 5.5 million tonnes of LNG per annum.

Adnoc recently confirmed new discoveries of gas in place totaling 15 trillion cubic feet and intends to continue LNG production for 40 more years and to increase its discovered resources and oil and gas infrastructure development.

It is also embarking on multiple sour gas projects and others onshore and offshore.



Laurence D. Fink, BlackRock Chairman and CEO, Ahmed Al Jaber, UAE Minister of State and Adnoc Group CEO and Henry Kravis, Co-Chairman and Co-CEO of KKR

As part of the Adnoc transaction with the US funds, a newly formed entity called Adnoc Oil Pipelines will lease Adnoc's interest in 18 pipelines, transporting stabilized crude oil and condensate across Adnoc's offshore and onshore upstream concessions for a 23-year period.

"The entity will, in turn, receive a tariff payable by Adnoc, for its share of volume of crude and condensate that flows through the pipelines, backed by minimum volume commitments," they explained.

Funds managed by BlackRock and KKR will form a consortium to collectively hold a 40 percent interest in the entity, while Adnoc will hold the remaining 60 percent majority stake.

Sovereignty over the pipelines and management of pipeline operations remain with the UAE company.

"The transaction will result in upfront proceeds of approximately \$4 billion to Adnoc and is expected to close in the third quarter of 2019, subject to customary conditions and all regulatory approvals," said Adnoc and the two equity funds.

"BlackRock and KKR's long-term investment underlines the

attractiveness of Abu Dhabi and the UAE as a rapidly emerging investment destination for international capital," they said.

"This transaction marks the first time that leading, global institutional investors have deployed capital into key midstream infrastructure assets of a national oil company in the Middle East," they added.

In conjunction with this transaction, Adnoc said it was laying the groundwork for additional infrastructure-related investment opportunities with institutional investors.

Adnoc's 60 percent equity stake in Adnoc Oil Pipelines will be held through Adnoc Infrastructure, a subsidiary.

"The level and sophistication of the investors that we are attracting as financial partners to invest, alongside Adnoc, in these select pipeline assets is a clear reflection of the UAE's stable, attractive and reliable investment environment," said Adnoc's Al Jaber.

Commenting on the transaction, KKR's Kravis said the transaction can be a catalyst for further foreign investment and broader economic transformation in the UAE.

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BP starts up Angelin gas field for Trinidad LNG and plans \$8Bln more in Caribbean investments

LNG Journal editor

UK major BP has announced the first natural gas flows from its Angelin development in Trinidad and Tobago to help underpin the future of the Caribbean nation's liquefied natural gas exports and has a 10-year investment plan amounting to around \$8 billion.

The Angelin project includes a new platform and four wells located 60 kilometres off the south-east coast of Trinidad in water depths of 65 metres.

Hub destined

The Angelin field is estimated to contain 1.5 trillion cubic feet of gas and will boost available volumes at the Atlantic LNG plant at Point Fortin in Trinidad.

The new platform, BP's 15th installation offshore Trinidad & Tobago, has a production capacity of 600 million standard cubic feet a day.

BP said gas was flowing from the platform to the existing Ser-



Platform and four wells located 60km offshore Trinidad

rette hub via a new 21-kilometre pipeline.

The gas passing through the hub can be sold into the domestic market or supplied to Atlantic LNG for liquefaction and export.

Trinidad's plant ships more than 10 million tonnes per annum of LNG from its four Trains and BP holds around a 40 percent working interest.

"This safe and successful start-up, less than two years after sanction, is a credit to our BP teams

and contractors," said BP Upstream Chief Executive Bernard Looney.

"Angelin is BP's 22nd in the latest of new upstream projects to come online in just over three years and reflects our commitment to do what we said we would, safely and competitively," he added.

BP regional president Claire Fitzpatrick said BP was proud to deliver its promise of first gas from Angelin in the first quarter of 2019.

"Angelin is the next step in ful-

filling our long-term development plan in Trinidad and will play an important role in enabling us to deliver our production commitments, which could potentially include up to \$8 billion of investment in several more major projects over the next 10 years," she stated.

BP said the Angelin gas field was BP's first major project development supported by the application of ocean bottom cable seismic acquisition with advanced processing, allowing enhanced imaging of its reservoirs in the Columbus basin offshore Trinidad.

BP started up two new gas projects in Trinidad, the Juniper venture and the Trinidad Onshore Compression project, in 2017 and recently announced the sanctioning of another two developments.

These are the Cassia Compression venture and the Matapal gas project for a discovery made in 2017. They are expected to come onstream in 2021 and 2022 respectively.

Kosmos Energy makes progress on other African ventures as well as Mauritania-Senegal FLNG

Kosmos Energy, the US partner of BP in the Mauritania-Senegal floating LNG projects, reported a net profit in the fourth quarter compared with a loss in the year-ago period as it advanced with its FLNG plans and expanded its Africa-focused activities.

The company generated a fourth-quarter net gain of \$186 million versus a net loss of \$122M in the same three months of 2017.

Kosmos also narrowed its annual losses to \$94 million for 2018 from \$223M in the previous year.

The Dallas, Texas-based company said that its main quarterly highlight was the final investment decision taken to progress with phase one of the Greater Tortue-Ahmeyim natural gas project that will underpin the FLNG ventures.

"The Greater Tortue-Ahmeyim

project will produce gas from a deepwater subsea system to an FLNG facility at a nearshore hub located on the Mauritania and Senegal maritime border," said Kosmos of the venture involving BP and both West African governments.

"The FLNG facility for Phase 1 is expected to deliver approximately 2.5 million tonnes per annum on average," it added.

"The full project will provide 10 million tonnes per annum of LNG for global export, as well as make gas available for domestic use in both Mauritania and Senegal," explained Kosmos.

"First gas for the project is expected in the first half of 2022. Following a competitive tender process, BP Gas Marketing has been selected as the buyer for the LNG offtake of all partners for

Greater Tortue-Ahmeyim Phase 1," it stated.

The other Kosmos operations in Ghana and Equatorial Guinea were also marked by increased activities.

During the fourth quarter, gross oil sales volumes in Ghana averaged around 151,000 barrels of oil per day (bop/d), including volumes from the Jubilee and the Tweneboa, Enyenra and Ntomme (TEN) fields which averaged 85,500 bop/d and 65,500 bop/d respectively.

Kosmos said its production in Equatorial Guinea averaged around 44,100 bop/d for the year and it also made acquisitions.

Kosmos completed a farm-in agreement with a subsidiary of Ophir Energy for Block EG-24, offshore Equatorial Guinea, whereby it acquired a 40 percent non-operated participating interest.

Then in January 2019 Kosmos agreed to acquire Ophir's remaining interest in the block and operatorship, which will result in Kosmos owning an 80 percent interest in Block EG-24, subject to governmental approvals.

The US company has additionally received \$258 million in dividends from the Kosmos-Trident joint venture in Equatorial Guinea.

During the fourth quarter Kosmos widened its African interests by acquiring a 45 percent non-operated participating interest in PEL 39 block offshore Namibia in southwest Africa from Shell Exploration Company.

The block covers an area of about 12,000 square kilometres in water depths ranging from 250 to 3,000 metres.

China LNG demand starts year on high note

Chinese liquefied natural gas imports rose to a record level last month as shipments continued to be attracted by high North Asian spot prices with the main suppliers such as Qatar, Australia and Nigeria keeping up their delivery momentum.

The Chinese imports in January 2019 amounted to 6.58 million tonnes compared with 5.18MT in January 2018, an increase of 27.2 percent, according to the General Administration of Customs.

China reported earlier in the month that total January natural gas imports, including LNG and pipeline gas volumes, increased by 26.8 percent from a year earlier to 9.81MT.

Chinese pipeline supplies come from the Central Asian countries Turkmenistan, Uzbekistan and Kazakhstan as well as Myanmar.

LNG will also receive more competition from December 2019 when the 4,000-kilometres Power of Siberia gas pipeline from Russia comes on stream.

Surging LNG and pipeline imports were driven by consumption from residential and industrial users in northern China amid government efforts to replace coal with natural gas during the winter months to reduce pollution.

Chinese LNG imports rose by 38 percent in 2018 as shipments surged in the final two months of the year.

The LNG imports totaled 53.81MT compared with just over 39MT in 2017.

The imports of LNG had risen at a slower pace in 2018 than in 2017 when they increased by 46 percent from the previous year when shipments had amounted to just over 27MT.

Pembina puts Jordan Cove LNG on its commercial front line

LNG Journal editor

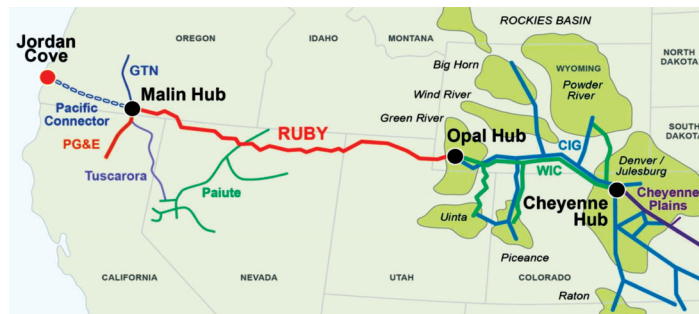
Pembina Pipeline Corp., the Canadian owner of the Jordan Cove LNG export project in the US northwest state of Oregon, has posted solid fourth-quarter earnings as it reported progress on the US liquefaction venture and expects a decision from regulators by year-end.

Pembina said its fourth-quarter and full-year earnings were \$368 million and \$1.3 billion, a 17 percent decrease and 45 percent increase respectively over the same periods in 2017.

Coos Bay

Pembina's Jordan Cove LNG plant is proposed for Coos Bay in Oregon and would comprise five small-scale liquefaction Trains each with 1.5 million tonnes per annum of output for a total of 7.8 MTPA.

It will also include two full-containment LNG storage tanks with a total storage capacity of 320,000 cubic metres, gas treating facilities, an export terminal and access to more than 25 billion cubic feet



Malin Hub will supply ample feed-gas from Rockies Basin

per day of gas supply from Western Canada and the US Rockies.

"Pembina continues to progress its proposed Jordan Cove LNG project that will transport natural gas from the Malin Hub in southern Oregon to an export terminal," said Pembina in its earnings statement.

"The company has received a Notice of Schedule that indicates the US Federal Energy Regulatory Commission will provide a decision not later than November 2019," added Pembina.

"Pembina continues to work with various state and other agencies to progress the project on a similar time line," said the Canadian company, which acquired the

Jordan Cove venture when it took over Calgary-based Veresen Inc.

The company reiterated that it had executed non-binding off-take agreements for a total of 11 million tonnes per annum of LNG, exceeding the planned nameplate capacity at Jordan Cove of 7.5 MTPA.

"Pembina is working to conclude off-take agreements in the first quarter of 2019," said the company.

"We continue to anticipate first gas in 2024, pending the receipt of the necessary regulatory approvals, a positive final investment decision and other requirements," stated Pembina.

Sempra expresses ambitions for three LNG export project plants

Sempra Energy said that recent agreements signed supported the goal of the California-based utility and project developer to become one of the largest US exporters of LNG with targeted volumes of 45 million tonnes per annum.

Sempra outlined its plans as it posted full-year earnings of \$924 million compared with \$256m in the previous year.

On an adjusted basis, the company's 2018 earnings were \$1.5 billion, up from \$1.37Bln in 2017.

"Our strong 2018 operational and financial results confirm that we're on track to fulfil our mission to become North America's premier energy infrastructure company," said Jeffrey W. Martin, Chairman and Chief Executive.

The company's LNG sales agreements with commercial parties in the fourth quarter were for its Cameron LNG plant in Louisiana, its Port Arthur facility in Jefferson County in Texas and its Costa Azul export venture on the Pacific Coast of Mexico.

"In November 2018, Cameron LNG initiated the commissioning process for the first of three liquefaction trains of Phase 1 of the project. Sempra expects Cameron LNG to begin generating earnings in mid-2019," said the company.

Earlier in February Sempra announced an agreement to complete the divestiture of its US renewables business by selling its remaining wind operating and development assets.

The sales of the renewables business and its non-utility natural gas storage assets are expected to generate around \$2.5 billion in cash proceeds for Sempra.

The proceeds will be used to support Sempra's focus on North America and strengthen its balance sheet.

Sempra also decided in January to sell its equity interests in its South American businesses, the utilities Luz del Sur in Peru and Chilquinta Energia in Chile.

"Over the past year, we made significant strides in all aspects of our business. We expanded our Texas regulated utility platform with the acquisition of our majority interest in Oncor," said CEO Martin.

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ExxonMobil reserves boost

ExxonMobil Corp., one of the main global LNG producers with stakes in multiple Trains in Qatar and elsewhere, said it added 4.5 billion oil-equivalent barrels of proved oil and gas reserves in 2018, replacing 313 percent of the year's production. ExxonMobil's proved reserves totaled 24.3 billion oil-equivalent barrels at year-end 2018. Liquids represented 64 percent of the reserves, up from 57 percent in 2017.

Awilco losses narrow

Awilco LNG, the small Norwegian LNG fleet owner with two vessels, narrowed its losses during the fourth quarter and the full year. Awilco, whose two ships are the 156,000 cubic metres capacity carriers the "WilForce" and the "WilPride" saw fourth-quarter losses narrow to \$1.16 million versus \$4.52M in the same three months of 2017. Annual losses were \$11.4M compared with \$31.8 in 2017. Interest expenses on the "WilForce" and "WilPride" financial leases amounted to \$5.4M, the same as in the previous quarter.

Golar FLNG agreement

Golar LNG has signed a 20-year lease and operate agreement with BP of the UK for the charter of a floating LNG production hull, the converted conventional carrier the "Gimi", to service the Greater Tortue-Ahmeyim project offshore Mauritania and Senegal. The FLNG facility is expected to be deployed to start production in 2022. The unit is designed to produce around 2.5 million tonnes of LNG per annum, using the Prico liquefaction process technology owned by Black & Veatch of the US.

Cheniere Energy LNG Trains post revenue rise as 270 cargoes are shipped amid output increases

LNG Journal editor

Cheniere Energy, the leading US LNG producer and exporter with its Sabine Pass plant in Louisiana and the new Corpus Christi facility in Texas, said annual revenues rose by 43 percent to \$7.57 billion as 270 cargoes were shipped in 2018.

Cheniere said full-year net income came to \$471 million compared with a \$393M loss in 2017.

Net profit down

"The increase in net income was primarily due to increased income from operations as a result of additional Trains at the SPL Project, decreased loss on modification or extinguishment of debt, increased derivative gains and decreased net income attributable to non-controlling interest," said Cheniere.

Fourth-quarter net income declined to \$67M compared with \$127M in the same three months of 2017 while fourth-quarter revenues were up 36 percent at \$2.24Bln.

Cargoes shipped in the fourth quarter, mostly from Sabine Pass, amounted to 80. Eight further cargoes departed from Sabine Pass and Corpus Christi on a delivered basis and were in transit as of December 31.

Cheniere said that its consolidated adjusted gross earnings (Ebitda) for the three-month and 12-month periods were \$634M and \$2.6Bln respectively compared with \$523M and \$1.8Bln in the same 2017 periods.

The company said the increase in gross earnings was primarily due to increased income from operations.

"It was an exceptional year for Cheniere, underscored by our positive final investment decision on Corpus Christi Train 3, the execution of seven long-term LNG Sale and Purchase Agreements for



Corpus Christi plant currently has one Train on stream

more than 7 MTPA of LNG and financial results at or above the top end of our guidance ranges," said Jack Fusco, Cheniere's President and Chief Executive.

"With our relentless focus on execution continuing to drive results at both project sites, we have cemented our reputation as a reliable full-service LNG operator which delivers on its promises to customers, while leveraging our infrastructure platform and LNG portfolio to support future growth and value for our stakeholders," added Fusco.

"We are focused on progressing Sabine Pass Train 6 and expect to make a positive final investment decision on that project in the coming months," stated the CEO.

"We expect to place Sabine Pass Train 5 and Corpus Christi Train 1 into (commercial) service imminently, furthering our track record of placing Trains into operation ahead of schedule and within budget," said Fusco.

"The commissioning process recently began on Corpus Christi Train 2, and we expect that Train to reach substantial completion in the second half of this year," he added.

Cheniere said that on February 20, about three years after it started commercial operations,

the Sabine Pass plant in Louisiana had exported more than 575 cargoes, with a small volume also coming from the recently on stream Corpus Christi plant.

In November 2018 and December 2018, the first LNG commissioning cargoes were exported from Train 5 at Sabine Pass and Train 1 at Corpus Christi respectively.

Cheniere's six Trains at Sabine Pass will have nameplate capacity of 27 MTPA when all are on stream and the three Trains at Corpus Christi will have output of around 13.5 MTPA.

Texas expansion

In addition, Cheniere is developing up to seven mid-scale liquefaction Trains adjacent to the Corpus Christi development.

Each of the seven mid-scale Trains will have nominal capacity of around 1.4 MTPA.

"The total expected nominal production capacity of the seven mid-scale Trains is approximately 9.5 MTPA of LNG," said Cheniere.

The company has filed an application with the Federal Energy Regulatory Commission to site, construct, and operate the new Corpus Christi project, known as Stage 3.

LNG equipment leader Air Products completes the world's largest industrial gas complex in Saudi Arabia

LNG Journal editor

Air Products, the leading US LNG equipment-maker and industrial gases company, has completed the world's largest industrial gas complex at Jazan in Saudi Arabia to provide gas to the Saudi Aramco refinery.

The Lehigh Valley, Pennsylvania-based company built the plant under a joint venture with Saudi company ACWA Holding.

Saudi Aramco

It will supply 75,000 metric tonnes per day of gases, including oxygen and nitrogen, to the Saudi Aramco facility.

Air Products industrial gases business is carried out alongside its LNG and equipment products such as LNG main cryogenic heat exchangers and its proprietary



The 2.1-billion Saudi industrial gas complex built in Jazan

propane pre-cooled mixed refrigerant liquefaction process.

In addition to building and designing the Saudi industrial gas complex, Air Products owns 25 percent of the completed plant and ACWA Holding the remaining 75 percent.

"For the Air Products team

members involved to complete this project with the extensive worker hours required, facing varied challenges, and to do so without a lost time injury is a truly exceptional milestone," said Samir J. Serhan, Executive Vice President of Air Products.

"Going forward, when a prospective customer is interested in Air Products' expertise, we can point to a map and say, let me tell you what we accomplished at Jazan," stated Serhan.

The work on the Jazan project was carried out by the main Air Products engineering centres lo-

cated in the UK, the US, China and India with the active engagement of other employees in Saudi Arabia.

"The now mechanically complete industrial gas complex is expected to be brought on stream in phases in 2019," said the US company.

Air Products said the Jazan gases complex took around three years to complete and is significantly larger than anything built to date by the company.

"On top of that, there was the massive recruitment effort to bring the construction workforce and others to the remote location, train them, and have them understand our focus on safety," added Serhan.

The Jazan project effort required the hiring of sub-contractors for almost all of the construction scope.

"At peak construction periods, a workforce of 6,000 people were at the site. The result was a multinational team of people from over 30 countries filling the varied roles necessary for the project," said Air Products.

“...when a prospective customer is interested in Air Products' expertise, we can point to a map and say, let me tell you what we accomplished at Jazan.”

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Canadian gas firms mull options for LNG plant

Western Canadian natural gas producers have formed a consortium to explore ways of sending their resources to market, including the possibility of planning their own LNG export project in British Columbia.

The companies, said to number about 10, include Seven Generations Energy, Peyto Exploration and Development Corp. and Advantage Oil & Gas and seven other producers.

The companies are excited about it. There's momentum there," said Andy Mah, President and Chief Executive of Advantage.

The consortium has hired experienced LNG executive Greg Kist as a consultant. Kist is the former President of the Pacific NorthWest LNG project company formed by Petronas of Malaysia.

Petronas eventually cancelled the Pacific Northwest LNG export venture planned for BC and instead joined the LNG Canada joint venture led by Royal Dutch Shell.

There were more than 20 LNG proposals in BC just five years ago from a range of different companies to build projects on Canada's West Coast. However, LNG Canada is the only industrial-scale plant still going ahead.

Kist said the group of 10 companies was "a collaboration amongst competing producers" that collectively produce 20 percent of Canada's natural gas and 40 percent of natural gas products such as propane, butane and ethane.

"The producers want to deal with the challenge we have today with weak prices," said Kist.

Singapore LNG completes jetty modifications for smaller ships

LNG Journal editor

Singapore LNG Corp., operator of the import terminal in the Asian city state, said it successfully completed modifications to its secondary jetty on Jurong Island and was now able to handle small-scale LNG carriers.

SLNG said small-scale vessels with capacities of between 2,000 cubic metres and 10,000 cubic metres were able to receive and reload shipments.

Break-bulk

"This new small-scale facility will help spur the development of the small-scale LNG market in various forms. For example, in the supply of LNG to isolated power plants in remote areas in the region, or in the delivery of LNG as bunker fuel to ships in the Port of Singapore," explained SLNG.

The company's initiative to welcome small-scale carriers followed its involvement in June 2017 in the gas-up-cool-down and reload operation for the 6,500 cubic metres capacity LNG bunkering vessel "Cardissa", owned by Royal Dutch Shell.

"Following on that success, and to better support small-scale LNG



Jurong Island terminal set to build fifth storage tank

and LNG bunkering, SLNG took the initiative to commence modification works to its secondary jetty so that even smaller LNG ships could reload at the terminal," said SLNG.

The modifications include the installation of a new marine loading arm and gangway, as well as new facilities for securing smaller ships at the jetty.

"We believe that there is good potential for the small-scale LNG market to flourish in this part of the world, and the timely completion of the SSLNG facility is an important step forward in SLNG's efforts to support this growth," said Sandeep Mahawar, Interim Chief Executive and Vice President (Commercial) of SLNG.

"It also serves to promote the development of LNG bunkering in

Singapore, which is another potential growth area given Singapore's already well-established reputation as the top bunkering port in the world," stated Mahawar.

"As demand builds and there is a viable business case, SLNG may consider installing topsides at its tertiary jetty to accommodate more SSLNG reloads," he added.

SLNG is additionally considering building a fifth storage tank after its fourth tank was put in service in 2018 and has an even larger capacity than the other three at 260,000 cubic metres, offering LNG traders more options and flexibility.

The SLNG facility's three other storage tanks each have a capacity of 188,000 cubic metres and 540,000 cubic metres in total.

Pavilion to charter Japan-owned LNG bunker vessel to serve port

Pavilion Energy said it would be chartering its first liquefied natural gas bunkering vessel to supply LNG fuel in the Port of Singapore and the Japanese-owned ship will have 12,000 cubic metres of capacity.

Pavilion said the vessel would be constructed at the Sembcorp Marine shipyard in Singapore for delivery by early 2021.

The LNG tanks will be the Mark III Flex membrane version supplied by French storage technology company GTT.

Japan's Mitsui O.S.K. Lines will own the vessel and the Singaporean bunker services provider,

Sinanju, will help manage the ship.

Pavilion, the energy company owned by Singapore wealth fund Temasek, received a S\$3 million (US\$2.2 million) grant under the Maritime and Port Authority of Singapore's (MPA) LNG bunkering co-funding programme.

The newbuild will have twin membrane LNG cargo tanks for more efficient boil-off gas management and will fuel ships mainly for the coastal and short-sea trade.

"Pavilion has made substantial headway that will see us supply a cleaner and more sustainable bunker fuel in the Port of Singa-

pore," said Frederic H. Barnaud, Group Chief Executive of Pavilion.

"The strategic partnerships with Total and MOL will reinforce our commitment to developing robust LNG bunker supply solutions in Singapore as our home base," added Barnaud.

Quah Ley Hoon, Chief Executive of the MPA, said she was pleased to have LNG fueling at the world's largest bunkering port.

"We look forward to this collaboration catering to growing future demand for ship-to-ship LNG bunkering in Singapore," she added.

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Flex LNG profits rise after record quarterly spot cargo rates followed by slump in early 2019

LNG Journal editor

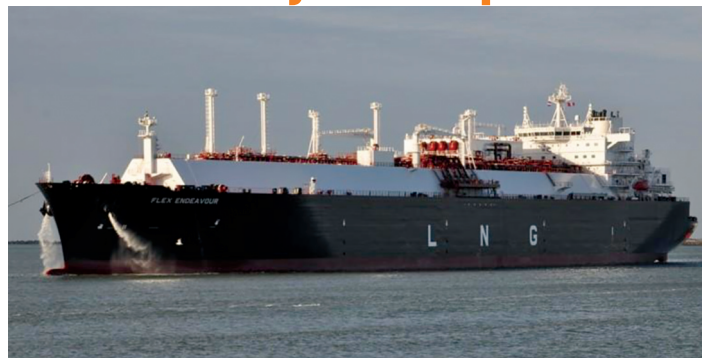
Flex LNG, the growing LNG shipping company with four vessels operating and nine others on order and whose largest shareholder is a company controlled by Norwegian magnate John Fredriksen, posted a rise in net profits as fourth-quarter spot LNG cargo rates reached record levels then slumped in the first quarter of 2019.

However, Flex added that due to a combination of higher temperatures and fewer gas heating days, the freight rates for LNG have dropped substantially during first quarter of 2019 and have resulted in lower general fleet utilization.

Strategy

The company, listed on the Oslo bourse, reported a fourth-quarter net profit of \$15.2 million compared with \$1.3M of profits in the same three months of 2017.

Flex stated that net profits for the year were \$11.8M compared with net loss of \$10.4M in 2017.



One of the company's operational carriers 'Flex Endeavour'

The company was still optimistic about market activities for the rest of 2019 and beyond.

"During 2019 we expect about 38 vessels to be delivered which means there is only 1.15 new ships per million ton of new LNG compared to historic requirement for about 1.3 ships per million of ton LNG given lifting capacity of LNG carrier of about 750,000 tonnes per annum," explained Flex.

"Furthermore, the incremental growth in LNG will predominately arrive from the US which in general have a longer sailing distance

to the average end-user than the traditional exporters thereby increasing expected ton per mile rates," added Flex.

The company said that its fourth-quarter operating revenues for its vessels amounted to \$36.1M compared with \$7.9M for the 2017 quarter.

Vessel operating revenues for the year came in at \$77.2M compared with \$27.3M for 2017.

"During the fourth quarter we capitalized on a strong market and clearly demonstrated the earnings potential of our new fifth genera-

tion LNG carriers," said Flex Chief Executive Oystein M. Kalleklev.

"While the market is currently soft due to weaker shipping demand, we remain upbeat about the outlook for LNG shipping," he added.

Flex said it expected the coming growth of LNG production and the expected rise in demand for natural gas to continue tightening the shipping market.

"We believe that our state-of-the-art LNG carriers will command a premium in the market and be the preferred vessels for longer term charters," said Flex.

"We continue to execute our chartering strategy to secure balanced fleet employment through actively marketing our LNG carriers in both the term and spot markets," added the company.

Flex noted that during the fourth quarter it successfully conducted a private placement of shares, raising gross proceeds of

Hoegh LNG advances with two Australian FSRU projects with other global tenders anticipated

Hoegh LNG, the Norwegian fleet owner and floating import project developer, reported rising profits as it advanced with projects to supply two Australian states with natural gas, while focusing on China and listing more than a dozen other countries likely to deploy floating storage and regasification units as terminals.

Hoegh said it remained involved in the final bidding round for one additional tender process, while it had been granted exclusivity for two FSRU contracts, including the Australian Industrial Energy import project at Port Kembla in Australia and a second project at Cribb Point in the state of Victoria.

The Australian Port Kembla project intends to install an FSRU

to supply the New South Wales market and is backed by a consortium consisting of Squadron Energy, owned by Australian industrialist Andrew Forrest, Jera Co. of Japan and Japanese trading house Marubeni Corp.

"Hoegh is involved in several additional selection and tender processes at various stages of development," said the company.

"China remains a key focus area since additional regasification capacity is deemed necessary to meet increasing demand for natural gas for the Chinese market," it stated.

Hoegh outlined its market activities as it reported total fourth-quarter income of \$122.3 million compared with \$73.05M in the same three months of 2017.

Hoegh's annual net profits rose by 75 percent to \$72.0M from \$40.1M in 2017. It said the improved net profit reflected higher gross earnings partly offset by increased depreciation, an impairment of jetty equipment and higher interest expenses.

The Norwegian company's full-year revenues amounted to \$352.7M versus \$279.4M in the previous year.

"The increase reflects a larger fleet, improved market conditions for LNG carriers, charter hire for 'Hoegh Esperanza' (to China) and the revenue recognition of remaining contractual commitments from Egyptian Natural Gas Holding Co. (Egas) under the amended contract structure," said Hoegh.

Hoegh noted that during the

past year FSRUs were installed in China and Bangladesh, while the Russian enclave of Kaliningrad became an LNG importer using an FSRU in January 2019.

The company said many other countries were considering new FSRU import terminals, including Australia, Croatia, India, Hong Kong in China, El Salvador, Myanmar, Thailand, Vietnam and the Philippines, as well as several North African and West African nations and the European countries Greece, Germany and Poland.

High said that three FSRUs were released from their contracts in 2018 owing to changing gas market balances in Egypt, Argentina and Abu Dhabi in the United Arab Emirates.

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Crowley Maritime holds Puerto Rico naming for LNG-fueled ship and defends need for Jones Act

LNG Journal editor

Crowley Maritime Corp., one of the US shipping lines pioneering vessels with LNG fuel capability, marked its commitment to the Florida-Puerto Rico trade route with a ceremony at San Juan port in the US Caribbean territory.

Crowley said it had christened the US-flag combination container-roll on-roll off ship "Taino" in San Juan, where the company's investments have ushered in a new era of world-class supply chain services.

Sponsor

Clara Crowley, daughter of Chairman and Chief Executive Tom Crowley and board member Christine Crowley, served as the ship's sponsor and broke the ceremonial bottle of champagne on the bow of "Taino" at the company's Isla Grande Terminal in the presence of several hundred employees, customers and officials.

It was the first time a container ship had been christened in San Juan in recent memory.

"We are thrilled to christen this magnificent new ship here with our employees, customers and people of Puerto Rico, whom



Clara Crowley, daughter of Crowley CEO Tom Crowley and board member Christine Crowley names the ship

she will serve for many years to come," said CEO Tom Crowley.

"The 'Taino' vessel is a source of pride for us all and in particular the men and women who built and or crew her, many of whom are Puerto Rican," added Crowley.

The vessel is among the first US-flagged vessels to have LNG capability, like its sister "El Coqui", which entered service in 2018. Both have dual-fuel engines to operate with LNG and conventional fuel.

Both ships were constructed at the VT Halter Marine's shipyard in Pascagoula, Mississippi.

Crowley has also made significant investments in terminals and related infrastructure on the

mainland and in Puerto Rico.

At Isla Grande, the company added a new, 900-foot pier and three ship-to-shore gantry cranes, the first newly constructed cranes for San Juan Harbor in more than 50 years.

The company also implemented a new terminal operating system and added container staging areas and handling equipment for both refrigerated and dry cargo.

"This major investment, which is resulting in jobs, a positive economic impact, a cleaner environment and world-class supply chain services for Puerto Rico shippers, would not have been possible without the Jones Act," said Crowley.

The Jones Act is a federal law that regulates maritime commerce in the United States.

It requires goods shipped between US ports to be transported on ships that are built, owned and operated by United States citizens or permanent residents.

"Also known as the Merchant Marine Act of 1920, the law is vitally important to maintaining a strong US maritime capability and national defense," said Crowley.

"While the act ensures that we have a robust shipbuilding capability and skilled merchant mariners in the US essential to our national defense, it has also created a commercial shipping market between the mainland and Puerto Rico that is highly competitive, customized and dedicated," said the CEO.

"We should be strengthening this critically important maritime law, not tearing it down as some special interest groups espousing highly inaccurate and misleading information would like to do," he stated.

Domestic carriers get no direct subsidies, but their routes between US ports are protected from foreign competition.

Spanish network and LNG terminals owner Enagas reports progress on the Trans Adriatic Pipeline

Enagas, the Spanish natural gas network owner and LNG terminals operator, reported firm profits and the 85 percent completion of Trans Adriatic Pipeline, part of Europe's Southern Gas Corridor.

Enagas posted annual net profits of 442.6 million euros (\$504.2M) in line with expectations as it invested in ventures like the Trans Adriatic Pipeline and the joint purchase of the Greek gas grid.

The company said demand for natural gas in Spain grew by 4.5 percent in 2018 compared with the previous year, reaching 287.5

terawatt hours (TWh). "This increase is the result of the good performance shown by the industrial sector, which represents about 60 percent of total demand for natural gas," said Enagas.

Enagas said that one of its main investments was its contribution to the construction of the Trans Adriatic Pipeline (TAP) a project in which Enagas holds a 16 percent stake.

The TAP venture is part of the Southern Gas Corridor to link the Adriatic region to the Trans-Anatolian Pipeline from the Caspian Sea

to near the Turkish-Greek border.

The pipeline would then cross Greece and Albania and the Adriatic Sea before coming ashore in Southern Italy to compete with European LNG shipments.

Enagas has four domestic import terminals around Spain at Barcelona in the northeast, Cartagena in the southeast, Huelva in the southwest and Gijon in the northwest.

It also owns a 50 percent stake in the facility serving the northwest city of Bilbao.

Other significant investments

by Enagas were in the acquisition by a consortium, also comprising Italy's Snam and Fluxys of Belgium, of a 66 percent stake in the Greek natural gas transmission operator DESFA.

Enagas said that during the past year it reduced its debt by 733M euros.

"The company has a debt structure in which more than 80 percent is at a fixed rate, limiting interest rate risk and there are no significant maturities until 2022," it added.

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