

Shell enters China shale oil scene with Sinopec



Reuters /Singapore

Royal Dutch Shell has entered China's shale oil sector, signing an agreement with state-owned Sinopec to study an East China block, part of the nation's early efforts to unlock the potentially massive unconventional resource.

China is already in the initial stages of developing its vast shale gas resources, with production last year making up just 6% of total gas output after more than a decade of work.

China's shale oil is at an even more basic phase due to challenging geology and hefty development costs, experts said. Shale oil makes up less than 1% of China's crude output after several years of development, according to Angus Rodger, research director of Asia-Pacific upstream at Wood Mackenzie. "China's shale oil has very low permeability, which means very low per well output that makes the economics hard to work," said an oil and gas official with China's Ministry of Natural Resources (MNR). The official declined to be named because he's not authorised to speak with the press.

Sinopec said yesterday it had agreed with Shell to study the Dongying trough of Shengli in China's eastern province of Shandong, without giving further details.

Shell confirmed the joint study agreement, but did not offer further comment.

That makes Shell one of the few international oil and gas explorers venturing into China's shale oil sector, and follows the Anglo-Dutch company's exit from shale gas drilling in Sichuan province in the southwest after spending at least \$1bn and getting unsatisfactory results.

Unlike shale gas resources, which are highly concentrated in Sichuan, most of China's shale oil is trapped in eastern regions such as the Songliao and Bohai Rim basins.

North China's Ordos and Junggar basins are also believed to hold large shale oil resources, the experts said.

The Dongying trough is part of the Bohai Rim basin, where top Chinese oil and gas group China National Petroleum Corp (CNPC) said in February that it is developing another small shale oil field with an annual output of 50,000 tonnes this year.

In 2013, US energy firm Hess Corp signed a production-sharing contract with PetroChina, CNPC's listed arm, to develop the Malang block of Santanghu basin in the northwest region of Xinjiang, China's first shale oil deal.

Hess quit the block around late 2014 due to poorer-than-expected drilling prospects and as global oil prices plunged, said the MNR official.

"The understanding of geology, resource and the best recovery techniques (for shale oil) has only just begun," said Woodmac's Rodger.

Sinopec is hoping Shell's expertise in shale oil exploration could help the Chinese state major turn around its fortunes at Shengli oilfield as the reserves at the giant conventional oilfield are depleting rapidly, said Rodger.

China's surging 2019 gas demand will require better integration for end-users 09-Apr-2019 Intellasia | Reuters | 6:00



China's surging natural gas demand in 2019 will require more efforts to better connect end-users to suppliers as government policies and a recent tax cut will continue to spur consumption of the clean-burning fuel, a senior industry executive said. China's gas demand will expand by 30 billion to 40 billion cubic meters (bcm) this year, Li Yalan, Chairwoman of Beijing Gas Group, the main supplier to the

Chinese capital, said in an interview on Friday. That would be an increase of as much as 14 percent from the 280.3 bcm of gas China consumed in 2018, according to data from state economic planner the National Development and Reform Commission (NDRC). Gas consumption in 2018 was 18 percent higher than in 2017, the NDRC said. The rising gas demand is a result of China's government continuing policies to switch to gas from coal for heating and industrial uses and as the industrial sector buys more gas following cuts in the value-added tax that went into effect on April 1, she said.

"The broad direction is not going to change, which is to restructure the energy mix by increasing the share of natural gas," Li told Reuters in a phone interview. "What China needs to do is to connect the gas supplies with the demand nicely to ensure a smooth switch." Better state planning to ensure grid connections and to encourage energy companies to boost imports in advance helped China's gas market, the world's third largest, to expand by a record 43 bcm last year, Li said. The expansion occurred after a supply crunch in the winter of 2017/18 as suppliers struggled to meet the demand surge for gas as a result of the policy to move millions of households to gas from coal and a cold winter. "This year we'll likely see the market growing between 30 and 40 bcm, which is a normal range," said Li.

With domestic gas production growth capped by high development costs and new piped gas from Russia's Siberian fields only due to start end of the year, China is expected to ramp up imports of liquefied natural gas (LNG), said Li. China, the world's second-largest LNG buyer since 2017, boosted imports 41 percent in 2018 to 54 million tonnes. Li said Beijing, one of the world's biggest gas consuming cities, consumed a record 18.5 bcm of gas last year, up 14 percent from 2017. Gas use may also rise after the government's cut in the value-added tax for manufacturers, as local authorities prepare to execute reductions in the fuel prices for industrial and commercial

users, said Li.

Spot deals make up more of global LNG market as sellers get flexible



Reuters Singapore

Spot trades and other short-term deals are making up more of the transactions in the global liquefied natural gas (LNG) market as producers in the US and Russia offer more flexible volumes and traders increasingly handle cargoes.

Spot and short-term LNG trades, defined as cargoes delivered through contracts of four years or less, made up 32% of overall import volumes in 2018, up from 27% of imports in 2017, the Paris-based International Group of LNG Importers (GIIGNL) said last week in its annual report.

Cargoes delivered in less than three months from the transaction date increased to 25% of the market in 2018, compared with 20% in 2017, the GIIGNL said.

“For LNG importers, long-term partnerships, destination and volume flexibility as well as the ability to optimise or arbitrage between Asian and European markets remain key,” said GIIGNL president Jean-Marie Dauger in an emailed statement.

“In China, in India and South East Asia, in particular, LNG’s environmental benefits and its versatility make it particularly attractive as a destination fuel for thermal power generation and co-generation, in the industrial and commercial sectors as well as in a growing variety of fields like marine and road transportation.”

Australia was the biggest exporter of spot and short-term volumes in 2018 as new projects in the country started up, followed by the US and Qatar, the GIIGNL said.

The three biggest LNG importing countries – Japan, China and South Korea – absorbed just over half of the global spot volumes traded, while India’s spot purchases increased as its natural gas demand growth exceeded domestic production, the group said.

Re-exports also increased due to better arbitrage opportunities.

Overall, the global LNG market grew by 8.3% from the previous year to nearly 314mn tonnes in 2018, more than three times the size of the market in 2000, GIIGNL said.

That was the third-largest annual increase after 2010 and 2017.

The market is likely to reach a tipping point this year, with many long-term contracts starting to expire and as new supply comes on stream, Dauger said, adding that the industry needs

to become more innovative and efficient in trading.

GIIGNL has 81 member companies headquartered in 26 countries and handles more than 90% of global LNG imports.

PRESS RELEASE on the Foreign Minister's transition to Beirut for participation in the tripartite Ministerial meeting of Cyprus – Greece – Lebanon



The Minister of Foreign Affairs, Mr. Nikos Christodoulides, goes to Beirut tonight to participate in the work of the first official tripartite Ministerial Meeting of Cyprus – Greece – Lebanon.

At the meeting tomorrow, Wednesday, Mr Christodoulides, together with his Lebanese counterparts, Gebran Bassil , and Greece, Mr George Katrougalos, are expected to lay the groundwork for further strengthening and promoting tripartite cooperation in the fields of tourism, education, economy and trade, on the basis of pre-service work. The three Ministers will also discuss regional and international issues of common interest. In the talks on cooperation in the tourism sector, the responsible Ministers / Ministers of the three countries will also participate, with the Deputy Minister of Tourism Mr Savva Perdio to participate on behalf of Cyprus.

Upon completion of the meeting, the Foreign Ministers of the

three countries will make statements to SME representatives (at 12.30pm) and a Joint Statement will be adopted.

Earlier Wednesday morning, Mr. Christodoulides will address a business forum, which will include a delegation of Cypriot businessmen to accompany the Foreign Minister to Lebanon. On Thursday morning, Mr. Christodoulides, together with the Minister of Energy, Commerce and Industry, Mr. G. Lakkotropi, will have a joint bilateral meeting with the Foreign and Energy Ministers of Lebanon, Mr. Gebran Bassil and Ms. Nada Boustani

, which is expected to discuss, inter alia, issues related to the Cyprus – Lebanon cooperation in the field of energy and energy security in the wider region of the Eastern Mediterranean. At the end of the meeting, Ministers will make statements to the media (at 10.45am).

During his stay in Lebanon, Mr Christodoulides will be admitted to separate meetings by Lebanese President Michel Aoun , Prime Minister Saad Hariri and House Speaker Nabih Berri, which will have the opportunity, among other things, to exchange views with their interlocutors on the strong links between Cyprus and Lebanon and the further strengthening of bilateral relations, EU-Lebanon relations and regional and international issues of mutual interest of interest.

The Foreign Minister will return to Cyprus on Thursday night.

Noble Energy Wins Big Gas

Deal From Israel Electric Corporation



Israel Electric awarded the deal to the partners in the Leviathan gas field over the Tamar field partners

It was Yitzhak Tshuva and Noble Energy competing against Yitzhak Tshuva and Noble Energy for a giant contract to supply the Israel Electric Corporation with natural gas. One side bid to supply the gas at a price of \$4.78 per thousand cubic feet and the other put in a bid for \$4.78, too.

In the end, no surprise, the winners, who were revealed on Sunday, were Yitzhak Tshuva and Noble Energy with a bid of \$4.78, although it in the end the two rivals may split the contract.

That strange bidding process was possible because on one side, there were the partners who control the Tamar gas field, which include Noble, Tshuva's Delek Drilling and Isramco, and the other side were the partners who control the Leviathan field, which include Noble, Delek Drilling and Ratio.

State-owned IEC said it opted for Leviathan's identically priced bid because it was seeking to diversify its sources of natural gas, which is now supplied exclusively by Tamar. Tamar will lose a major part of its sales to IEC because the Leviathan contract will replace much of the gas Tamar is now supplying.

The interim contract calls for Leviathan to supply about 4 billion cubic meters of gas, once production begins in October of this year, through June 2021. The contract is a so-called "interruptible" agreement, meaning IEC does not have to buy all the gas it has contracted for. It represents a big cost savings for IEC, which has been paying \$6 for its Tamar gas up to now.

"IEC encouraged competition and achieved savings in the hundreds of millions, which is resulting in lower electricity rates to customers," the utility said on Sunday, and vowed: "In the next stage, the company will begin a competitive process with Karish and Tanin."

Karish and Tanin are gas fields off Israel's coast that are controlled by the Greek energy company Energean, the only other major player in the Israeli gas industry besides the Tamar and Leviathan partners.

Ella Fried, an analyst at Leumi Capital Partners, noted that the contract isn't important financially for the Leviathan. Revenues from it will not exceed \$700 million. In fact, shares of the Ratio partnership, which holds a 15% stake in Leviathan and has no interest in Tamar, edged up just 0.9% to close at 2.85 shekels (80 cents) on the Tel Aviv Stock Exchange.

However, she said it did represent a step toward making the Israeli natural gas market more competitive.

"It appears that the gas framework has chalked up a success this week, even before Karish and Tanin have gone into production," Fried said. "For the first time, we are seeing

signs of competition in the sector.”

The issue of competition has shadowed the industry for years and continues to be a source of controversy even after the government and the industry agreed three years ago on a gas framework agreement for the industry. Leviathan and to a lesser extent Tamar are also seeking contracts to export gas to Egypt and Jordan, and maybe Europe down the road.

Among other things, the framework agreement breaks up the Noble-Delek monopoly and has allowed IEC to reopen its contract with Tamar by giving it the freedom to reduce the quantity of gas it is required to buy from it to three billion cubic meters annually, from five billion.

Analysts and industry sources agreed there was a good chance that in the end, Leviathan and Tamar would split the contract. Isramco said on Sunday that the Tamar partners had asked IEC to see documents related to the bidding so it could weigh further steps. It asked that the result be frozen for 14 days.

In the meantime, shares of Tamar Petroleum, which owns 12.75% of Tamar, skidded 5.2% to 14.35 shekels. Shares of Isramco, which owns a 28.75% stake in Tamar, dropped just 3.6% to 37 agorot.

Analysts said the differing reaction by investors could be laid to Tamar Petroleum's higher debt levels, which make it more sensitive to any loss in future income. A source close to Tamar expressed confidence it could meet all of its 5 billion shekels in debt coming due between now and 2028 and continue paying dividends.

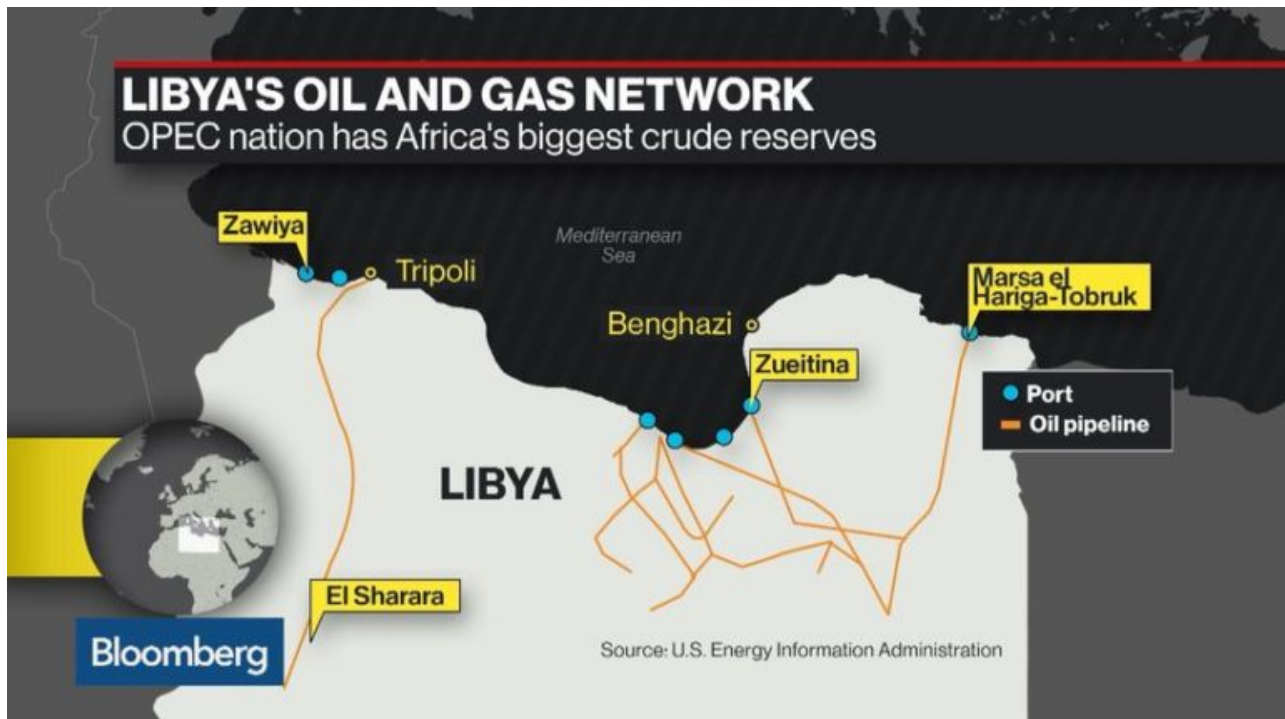
Eni to complete seventh Zohr gas processing station in July



Eni will complete the Zohr field's seventh natural gas treatment plant in Port Said's El Gameel region in July to raise output to 2.7 bcf/d from 2.3 bcf/d currently, an unnamed industry source tells the domestic press. The Italian company has also completed drilling the tenth well, the source says.

Oil Hits a Five-Month High as

Libya Clashes Add to Supply Concerns

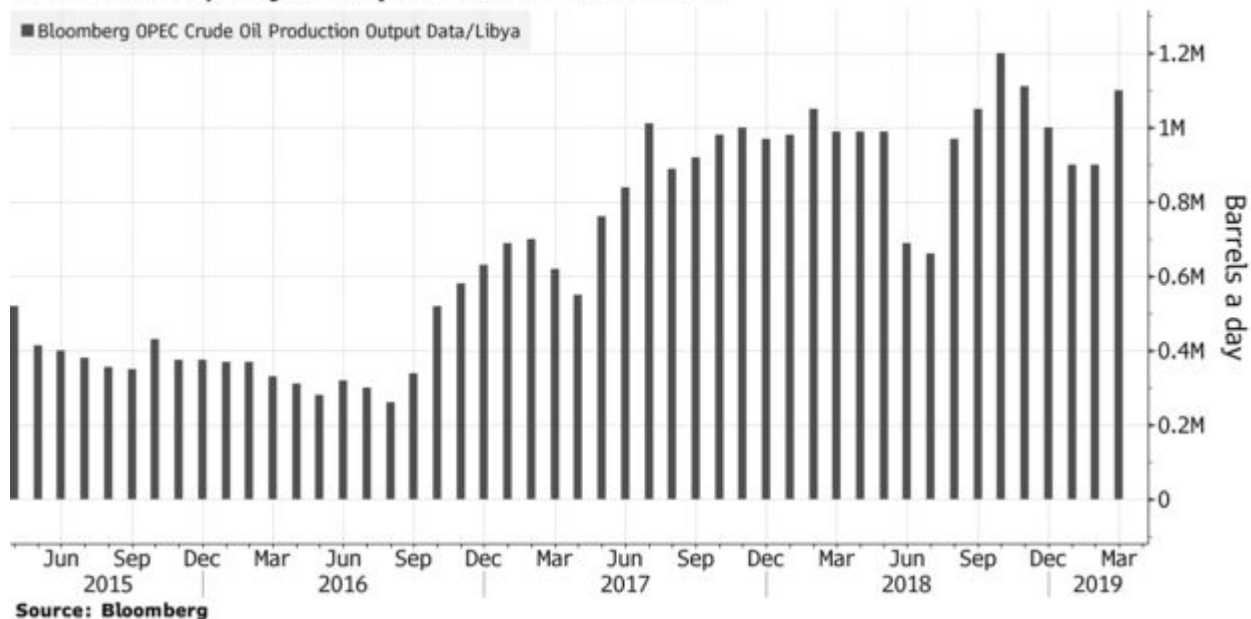


Oil extended gains after capping its best week in almost two months as an escalation of fighting in OPEC producer Libya overshadowed the biggest increase in U.S. active rigs since May.

Futures gained as much as 0.7 percent in New York after rising 4.9 percent last week. Libya's internationally-recognized government vowed to counterattack against forces loyal to strongman Khalifa Haftar that are trying to enter the capital Tripoli. Crude pared gains after Saudi Arabian Energy Minister Khalid Al-Falih said in a Bloomberg TV interview that oil markets are "moving in the right direction" and there's no need for the kingdom to deepen output curbs.

Rising Production

While volatile, Libyan output has been on the rise



Crude has kept rallying after its best quarter in almost a decade on signs the Organization of the Petroleum Exporting Countries and its allies will extend output cuts beyond June. The escalation of the conflict in Libya, which pumped 1.1 million barrels of a day last month, adds to risks to supply from Iran and Venezuela. On the demand side, a U.S. report last week showing better-than-expected hiring is the latest evidence that the global economy might not be in as bad shape as previously feared

“Supply disruptions in Libya are lifting prices at a time when appetite for risk assets is rising as concerns over global growth ease,” said Ahn Yea Ha, a commodities analyst at Kiwoom Securities Co. in Seoul. “Oil might be rising too quickly at the moment, but it’s hard to find any bearish signals,” she said before the comments by Al-Falih.

West Texas Intermediate for May delivery climbed 27 cents, or 0.4 percent, to \$63.35 a barrel on the New York Mercantile Exchange as of 8:08 a.m. in London. Prices rose 1.6 percent to settle at \$63.08 on Friday, the highest closing level since Nov. 5.

Brent for June settlement advanced 0.3 percent to \$70.56 a

barrel on the London-based ICE Futures Europe exchange. The contract added 1.4 percent to \$70.34 on Friday, taking its weekly gain to 2.9 percent. The global benchmark crude was at a premium of \$7.16 to WTI for the same month.

The structure of the futures market is reflecting supply uncertainty. WTI's front-month prices rose to a premium, or backwardation, of as much as 4 cents a barrel to the contract four months ahead on Monday. They then flipped back into a discount, or contango. A spot price that's higher than the forward price indicates tighter supply.

Fighting on the outskirts of Tripoli showed no signs of abating despite appeals for calm by global powers and the United Nations. While the latest fighting is south of Tripoli – away from most of the main oil ports and fields – the risks of disruption rises the more inflamed the tensions get. Western Libya is home to the Zawiya oil terminal, the export point for crude pumped from the country's largest field, further south at Sharara.

American rigs climbed by 15 to 831 in the first increase since mid-February, according to data from oilfield services provider Baker Hughes.

Total, China battery maker team up in latest Big Oil shift



Total SA is tying up with China's Tianneng Group to build batteries, moving into mass production of electricity storage technology after snapping upSaft Groupe SA in 2016.

The joint venture will focus on making and selling advanced lithium-ion cells for electric vehicles, bikes and energy storage equipment in China and worldwide, Total said Thursday in a statement. The French company is among several oil and gas majors investing in the sector as governments clamp down on fossil fuels and carbon curbs tighten.

Power storage could be a lifeline for Big Oil in the long term, offering a new revenue stream as the industry shifts toward less-polluting energy. Total bought battery maker Saft for 950 million euros (\$1.07 billion) in 2016, while Royal Dutch Shell Plc acquired car-charging operator NewMotion a year later.

Saft, which makes batteries for planes, trains, and military

equipment such as missiles and night-vision googles, had so far avoided the mass market for cars for fear of being squeezed by Asian rivals benefiting from lower production costs and bigger demand.

Chinese, Korean and Japanese manufacturers have taken the lead in batteries for electric vehicles by investing billions in so-called gigafactories to supply global carmakers that are developing low or zero-emission vehicles to meet increasingly stringent government anti-pollution rules.

The Total-Tianneng joint venture will manufacture cells at the Changxing Gigafactory, with potential capacity of 5.5 gigawatt-hours, according to the statement. Total will have a 40 percent stake in the venture, while Tianneng Group will hold the remaining shares. Saft's current capacity for lithium-ion batteries is about 400 megawatt-hours a year, a spokeswoman said.

The joint venture may be up and running within a year to work on new batteries that will be more competitive, a spokeswoman for Saft said.

Total Chief Executive Officer Patrick Pouyanne had complained several times about China's protectionism in terms of batteries, and urged Europe to do the same if it wants to foster a similar industry on its soil.

Germany and France said this year they will put up 1 billion euros and 750 million euros, respectively, in subsidies to co-finance building factories in their respective countries.

Saft last year teamed up with German engineering giant Siemens AG and battery maker Manz AG as well as Belgian chemicals maker Solvay SA to develop next-generation batteries that would be cheaper, safer and more efficient.

– *With assistance by Amanda Jordan*

Biggest US gas shipper hunts China deals, trade truce or not



Bloomberg/Singapore/Shanghai

America's biggest natural gas exporter is ready to sign long-term agreements with buyers in China, the world's top market for the fuel, with or without a trade truce.

Cheniere Energy Inc isn't delaying any liquefied natural gas deals because of the trade dispute, chief executive officer Jack Fusco said in an interview in Shanghai. If that's happening, it's on the part of Chinese customers or their government, he said.

"Their approval process is between them and their regulatory agencies," Fusco said on the sidelines of the LNG2019 conference. "But we are a publicly traded company, and we are not going to slow down."

A supply deal between Cheniere and China Petrochemical Corp, known as Sinopec, is expected to be awaiting a resolution to the US-China trade spat. The companies had been in talks for nearly a year when progress stalled as the Trump administration escalated a tariff war between the two countries, people familiar with the situation said last month. Fusco declined to comment about any negotiations.

LNG is perhaps the best example of a trade that would benefit both countries. China is the world's fastest growing market for the super-chilled fuel, which it wants to use in place of coal to fight pollution. And the US, buoyed by booming natural gas production from shale fields, could easily be on track to be the world's biggest exporter.

"Two companies working together could be a win-win," Fusco said. "A Chinese company and an American company, trying to show our administrations what the possibilities are."

China National Offshore Oil Corp, the country's largest LNG importer, hasn't excluded the US in its search for overseas upstream and LNG investment opportunities, Chen Jie, chief engineer for the company's gas and power unit, said in an interview at the conference.

"Buying US resources can actually help ease the trade frictions between the two countries," Chen said.

US suppliers have seen their efforts to court Chinese buyers jammed up because of the trade dispute. While China has at times been a large buyer of spot LNG from the US, the only long-term contract is between Cheniere and a unit of state-owned China National Petroleum Corp for 1.2mn tonnes per year over 25 years, and that was signed in February 2018, before trade issues intensified.

"My expectation is if the trade dispute gets solved that there could be good things to come for Cheniere here in China," Fusco said in an interview on Bloomberg TV.

Petrobras agrees to sell pipeline unit to Engie for \$8.6 billion



SAO PAULO/RIO DE JANEIRO (Reuters) – A consortium led by France's Engie SA submitted the highest offer for a major gas pipeline unit owned by Brazil's Petroleo Brasileiro SA, the state-run oil firm said on Friday, as the company's biggest divestment draws to a close.

In a filing, Petrobras, as the company is known, said the Engie consortium, which includes Canada's Caisse de Dépôt e Placement du Québec, presented an \$8.6 billion bid for 90 percent of the TAG gas pipeline unit in northern and northeastern Brazil.

That topped offers by two competing consortia, led by Itausa Investimentos Itau SA and EIG Global Energy Partners with Mubadala Investment Co, respectively.

Two sources with knowledge of the matter said the difference between the bids was very small. The second highest bid, delivered by EIG Global Energy Partners and Mubadala Investment Company, was less than 1 percent below Engie's bid, they said.

Engie subsidiaries in different countries account for 75 percent of the winning consortium and the Canadian pension fund the other 25 percent, one of the sources added, asking for anonymity to discuss undisclosed details.

Around 60 percent of the bid was financed by Itau Unibanco Holding SA , Banco Bradesco SA and Banco do Brasil SA .

The EIG-Mubadala group was financed by JPMorgan Chase & Co and Goldman Sachs. The third group, led by Brazilian holding Itausa Investimentos Itau SA, was also financed also by local banks. Banco Santander Brasil SA was Petrobras adviser on the deal.

The price tag includes the payment by the Engie group of \$800 million in debts to Brazilian state development bank BNDES. At an exchange rate of 3.85 reais to \$1, Petrobras said, the deal values all of TAG at 35.1 billion reais.

The divestment represents a victory for current Petrobras leadership and Chief Executive Roberto Castello Branco, who is pushing to aggressively unload assets in a bid to cut debt and refocus on exploration and production.

The sale process began in October 2017 but was interrupted last year by a Supreme Court injunction.

In September 2016, Petrobras sold a larger gas network pipeline, Nova Transportadora do Sudeste, for \$5.2 billion to Brookfield Infrastructure Partners LP, which beat out a bid by Engie.

Petrobras will continue to distribute natural gas through the TAG system under the terms of long-term contracts, the company said in the statement.

Bloomberg reported on the TAG sale earlier on Friday.