#### Oil & Gas Bulletin

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# Turkey: Historic TANAP gas pipeline project goes live

Anadolu Agency, 13.06.2018



The historic TANAP project was officially launched Tuesday in the central Turkish city of Eskisehir.

TANAP was opened by Turkish President Recep Tayyip Erdogan, Azerbaijani President Ilham Aliyev, Ukrainian President Petro Poroshenko, Serbian President Aleksandar Vucic, and Mustafa Akinci, president of the Turkish Republic of Northern Cyprus. Speaking at the ceremony, Erdogan called TANAP the fruit of the shared vision of the countries involved in the project and said it would pave the way for similar future projects.

"The political and economic stability Turkey has ensured over the last 16 years in Turkey has played a very significant role in realizing TANAP in such a short time," Erdogan said, referring to the era of Justice and Development (AK) Party rule.

Calling it a historic step for the countries of the region, he added: "We are opening the Trans Anatolian Natural Gas Pipeline, the backbone of the southern gas corridor, which we call the Silk Road of energy."

Erdogan said the project was made possible primarily due to good Turkish-Azeri relations, based on mutual trust. He added that the harmonization and understanding among producer, transit, and consumer countries, and companies also sped up the process. "In this respect, TANAP is also a sign of multilateral cooperation. The understanding that we see energy not a conflict, but as cooperative ground has once again taken shape in flesh and bones thanks to TANAP," Erdogan said.

Noting TANAP's starting capacity of 16 billion cubic meter (bcm) of natural gas, he said 6 billion of that will go to Turkey, while 10 billion will go to Europe. "We aim to increase TANAP's capacity to 22 bcm based on demand, and to 31 bcm immediately after with additional investments," he said.

Erdogan said first gas delivery to the Greek border is set for June 2019. "We have sent our first local and national drilling ship the Fatih to the Mediterranean. With this ship and its cutting-edge technology, we have addressed an important shortcoming of our country," Erdogan said, adding that they have boosted Turkey's renewable energy resources' installed power from 12,305 megawatts to 40,838 megawatts.

TANAP is a critical project, as it will boost the security of energy supplies, said Berat Albayrak, Turkey's energy and natural resources minister. He called TANAP a new symbol of the Turkish-Azeri brotherhood. "The regional cooperation between Turkey, Azerbaijan and Georgia turned into global cooperation. TANAP is a project of vision, stability and strong leadership," Albayrak said.



The opening ceremony featured the attendance of government leaders, energy company executives, and senior bureaucrats from shareholder and friendly countries. TANAP is a natural gas pipeline stretching from the Turkish-Georgian border to the Turkish-Greek border to supply natural gas to both Turkey and also European countries. The 1,850-kilometer pipeline is the largest section of the 3,500-km Southern Gas Corridor, which was inaugurated on May 29 in Baku.

TANAP, with around \$8 billion in investment, will deliver 6 billion cubic meters of Azeri gas to Turkey and 10 billion to Europe per year. The European part of the project is expected to be operational in 2020. The TANAP project has seen the employment of around 13,000. The estimated investment cost was \$11.7 billion at the start of the project, but this figure has been revised down to \$7.99 billion. Currently, the Southern Gas Corridor Company holds a 51 percent share, Turkey's BOTAS has a 30 percent interest, BP holds 12 percent, and SOCAR Turkey has the remaining 7 percent.

TANAP will be followed by an 878-km cross-border natural gas pipeline, the Trans Adriatic Pipeline (TAP). TAP is currently under construction, stretching from the Greek-Turkish border crossing Greece, Albania and the Adriatic Sea to Italy. At its entry point, TAP will connect to the Trans Anatolian Pipeline (TANAP) in Turkey. The European Investment Bank (EIB) in March approved €932 million (\$1.15 billion) in financing for TANAP.

### Turkey's 1st drilling vessel Fatih arrives in Antalya

Anadolu Agency, 07.06.2018



Turkey's first drilling vessel, Fatih, formerly the Deepsea Metro II, arrived in the city of Antalya in order to start the country's first deep drilling project in the Mediterranean.

According to shipping data, Fatih sailed from the Kocaeli province on June 4 and arrived in Antalya late on June 6. Turkish Energy and Natural Resources Minister Berat Albayrak said on May 31 at an official sailing ceremony in the Kocaeli province that the vessel would conduct drilling at a depth of 2,600 meters in the Mediterranean, and hailed it as a historical step for Turkey.

Turkey has already undertaken oil and gas explorations using two seismic vessels. Turkey's first seismic vessel Barbaros Hayrettin Pasa has been conducting operations in the Mediterranean since April 2017 while a second vessel the MTA Oruc Reis is ready for exploration.



# Southern Gas Corridor to boost EU's energy security

Sputniknews, 13.06.2018



The Southern Gas Corridor is strategically important for the EU's energy security as it helps diversify energy supplies and routes, according to a statement of the European Commission Vice President Maros Sefcovic.

The statement follows the official launch of Phase 0 of Trans Anatolian Natural Gas Pipeline (TANAP) in Turkey's Eskisehir province on Tuesday, June 12. "Today, [Tuesday with Phase 0 launch] we are turning intentions into reality and delivering another tangible result under the Energy Union," Sefcovic said.

TANAP together with the South Caucasus Pipeline (SCP) and the Trans-Adriatic Pipeline (TAP) is an essential part of the Southern Gas Corridor, the statement said. Sefcovic said that by helping diversify energy suppliers and routes, the Southern Gas Corridor is strategically important for the EU's energy security, including the most vulnerable parts, such as southeast Europe and southern Italy.

"Our long-term objective is to create a pan-European energy market based on free trade, competition and diversified supplies, sources and routes. This shows that the Energy Union does not stop at the EU's borders and it has a strong external dimension. Only like this it can be truly resilient," he added. "We all stand to gain from this 'bridge' between the Caspian region and the EU market [via TANAP]. It is in our joint interest to make it a success," Sefcovic said.

The Southern Gas Corridor consists of the Shah Deniz gas field, the SCP and its expansion through Azerbaijan and Georgia to Turkey, the construction of the TANAP through Turkey to Greece and the construction of the TAP through Greece, Albania and the Adriatic Sea to Southern Italy. The 1,850-kilometer-long TANAP is the largest section of the 3,500-kilometer-long Southern Gas Corridor, the Azerbaijani section of which was officially inaugurated on May 29 during a ceremony held in Baku with the participation of Azerbaijan's president.

TANAP, with around \$8 billion of investment, will deliver 6 billion cubic meters of Azeri gas to Turkey and 10 billion cubic meters to Europe per year. The European part of the project is expected to become operational in 2020. "I trust that the construction of the TAP, a European section of the Southern Gas Corridor, will continue to progress also thanks to the continuous support of the three national governments involved [Greece, Albania, and Italy] so that Caspian gas reaches the EU by 2020," Sefcovic said. "It will bring significant benefits to its host, transit and destination countries, including their local communities – in terms of investment, jobs as well as lower energy prices for consumers and transitioning to low-carbon economies," he concluded.



### Pipelaying vessel Pioneering Spirit heads for Black Sea

Anadolu Agency, 09.06.2018



The world's largest construction vessel, Pioneering Spirit, left Rotterdam port in the Netherlands on Friday and is now cruising to Black Sea in order to finish the deep-water construction of the second offshore line of TurkStream.

"Upon its return to the Black Sea, Pioneering Spirit will resume pipelaying of the second offshore string for TurkStream and will bring the second line to Kiyikoy in Turkey," Russian natural gas company Gazprom said on Friday in a statement.

"The vessel had completed the first line of TurkStream and laid the first 224 kilometers of the second line up until the the border of Russian and Turkish Exclusive Economic Zones," according to Gazprom.

The second line of TurkStream natural gas pipeline will have a capacity 15.75 billion cubic meters (bcm) per year and will carry Russian gas to European markets. The route for the second line is not clear yet. Gazprom announced earlier that Greece and Bulgaria are both possible route options for the pipeline after it leaves Turkish border. The construction of the first offshore line, which will carry Russian gas to Turkish market with a capacity of 15.75 bcm, was completed on April 30 this year.

Turkey's Energy and Natural Resources Minister Berat Albayrak, said earlier, that the project was planned to finalize before the end of 2019 by the close coordination and collaboration of the both parties. "We came to an agreement that Turkey and Russia will complete the second line of TurkStream by the end of 2019," he said. Russian natural gas company, Gazprom plans to deliver first batch of natural gas by December 2019 to Turkish shore Kiyikoy from Russian shore Anapa via TurkStream pipeline.

Following the completion of the first line of the project, Pioneering Spirit left the Turkish coast and headed for Rotterdam where the vessel was prepared for its next heavy-lift project - the installation of a 22,000-tonne drilling platform topsides for Norwegian Equinor's Johan Sverdrup development on the Norwegian continental shelf.

The Pioneering Spirit commenced offshore operations in August 2016 with the removal of a mobile production platform from Norwegian waters. TurkStream is the vessel's maiden pipelaying project. It commenced deep-water pipelaying operations late June 2017 and up until April 30 was working exclusively for the TurkStream project.



#### Iran raises gas production by 9.3% in 2017

Anadolu Agency, 13.06.2018



Iran increased its natural gas production by 9.3 percent in 2017 year-on-year, according to a senior official at the National Iranian Gas Company (NIGC).

IRNA, Iran's official news agency, reported that the country produced 214 billion cubic meters of natural gas last year, said Gholamraza Bahmannia, the NIGC director for coordination and supervision on production. Bahmannia added that the increase in production in the South Pars gas complex "has been very satisfactory."

The production of subsidiary products, including gas condensates, ethane, and sulfur has reached its peak in the new phases of the South Pars complex, according to Bahmannia. The existing capacities shows that the production of subsidiary products can further increase this year, he added.

## OPEC resistance to Saudi supply plan grows as Iraq objects

The Business Times, 12.06.2018



IRAQ said Opec should resist pressure to increase oil supplies, strengthening opposition to Saudi Arabia's plans as the group prepares to meet next week.

Opec's second-biggest producer said supply curbs by the cartel haven't yet achieved their purpose, with oil prices still below the desired level. Its defiance follows similar resistance from Iran and Venezuela, meaning three of the five countries that founded Opec now oppose the Saudi plan. The US has reportedly asked Saudi Arabia and others to relax output restraints put in place in early 2017 as prices near US\$80 a barrel pose a threat to economic growth.

The kingdom and partner Russia, which last month proposed increasing supplies later this year without first consulting Opec members, appear to be raising production already. "Producers from within and outside Opec have not yet reached the goals set," Iraqi Oil Minister Jabbar al-Luaibi said in a statement. Iraq "rejects unilateral decisions made by some producers which do not consult with the rest." This is setting the scene for a fractious meeting when the Organization of Petroleum Exporting Countries and its partners gather in Vienna on June 22-23.



Iran and Venezuela - both subject to US sanctions - have written to fellow Opec members urging unity against American pressure. Both producers stand to lose market share if Saudi Arabia and Russia open the taps. Iraq faces both technical constraints on boosting supply and a political clash with its Kurdish population that's impeded exports, and so may have little to gain from any Opec agreement to raise production. "We shouldn't exaggerate the need of the oil market for more oil at the present time, and which could cause great damage to global markets," Mr Jabbar said.

Nevertheless, it's unclear whether Iraq, Iran and Venezuela could do much to block the Saudi-Russian plans. Although Opec's rules require that decisions are made by consensus, there's nothing to stop Saudi Arabia and its Gulf allies from simply raising output in concert with Moscow.

Russia, despite its political connections with Iran and Venezuela, looks like it's in the process of raising supply already. The country pumped 11.09 million barrels a day in the first week of June, according to a person with knowledge of the matter, exceeding its agreed limit of 10.95 million.

Saudi Arabia has enjoyed diplomatic ties with the US for decades, and may be facing strong pressure to temper oil prices as President Donald Trump targets Iran - the kingdom's political rival - with sanctions.

The US hasn't asked Opec to bolster supplies, United Arab Emirates Oil Minister Suhail Al Mazrouei - who this year holds Opec's rotating presidency - told CNN. Saudi Arabia, Opec's biggest producer, also seems to be restoring halted output, having pumped more than 10 million barrels a day last month for the first time since October, according to a person familiar with the matter.

Saudi Arabian Oil Co, the kingdom's state-run producer, will supply full crude volumes to buyers in Asia in July, according to a person familiar with the situation. Saudi Aramco, as the company is known, earlier this month raised pricing on key crude grades for buyers in Asia to the highest since 2014, giving a sign it sees sufficient demand for its crude in that market.



#### Iraq's oil companies sign MoU with Chevron

Tribune, 12.06.2018



Iraq's Basra Oil Co. and Dhi-Qar Oil Co. have signed a memorandum of understanding (MoU) with Chevron, allowing the U.S. supermajor to carry out studies and a seismic survey for oil activities in the country, Kallanish Energy learns.

The cooperation will help the state oil firms to improve their technical, administrative and financial performances, Iraqi oil minister Jabar Al-Luaibi said last week. He added it's possible to expand their cooperation to sign contracts for development projects "to achieve common goals."

Ministry spokesman Assim Jihad said in a statement the ministry plans to sign more MoUs and contracts with international oil companies to exchange experience and develop the national capabilities to invest in the domestic oil and gas wealth, strengthening the Iraqi economy.

## Italian Snam forms new JV for Albania's gas pipelines

Anadolu Agency, 12.06.2018



The Italian natural gas transmission system operator Snam and the Albanian gas infrastructure operator Albgaz signed an agreement to form a joint venture for the operation and maintenance of gas pipelines in Albania, the company announced.

The joint venture, 75 percent owned by Albgaz and 25 percent by Snam, aims to provide related services to Albania's gas pipelines. The signing of the joint venture contract follows the conclusion of an international tender called by Albgaz to select a qualified partner to support the company.

"It [the joint venture] would also facilitate potential future technical collaboration for the development of the Albanian gas market," the statement read. Albgaz was created in January 2017 and is responsible for the construction and management of Albania's gas market infrastructure.



## Nord Stream 2 receives construction permit in Russia

Anadolu Agency, 09.06.2018



Nord Stream 2 AG, the developer of a pipeline to supply Russian natural gas to the EU market through the Baltic Sea received the construction permit for the Russian section of the planned pipeline, Russia's Gazprom announced late on Thursday.

The Russian company said the Russian Ministry of Construction and Utilities issued the permit in line with the established procedure. "Practical implementation of the project under the terms of the newly issued permit will begin in the nearest future"

"Taking into account environmental aspects and in line with the conclusion of the state environmental expert review," a statement from Gazprom said. "We are very pleased to have obtained this permit. This is the result of extensive and thorough teamwork that has been carried out throughout the comprehensive permitting process. This marks an important milestone for the Nord Stream 2 project," said Sergey Serdyukov, chief technical officer of Nord Stream 2 AG. In Russia, the Nord Stream 2 needs to obtain two main permits. In addition to the permit issued on Thursday, a permit to construct an underwater pipeline in the territorial sea of the Russian Federation will be obtained from the Russian Environmental Authority.

According to Gazprom, its issue is expected in the near future. To date, Germany, Finland and Sweden have granted all the necessary permits for construction and operation of the planned pipeline. The national permitting procedure in Denmark is ongoing.



## New trading system to link Czech, Austrian gas markets

Anadolu Agency, 12.06.2018



The Austrian and the Czech gas transmission system operators Gas Connect Austria and NET4GAS are offering market participants a new service called Trading Region Upgrade (TRU), Gas Connect Austria announced.

The TRU is a new specially designed service that connects the Austrian and the Czech gas markets directly, adding the service is offered within a one-year pilot phase, the company said. The main aim is to simplify transaction procedures and reduce transaction costs.

With this, the two companies will also realize the interests of the European Union in bringing markets together in an easy and cost-efficient way, according to Gas Connect Austria. "TRU will be marketed through auctions, which start on July 2, 2018," the statement read. "For the first time, customers of Gas Connect Austria and NET4GAS, succeeding in the TRU auctions, will have the opportunity to have their gas shipped directly from Austria to Czechia and vice versa with a single contract, including trading hubs," the statement said. The company said the service would ultimately facilitate cross-border transport and reduce transaction costs for customers.

## Qatar buys 30% of Exxon's stake in Argentina

Anadolu Agency, 11.06.2018



Qatar Petroleum agreed on Sunday with ExxonMobil to buy a 30 percent stake in two ExxonMobil affiliates in Argentina.

ExxonMobil's affiliates in Argentina hold interests in hydrocarbon licenses covering unconventional exploration for seven blocks in the onshore Neuquen basin in Argentina. The Vaca Muerta shale in the Neuquen province in western Argentina is considered among the most prospective unconventional shale oil and gas plays outside North America, according to the company.



"This is an important milestone, as it marks Qatar Petroleum's first investment in Argentina as well as its first significant international investment in unconventional oil and gas resources," Saad Sherida Al-Kaabi, president and CEO of Qatar Petroleum was quoted as saying. "This agreement is an important milestone on the road to expanding our international footprint, which is an important part of Qatar Petroleum's growth strategy," Al-Kaabi added. The company plans to increase its LNG production from 77 million to 100 million tons per year, according to Al-Kaabi. "As we approach the first anniversary of the unjust blockade against the State of Qatar, I would like to stress that our oil and gas sector has not been impacted by the blockade, nor has our previously planned expansion," he added.

#### Total extends Algeria gas field license

Oil & Price, 11.06.2018



French oil and gas company Total signed a new concession contract with Algeria's Sonatrach, Repsol and Alnaft for a 25-year extension of their Tin Fouye Tabankort (TFT) gas and condensate field license, Total announced.

Total said the new agreement would give Total a 26.4 percent stake in the project while Sonatrach would hold a 51 percent share and Spain's Repsol would have a 22.6 percent interest. The partners will carry out the drilling and development investments required to develop additional reserves estimated at more than 250 million barrels of oil equivalent.

"These investments will allow the maintenance of the production of the field, which is currently over 80,000 barrels of oil equivalent per day for six years," Total said. Total's exploration and production activities in Algeria date back to 1952. In 2017, Total produced 15,000 barrels of oil equivalent per day in Algeria, all of which is from the TFT gas and condensate field.



## China plans to create a \$78 billion natural gas giant

Oil & Price, 13.06.2018



Together with its massive push to have more and more residential and industrial customers switch from coal to gas, China is aiming to overhaul the ownership of its huge gas pipeline network that would allow third-party access to the gas pipelines and would help Beijing in its efforts to cut pollution by using more natural gas instead of coal.

For several years, China has been studying merging the oil and gas pipeline assets of three of its state-held energy giants— CNPC, China Petrochemical Corporation (Sinopec), and China National Offshore Oil Corporation (CNOOC).

Now the regulators are targeting to announce before the winter a decision to merge the three companies' pipeline assets, estimated to be worth around US\$78 billion (500 billion Chinese yuan), according to people with knowledge of the plans who spoke to Bloomberg. Sanford C. Bernstein & Co analysts have estimated that the Chinese gas pipeline network is 70,000 kilometers (43,500 miles), and the three state energy giants own 66,000 kilometers (41,000 miles) of it.

CNPC's listed arm PetroChina—the country's biggest gas producer and importer—owns some 70 percent of the gas pipeline network, Bernstein analyst Neil Beveridge told Bloomberg. The Chinese authorities and regulators plan to have both state-owned and private funds invest capital in the new gas pipeline giant so as to lower the combined stake of the three energy giants to some 50 percent, according to Bloomberg's sources, who said that an initial public offering (IPO) is also being considered.

Nothing is finalized yet and plans could be subject to change, but creating a gas pipeline giant would be a major overhaul of China's gas market as it would open the gas network to suppliers other than the current owners of the pipelines. The so-called third-party access could help smaller gas producers purchase available capacity on the pipeline network. Currently, independent producers find it hard to gain access to the network operated by their giant state-held competitors.



#### The gift and the curse of China's energy demand

Oil & Price, 12.06.2018



Last year, China became the world's largest and secondlargest importer of crude oil and liquefied natural gas (LNG), underscoring that the driver of global growth and energy demand has moved from west to east.

While energy consumption in the U.S. and Europe has never recovered to the levels seen before the global financial crisis, China's demand has surged by a third in the decade since. Although this is reflective of the dynamism of China's economy, it's also the country's Achilles heel.

Demand growth might have slowed to single digit figures, but energy imports have grown on average by over 10 percent every year over the last decade with China increasingly reliant on imports of not just oil and natural gas but even coal to meet the country's ever-increasing energy needs. Part of the reason China's energy consumption is so large is due to the size of China's industrial sector. In developed economies, industry uses slightly over one-fifth of all energy. In China, it consumes over a half.

The source of this is primarily coal, not only in the form of coal-fired electricity generation but also direct burning by heavy industry like ceramics and steel. China's push to be a global leader in electric vehicles and renewables might have grabbed the headlines, but one of the largest factors in constraining the seemingly inexorable rise of China's energy demand will be the move away from an economy built on industry and manufacturing.

In the future, consumption and services, which need less energy for every unit of economic growth, will be the drivers of rising productivity required for long-term economic success. This is not to say that industry will play no role in China's future. It will. It's just that it will be less energy intensive. Everyone is aware of China's ambitions to become a global leader in advanced information technology, robotics and electric vehicles as part of its "Made in China 2025" industrial masterplan.

Less discussed is the upgrading of basic manufacturing, which aims to reduce industrial energy intensity by a third over the decade 2015–2025 so that basic manufacturing will be efficient as that of advanced economies. Even with a more energy-efficient industry and innovation and digitization as the new drivers of growth, energy demand will still expand with the government aiming for 2030 energy consumption to be no more than a third higher than it is today.

At the same time, policies tackling the environment and China's chronic air pollution will see the share of cleaner fuels like natural gas and renewables rise from just over 20 percent today to around 35 percent of total consumption by 2030.



In the short term, the focus on the environment has offered plenty of opportunities for LNG exporters. Imports into China are up 60% on 2017 and the average spot price of LNG sold to Asia as represented by Platts JKM is up a third on 2017. But this may not last forever. A new natural gas pipeline from Russia scheduled to come online in 2020 and another planned for a few years later may make life a lot more competitive for LNG into China in the next decade.

Even with the push toward the use of gas and renewables, coal will still dominate China's energy landscape with analysis by S&P Global Platts Analytics suggesting that coal's share of China's total energy consumption will fall from around 60 percent last year to around 44 percent of the total by 2030.

Coal consumption actually rose last year on the back of strong industrial production and it may be well into the middle of the next decade before we start to see any significant reduction in total coal consumption. However government leadership means that this coal will be burnt more efficiently.

Policies mandating the upgrading of existing coal-fired power plants and use of advanced coal-power-generation technology in new plants will mean that by 2020 coal-fired electricity generation will be more efficient and produce fewer emissions. It's easy to forget that as recently as 2014, China was the world's fourth-largest crude oil producer behind Saudi Arabia, Russia and the U.S. But with domestic production in decline, China is more and more reliant on overseas crude, around 70 percent of which was imported last year. Unlike other fuels, there are few substitutes for oil, and while the development of electric vehicles is a strategic priority for China's leadership, this is in many ways driven as much by a desire to capture a position of global leadership in new technologies as it is by energy security.

# Philippines' Phoenix Petroleum, China's CNOOC partner for LNG terminal

Reuters, 12.06.2018



Philippine fuel retailer Phoenix Petroleum said it had agreed to partner with a subsidiary of state-owned China National Offshore Oil Corp (CNOOC) to explore building a receiving terminal for liquefied natural gas in the country.

The Philippines is seeking investors to build a storage and distribution facility for imported LNG as it moves to replace its Malampaya gas reserves, expected to be depleted by 2024. Phoenix Petroleum, owned by a local businessman who helped bankroll President Rodrigo Duterte's 2016 election campaign.

It was said it had signed a memorandum of understanding with CNOOC Gas and Power Group Co Ltd. The two companies agreed to "study, plan and develop" an LNG project in the Philippines, Phoenix told the Philippine Stock Exchange on Tuesday. It did not give financial terms of the deal.



Officials of CNOOC, the largest offshore oil and gas producer in China, were not immediately available for comment. The Malampaya gas field, which lies near the disputed South China Sea waters and operated by a unit of Royal Dutch Shell Plc , fuels power plants producing about 40 percent of supply for the main Luzon island. Phoenix said the agreement with CNOOC will potentially broaden its business portfolio, which includes retailing of petroleum products, logistics services such as hauling of jet fuel for airports and airlines, and FamilyMart convenience stores. Dozens of domestic and foreign companies were looking to get a stake in the Philippines' LNG project, including investors from China, Japan, South Korea and Russia, Energy Secretary Alfonso Cusi said in December. Tokyo Gas Co Ltd has expressed interest while the Philippines' First Gen Corp, which owns four Malampaya gas-powered plants, has also disclosed plans to build an LNG terminal.

With the proliferation of flexible-destination contracts and a growing number of players, shorter contracts and spot markets have become more popular in the natural gas business over the past decade. These mechanisms allow China to hedge against potential economic and political risks associated with long-term deals. A combination of short-term and long-term contracts can expand China's accessibility to various sources of supply, contributing to its overall energy security. In that sense, importing natural gas from the U.S. suits China's economic interests and energy security. While most LNG and all pipeline gas contracting partners of China index to oil to determine the price for natural gas, the U.S. uses the Henry Hub price, which is consistently lower and less volatile. Adding Henry Hub supply to an oil-linked LNG portfolio brings about higher stability due to the inclusion of a large fixed component and the low correlation between Brent and Henry Hub. U.S. gas would be more competitive if oil price rebounds.

The abundant and stable natural gas supply from the U.S. can help to balance China's import portfolio by avoiding potential disturbances from risky and conflict areas. Moreover, LNG import terminals are closer to the demand centers along the east coast, therefore making more economic sense. China's natural gas distribution system is constructed by the trunk pipelines and the provincial and local distribution networks. While the "Three Barrels" operate the cross-country pipelines, local transmission networks are operated by various local distribution companies. The fragmented structure charges transportation tolls at every level, reducing the economic competitiveness of pipeline imports. Transportation fee for pipeline imports from Xinjiang to Guangdong could be about seven times more expensive than fuel costs. Taking into account of the transportation cost, Turkmenistan supplies are much more expensive than U.S. LNGs, especially on the east coast. Therefore, pipeline supplies can only fill the demand in western parts of China. In addition, LNG is transportable using trucks. This is especially important for replacing coal combustion in rural areas, where the local storage and distribution networks are weak.

The LNG trade between the two countries is meaningful for rebalancing trade. Increasing the U.S. share to 20 percent of the future LNG demand at the price of \$10/mmbtu, for instance, is equivalent to 21 billion U.S. dollars. At the Sino-U.S. Presidential Summit 2017, President Xi and President Trump found common ground in expanding bilateral natural gas trade. In fact, cooperation in natural gas between the two countries should not be limited merely to LNG trading. In the near future, China will have to improve domestic infrastructure, especially storage systems, to facilitate natural gas consumptions. However, Chinese SOEs lack the experience and technology for site selection, security management, and detail designs. This is where U.S. companies come in.



### Petronas to acquire 25% share in Canadian LNG Project

Anadolu Agency, 11.06.2018



Malaysia's Petronas entered into an agreement to acquire a 25 percent stake in the LNG Canada project in British Columbia, the company announced on Thursday.

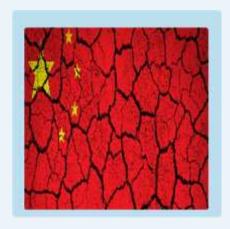
The proposed project includes the design, construction and operation of a gas liquefaction plant and facilities for the storage and export of LNG, including marine facilities. The plant will initially consist of two world-scale LNG processing units referred to as "trains", with an option to expand the project in the future to four trains. According to Petronas, the transaction is scheduled for completion in the few months.

Petronas said that on transaction completion, the project ownership composition will be Petronas with 25 percent, Shell Canada with 40 percent, PetroChina Canada with 15 percent, Diamond Canada, a subsidiary of Mitsubishi with 15 percent and Kogas Canada with 5 percent. "Petronas is pleased to be part of the LNG Canada project. As one of the world's largest LNG producers, Petronas looks forward to adding value to this venture through our long-term expertise and experience across the LNG value chain. We are committed to deliver LNG and natural gas, the cleanest fossil fuel in the world, to the growing global energy market," said Petronas President and Group Chief Executive Officer Tan Sri Wan Zulkiflee Wan Ariffin. He explained that Petronas, with its long presence in Canada, is currently exploring a number of business opportunities. Canada is Petronas' second largest resource holder after Malaysia, with vast unconventional gas and oil resources in North Montney in British Columbia.



### China closes the door on Vietnam's oil and gas ambitions

Oil & Price, 13.06.2018



As China tightens the noose over Vietnam's ability to drill for oil and gas in its own UN-mandated 200-nautical mile Exclusive Economic Zone (EEZ), the country is turning to solar energy and other renewables to make up for lost ground.

Over the weekend, Singapore-based Sunseap Group broke ground on Vietnam's largest solar farm, a 168-MW project in Ninh Thuan province. The \$150 million project will become operational in June 2019 and supply more than 200 kWh of electricity to the national power grid annually, Sunseap said in a statement.

However, more solar projects are planned. Around 30 foreign and domestic companies have been approved to build solar power plants in the province. This has the potential of adding 9,999 MW of solar energy to the national grid. Vietnam plans to triple the renewables needed for power generation by 2030, a report in the Singapore-Channel News Asia said on Saturday, citing government sources. Moreover, the country, whose GDP growth is second only to China in the Asia-Pacific region, is forecast to see its electricity demand increase more than 10 percent annually amid this economic growth.

The quandary for Vietnam is that this increased electricity demand comes as the country's natural gas reserves needed for power generation are being depleted. In an effort to offset this decline, the country needs to either import liquefied natural gas (LNG), pivot back to coal or explore for more of its own gas resources.

LNG for its part is the most expensive of the three choices, while Vietnam still doesn't have its first LNG receiving terminal. Prices for LNG also fluctuate, particularly spot prices during during peak season in the winter months. Also, with a ramp up in gas and LNG demand coming from China per Beijing's mandate that gas make up at least 10 percent of its energy mix by 2020, upward pressure will weigh on LNG prices in Asia going forward.

Spot prices for LNG in Asia breached the \$10/MMBtu price point this past winter amid unexpected increases in Chinese gas demand. Coal for its part has been one of the fuels of choice in Asia for power generation but it's also the dirtiest burning hydrocarbon and countries in the region are trying to reduce their coal and carbon foot prints. This leads to Vietnam's plans to explore for and produce more of its own gas off its coast.

However, twice in the past year Beijing has pressured Vietnam to stop gas projects within Vietnam's own territorial waters, which Beijing also claims as part of its so-called nine-dash line that comprises more than 90 percent of the South China Sea.



Two months ago Hanoi caved into pressure from Beijing, and ordered Spanish energy firm Repsol to stop drilling for oil and gas at the Red Emperor block in waters off Vietnam's southeast cost. The Spanish company and PetroVietnam were joint partners in the venture. The project was in its final stages, while the pull-out could cost Repsol some \$200 million in lost investment, a figure that that the Madrid-based company says it wants Vietnam to reimburse. Also, last July Vietnam also ordered Repsol to stop oil drilling operations at an adjacent location, Block 136/3, in response to what media at the time called "threats from China."

All of these developments up the ante for Vietnam, a country that has complex economic and political ties with its giant neighbor to the north. However, most Vietnamese have a decided anti-China stance that is complicating matters even more for the government. This weekend, as ground was being broken on the country's largest solar project, protesters in the country's capital, Hanoi, and economic hub, Ho Chi Minh City (Saigon), took to the streets in large numbers to protest a recent government move that would allow foreign firms to lease land for up to 99 years in three special administrative and economic units. The concern for most Vietnamese is that the new deal will be dominated by China.

Demonstrators in Hanoi carried anti-China banners, including one that said "No leasing land to China even for one day," while protestors in Ho Chi Minh City were dispersed by police. Some were later put in vehicles and driven away, according to a several media reports. Police arrested 102 protesters in Vietnam's central province of Binh Thuan on Sunday, the country's online newspaper VnExpress reported, citing local police. The report added that dozens of policemen were injured in the incident. Yesterday, the Chinese government warned its citizens living in and traveling to Vietnam to pay attention to security while traveling within the country.

## Venezuela won't have enough oil to export by 2019

Petroleum Economist, 12.06.2018



On May 21st President Donald Trump signed a new executive order prohibiting certain oil-related transactions with Venezuela.

Adrian Lara stated: "Crude oil production in Venezuela is practically falling at an average of 10% every quarter and has been since mid-2017. A scenario with oil production in the country losing at least another 500,000 barrels per day by the end of the year is not unrealistic. Having full additional sanctions imposed would certainly send a strong geopolitical message from the U.S. at the risk of generating more instability in the world supply markets."



GlobalData also forecast that Venezuelan crude oil production would fall to around one million barrels per day by the end of 2018. This is a steep decline from the three million barrels per day that Venezuela produced in 2011.

Platts reported this week that Venezuela has already warned eight international customers that it wouldn't be able to meet its crude oil commitments to them in June. Venezuela's state oil company PDVSA is contractually obligated to supply 1.495 million barrels per day to those customers in June, but only has 694,000 barrels per day available for export.

Impacted U.S. oil companies reportedly include Chevron, "Conoco" and Valero. I suspect "Conoco" is really Phillips 66, the refining arm spun out of ConocoPhillips in 2012. Venezuela also reportedly has a severe backlog of crude deliveries at its main terminals, and this could temporarily halt PDVSA's supply contracts if they are not cleared soon. The company has told some customers it may declare force majeure if they do not accept new delivery terms, including higher-cost and riskier seaborne transfers. Brent crude prices moved higher on the news. But if the GlobalData forecast is correct, then the temporary interruption of Venezuela's exports may be permanent, as they will be plunging toward zero by the end of the year.

## Golar's Cameroon FLNG project starts commercial operations

Reuters, 13.06.2018



Golar LNG said it had started commercial operations at a pioneering floating liquefied natural gas (FLNG) production platform in Cameroon, \$70 million under budget.

It is the first FLNG vessel of its kind and is likely to boost demand for Golar's technology in Africa and beyond. The Hilli Episeyo FLNG vessel, converted from an ageing tanker for \$1.2 billion, produced the first LNG on March 12 but only exported its first cargo in May, to China, after technical issues delayed a ramp up in production. After continuously producing LNG over 16 days at an average of 7,500mcm.

Golar's project clients have contractually accepted the facility, marking its commercial start, Golar said in a statement. Golar is in talks to develop similar projects in Senegal-Mauritania with BP and with Ophir Energy in Equatorial Guinea. The successful start-up removes uncertainty about the risks associated with squeezing a liquefaction plant typically spanning hundreds of acres on land into a single, 1970s-built ship with four liquefaction units bolted onto its sides. Trading companies and oil majors are keen on the technology for its relatively low cost and ability to unlock stranded reserves beyond the reach of pipelines. Developer Golar provides the liquefaction facility and services under a production tolling agreement with oil firm Perenco and Cameroon's state-run Societe Nationale Des Hydrocarbures (SNH). All of the plant's 1.2 million tonne annual output was sold, via a competitive tender, by Perenco to Gazprom Marketing & Trading for eight years.



In a statement, Golar LNG said commercial tolling fees will add about \$164 million to its earnings before interest, tax, depreciation and amortization annually, plus an estimated \$45 million in operating cash flow based on current oil prices. All told, the Hilly Episeyo came in \$70 million under budget, Golar said, a rarity in the LNG industry where project costs routinely balloon billions of dollars over budget.

#### ExxonMobil purchases oil field offshore Brazil

Anadolu Agency, 07.06.2018



ExxonMobil has completed the purchase of half of Equinor's interest in the BM-S-8 block offshore Brazil that contains part of the 2-billion-barrel, pre-salt Carcara oil field, the company announced.

Production from the field is expected to start in 2023 or 2024, according to the company's press release. Exploration drilling began on the Guanxuma prospect in BM-S-8 on April 25, the press release read. ExxonMobil now holds a 36.5 percent interest in the BM-S-8 block and Equinor (formerly Statoil) holds 36.5 percent. Petrogal Brasil and Barra Energia each hold 17 percent and 10 percent, respectively.

ExxonMobil has a 40 percent interest in the North Carcara block adjacent to BM-S-8, with coventurers Equinor and Petrogal Brasil. The block contains the other part of the significant Carcara field. Equinor is the operator of both Carcara North and BM-S-8. "The Carcara oil field is an excellent example of the quality resources to be found offshore Brazil," President of ExxonMobil Upstream Ventures Brad Corson said in the press release. "We'll be working with our partners to explore and develop these shared blocks, and contributing our deepwater technology and expertise to further enhance the value of this world-class resource," he added.

ExxonMobil has interests in 24 blocks offshore Brazil. The company has had business activities in Brazil for more than 100 years and has about 1,300 employees in the country across its chemical, upstream and business service center operations.



### World crude oil production declines in 2017

Interfax, 10.06.2018



World crude oil production declined by 701,000 barrel around 0.9 percent in 2017 year-on-year to reach 74.69 million barrel per day (mb/d), marking the first yearly fall since 2009, OPEC said.

OPEC crude oil production fell year-on-year by 926,000 b/d, or 2.8 percent, while crude production in non-OPEC countries registered gains. World oil demand averaged 97.20 mb/d in 2017, up by 1.7 percent year-on-year, with the largest increases taking place in Asia and Pacific region, particularly China and India, Europe and North America.

"The 2017 oil demand in Africa and the Middle East grew by around 100,000 b/d, as compared to 2016, while oil demand declined in Latin America for the third year in a row," the report indicates. Total exports of crude oil from OPEC member countries averaged 24.86 mb/d in 2017 declining by 406,000 b/d, or 1.6 percent on an annual basis. As in previous years, the bulk of crude oil from member countries was exported to the Asia and Pacific region, with an amount of 15.56 mb/d, or 62.6 percent. Significant volumes of crude oil were also exported to Europe, which increased its imports from OPEC member countries from 4.40 mb/d in 2016 to 4.64 mb/d in 2017. North America imported 3.21 mb/d of crude oil from member countries, which was 82,000 b/d, or 2.5 percent less compared to 2016 volumes.

#### World refinery capacity grows in 2017

Brookings, 09.06.2018



World refinery capacity expanded by 104,000 barrels per calendar day (b/cd) to stand at 96.93 million b/cd in 2017, OPEC said.

According to OPEC's Annual Statistical Bulletin 2018, the result is mainly supported by additions in the Asia and Pacific region, particularly China and India. In addition, global refinery throughput ramped up by 1.6 percent to reach 83.7 million barrels per day in 2017, with the largest gains in the Asia and Pacific region and North America. Last year, total world proven natural gas reserves rose by 0.2 percent to approximately 199.4 trillion standard cubic meters.



Proven natural gas reserves in OPEC member countries stood at 95.95 trillion standard cubic meters, unchanged from the level of the previous year. This year's bulletin provides updated statistical data on the oil and natural gas activities of each of OPEC's 14 member countries: Algeria, Angola, Ecuador, Equatorial Guinea, Gabon, Islamic Republic of Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates and Venezuela.



#### **Announcements & Reports**

#### The global effect of LNG growth on European gas markets

Source : OIES

Weblink : https://www.oxfordenergy.org/publications/global-effect-lng-growth-european-gas-markets/

#### Egypt – a return to a balanced gas market?

Source : OIES

Weblink : https://www.oxfordenergy.org/publications/egypt-return-balanced-gas-market/

#### **Upcoming Events**

#### 14th Russian Petroleum & Gas Congress (RPGC2018)

Date : 18 – 19 June 2018 Place : Moscow, Russia

Website : https://www.clocate.com/conference/14th-Russian-Petroleum-and-Gas-Congress-RPGC-2018/27847/

#### 27th World Gas Conference

Date : 25 - 29 June 2018 : Washington DC

Website : https://wgc2018.com/?src=Upstream

#### Eastern Unconventional Oil & Gas Symposium 2018

Date : 05 July 2018
Place : Washington DC
Website : http://www.euogs.org/

#### Offshore Oil & Gas and Chemical Industry Technology and Equipment Exhibition

**Date** : 23 - 25 August 2018

Place : Shanghai

Website : http://sh.cippe.com.cn/en/For\_Visitors/Venue\_Time/



#### Gastech

**Date** : 17 – 20 September 2018

Place : Barcelona, Spain
Website : http://www.gastechevent.com/

#### The European Autumn Gas Conference

**Date** : 07 – 09 November 2018

Place : Berlin, Germany
Website : http://www.theeagc.com/