## Oil & Gas Bulletin

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# Turkey, Brazil energy investments can be \$440m by 2026

Anadolu Agency, 12.03.2018



The potential for bilateral energy expansion between Turkey and Brazil is evident with projections of \$440 million in investments in energy infrastructure by 2026.

Speaking exclusively to AA, Ambassador Eduardo Riccardo Gradilone Neto said trade relations between Brazil and Turkey have witnessed a rebound from \$1.8 billion in 2016 to \$2.2 billion in 2017. "This result is attributed to the improved economic performance of both countries which, in 2018, should provide new opportunities for expanding trade and investment." the Brazilian ambassador said.

Energy sector cooperation is one of the topics that the economic and trade promotion sectors of the Brazilian Embassy are following, he asserted, adding that this is also a topic on the agenda of the Turkish-Brazilian Economic Cooperation Commission that meets periodically to identify trade and cooperation opportunities between Turkey and Brazil. He explained that the oil and gas sector is expected to absorb 71.4 percent of the \$440 million total, 26.2 percent is anticipated for the generation and transmission of electricity, and the supply of biofuels is set to increase by 2.4 percent. "The dynamism of the Turkish economy, which has grown at rates above the world average in recent years, and the Brazilian regulatory environment are parameters to guide the estimation of business expansion in the Brazilian electric power sector in the coming years," he added.

Auctions are the main form of energy contracts in Brazil that are carried out openly with the participation of Brazilian and foreign companies. The winners are defined by offering the lowest tariff with the aim of promoting efficiency in the contracting of energy, Neto explained. "In the oil and gas sector, for example, the 14th auction round, held in September 2017, provided revenues of over 3.84 billion Brazilian reais (approx. \$1.18 billion) in bonuses, according to the National Petroleum, Natural Gas and Biofuels Agency (ANP)," he said. He noted that altogether 17 companies amassed areas for exploration, out of which seven are foreign companies. In the bidding round, 37 blocks were acquired for exploration and production of oil and gas while three bidding rounds will be held in 2018 and 2019 each year, according to the ANP. The largest signature bonus in the auction round was 2.24 billion Brazilian reais (approx. \$690.8 million) offered by the Petrobras-ExxonMobil Brazil consortium.



Official data estimates that Brazil's energy supply, which is necessary to advance the economy, will reach 351 million tons of oil equivalent (Mtoe) in 2026, based on a growth estimate of 2 percent per year, according to Neto. "Of this amount, renewable sources can reach a share of 48 percent in 2026. In Brazil, the participation of renewable sources in meeting the growth of energy consumption in the coming years was prioritized," he said. Almost 45 percent of primary energy demand in Brazil is met by renewable energy, making its energy sector one of the least carbon-intensive in the world, according to the International Energy Agency (IEA).

## Israel continues talks with Turkey on EU natural gas supply project

Reuters, 08.03.2018



Yuval Steinitz, Israel's Minister of National Infrastructure, Energy and Water Resources, said they continue negotiations with Turkey regarding the construction of a pipeline to supply natural gas to Turkey and the European Union (EU), and the respective final agreement is not signed yet, reported RIA Novosti news agency of Russia.

But in July 2017, Steinitz had informed that Israel and Turkey agreed to sign the final agreement by the end of last year. "We still have no agreement with Turkey," the Israeli official said speaking at CERAWeek energy conference.

"There is no pipeline from Israel to Turkey; negotiations on this issue are still underway. So far, the discussions are very friendly. But you know, sometimes it takes some time for a dialogue between the business sector and the government."



## Med natural gas find brings conflict dividends

Politico, 08.03.2018



The dream was that the discovery of gas in the Eastern Mediterranean would bring about peace and cooperation in an unstable region. The reality is that greater resources mean more disputes.

Last month, a long-awaited energy deal and a potentially significant hydrocarbon find off the coast of Cyprus Island sparked excitement over the prospect of a new gas hub on Europe's borders, and the associated stability benefits that could bring.

"Large quantities of natural gas are thought to lie below the Eastern Mediterranean seabed. "The discovery of important hydrocarbon reserves in the Eastern Mediterranean can serve as a catalyst for peace, stability and cooperation in the region," the three leaders said in a joint statement after the summit. Then the trouble began. Last month, tensions escalated between Turkey and Greek Cyprus when Ankara sent its navy to block Greek Cypriots from exploring for gas. Further south, Israel and Lebanon are engaged in a war of words over a gas deal in disputed waters. Large quantities of natural gas are thought to lie below the Eastern Mediterranean seabed. In the past decade, Egypt and Israel have both discovered vast reserves.

Greek Cyprus has already found a smaller field in its waters — but Eni's new gas field could be a game-changer for Nicosia's dreams of transforming the island into an energy hub. Yet getting access to any riches hidden in the area's waters is fraught with difficulty, as Turkey is determined to prevent Greek Cypriots from exploring for gas. Ankara, which supports the Turkish breakaway state in the north, claims that part of Cyprus' maritime zone belong to Turkey or Turkish Cypriots. (Turkey is the only country that recognizes northern Cyprus.) "Turkey will not step back from its current position ... unless any discovered reservoir is jointly developed and new exploration activities are jointly decided by the two communities on the island" — Necdet Pamir. On February 11, the Turkish foreign ministry condemned Cyprus' "unilateral" exploration activities and accused the Greek Cypriot government of "acting as though it were the sole owner of the island." But what should have been good news for the region's economies — and the European Union's mission to diversify its energy supply — quickly fell victim to the region's torturous geopolitics. On February 19, Israel and Egypt signed a multibillion-dollar agreement to export Israeli gas to the Middle East's most populous nation. Two weeks earlier, Italian energy company Eni announced a "promising" gas find in the waters surrounding Cyprus. And in January, Cypriot President Nicos Anastasiades met with Greece's Alexis Tsipras and Israel's Benjamin Netanyahu in Nicosia to discuss plans for a pipeline linking their countries. The same day, a Turkish military ship blocked the Saipem 12000, an Eni drilling vessel, off Cyprus.



Two weeks later, the Eni ship's course was once again intercepted by the Turkish navy — angering the Cypriot government, which accused Turkey of issuing "threats of violence" against Eni's ship. Brussels was quick to side with Greek Cyprus, which became an EU member in 2004. Last week, European Council President Donald Tusk underscored EU support for Greek Cyprus to "explore and exploit its natural resources." The EU is considering developing a gas hub in the Mediterranean key to diversifying its energy sources and reducing its dependence on Russia, which supplies roughly one-third of the bloc's gas. Tusk indicated that Ankara's actions had prompted EU leaders to reconsider whether to hold a summit with Turkey in Varna, Bulgaria, planned for this month Yet the Turkish government is unlikely to back down. Earlier in February, President Recep Tayyip Erdo an warned Greek Cyprus not to "overstep the mark" and said that Turkish warships would "do whatever is necessary." "Turkey will not step back from its current position ... unless any discovered reservoir is jointly developed and new exploration activities are jointly decided by the two communities on the island," said Necdet Pamir, who chairs the energy commission of Turkey's opposition party CHP.

The prospect of gas discoveries has also turned up the heat elsewhere in the Eastern Mediterranean, inflaming tensions between Israel and Lebanon as well as Egypt and Turkey In late January, Lebanon signed an agreement with a consortium comprised of France's Total, Russia's Novatek and Italy's Eni. The deal allows the three companies to explore for gas in an area also claimed by Israel. In response to the deal, Israeli Defense Minister Avigdor Lieberman accused Lebanon of "provocative conduct." Lebanon's Hezbollah movement wasted no time stoking tensions, denouncing Lieberman's words as "a new aggression" and vowing to "decisively confront any assault on our oil and gas rights." A week later, Turkey's Foreign Minister Mevlüt Çavuso lu enraged the Egyptian government when he questioned the validity of a 2013 border agreement between Egypt and Cyprus Island, which allows for gas exploration in the area. Tareq Baconi, a fellow at the European Council on Foreign Relations focusing on oil and gas, believes that the regional flare-up was "inevitable" given the presence of resources. He was skeptical about claims that gas could become a driver for peace in the region, as suggested by the leaders of Greece, Israel and Greek Cyprus.



# OPEC could agree in June to start easing oil output cuts in 2019

WSJ, 11.03.2018



Iranian oil minister Bijan Zanganeh said OPEC could agree in June to begin easing current oil production curbs in 2019, the Wall Street Journal reported on Sunday.

Zanganeh also told the WSJ in an interview that Iran wanted OPEC to work to keep oil prices around \$60 a barrel to contain U.S. shale oil production. "If the price jumps [to] around \$70 ... it will motivate more production in shale oil in the United States," Zanganeh said. Iran will press for carefully bringing back some of its own production, the WSJ cited Zanganeh.

It is adding that the OPEC member currently pumps about 3.8 million barrels per day (bpd) and could produce about 100,000 bpd more. He did not say when Iran could raise its output. Iran is allowed to pump up to 3.8 million bpd under a global pact between OPEC, Russia and other oil producers to limit supply. OPEC meets next in June.

## Russian energy minister urges to speed up Nord Stream-2, Turkish Stream projects

Tass. 08.03.2018



Russian Energy Minister Alexander Novak called for speeding up the implementation of the Nord Stream-2 and Turkish Stream gas pipeline projects to remove transit risks for Russian gas deliveries.

In a Rossiya-24 TV channel broadcast, the minister said that the recent ruling by the Stockholm arbitration in Gazprom's gas dispute with Ukraine's Naftogaz "confirms the need to implement as soon as possible projects aimed at developing alternative gas routes, including the Turkish Stream and the Nord Stream-2 projects in order to reduce transit risks.



"And ensure competitiveness in gas deliveries and costs for final consumers." "In my view, the implementation of [the projects] needs to be accelerated in order to reduce the risks that exist today," Novak said. According to earlier reports, Gazprom has officially notified Naftogaz about launching the procedure of terminating gas delivery and transit contracts with Ukraine in the Stockholm arbitration. The minister reiterated that Gazprom will remain a reliable energy partner for Europe despite current difficulties. "This will not lead to disruption of gas deliveries to European consumers. On the contrary, our current supplies of gas to Europe are record high amid current temperatures, and Gazprom has once again proven itself as a reliable supplier," the minister added.

The Stockholm arbitration on Wednesday ordered Gazprom to pay \$2.56 bln on a transit contract with Naftogaz of Ukraine. Gazprom has already expressed its disagreement with the court's decision and announced its intention to protect its rights in accordance with applicable law. He told reporters that the Stockholm arbitration, guided by double standards, had adopted an asymmetric decision on the contracts with Naftogaz of Ukraine regarding supply and transit of gas. The decision seriously violates the balance of interests of the parties under these contracts, according to Miller. Prior to that, Deputy Chairman of Gazprom Management Committee Alexander Medvedev told reporters that Gazprom received payment for March gas supplies from Naftogaz of Ukraine, but returned it due to inconsistency of the additional agreement to the contract, so the deliveries will not begin.

Naftogaz CEO Andrei Kobolev described the move as Gazprom's refusal to implement the court's decisions. He also said Ukraine will face a gas deficit due to lack of supplies from Russia and called upon reducing gas consumption in the country starting from March 6. On February 28, 2018, the Arbitration Institute of the Stockholm Chamber of Commerce imposed a \$4.63-billion penalty on Gazprom over its gas transit dispute with Ukraine's national oil and gas company Naftogaz. Taking into account the satisfied counter claims, Gazprom has to pay \$ 2.56 bln.

## Only Russia ensured additional gas supplies to Germany in March

Sputnik, 08.03.2018



Moscow was Berlin's only foreign partner that provided Germany with additional natural gas during the cold period in early March, Mario Mehren, the CEO of the Wintershall energy company, said.

"Maybe you noticed that it was very cold in Europe last week, but maybe you have not noticed it, because the buildings were heated very well, and they were heated because of gas deliveries from Russia, particularly via the Nord Stream gas pipeline... If you look at flows at gas in these days, the Norwegians failed to increase the deliveries and the only partner that had responded was Russia,"



Mario Mehren, the CEO of the Wintershall energy company said at a press conference. German company Wintershall expects that Denmark will give the green light to the construction of the Nord Stream 2 gas pipeline in its territorial waters, the company's CEO Mario Mehren said. "We do not see Denmark opposing this pipeline project. We see that Denmark has started the process of obtaining a license and is working on this process. And an appropriate decision will be eventually taken on the basis of new legislation that took effect at the beginning of this year. I cannot imagine Denmark taking a decision that would harm EU consumers. I believe that there will be a positive decision on the Nord Stream 2," Mehren told a press conference. In November, Denmark adopted a bill that enabled the country to prevent the construction of the Nord Stream 2 if the pipeline harmed Danish strategic or security interests. In early October, Sergey Serdyukov, the chief technical officer for Nord Stream 2 AG, said that the company had developed an alternative route for the pipeline in case of Denmark banning its construction in Danish territorial waters. The European partners on the Nord Stream 2 gas pipeline, namely France's Engie, Austria's OMV AG, UK-Dutch Royal Dutch Shell, and Germany's Uniper and Wintershall, each contributed 324 million euros (\$400 million) to the project in 2017. "By the end of the year, each company paid out 324 million euros... The mechanism entails that we all pay at one time," Mehren told reporters. Mehren specified that the first tranche was allocated in June and the second in December.

Through Nord Stream AG, based in Zug, Switzerland, Wintershall holds a 15.5 percent share in the Nord Stream pipeline, which commenced operation in 2011. This pipeline, which runs from Russia through the Baltic Sea to the German coast, helps strengthen the security of supply in Europe with a total annual capacity of 55 billion cubic meters of natural gas. Also, Wintershall is contributing to the financing of the new Nord Stream 2 project as a co-creditor, according to Wintershall press release. Russia's energy giant Gazprom reported at the end of February and in the beginning of March about record volumes of gas exports to Europe. On Friday, the Russian company said that it had broken yet another record for daily exports by delivering 713 million cubic meters of gas to the European Union. In 2017, Gazprom increased its gas exports to non-CIS countries by 8.4 percent to 194.4 billion cubic meters. Chairman of Gazprom's Board of Directors Viktor Zubkov said in early February that the company's goal in 2018 was to maintain its export capacities.



# OPEC sees oil supply surge from rivals, countering its cuts

Reuters, 14.03.2018



OPEC on Wednesday raised its forecast for non-member oil supply this year to almost double the growth predicted four months ago as higher prices spur U.S. shale drilling, offsetting OPEC-led output cuts and a collapse in Venezuelan production.

In a monthly report, the Organization of the Petroleum Exporting Countries said non-OPEC producers would boost supply by 1.66 million barrels per day in 2018. That was the fourth straight rise from 870,000 bpd forecast in November. "For 2018, higher growth is expected on the back of the projected increase in U.S. shale production"

"It is following a better price environment not only for shale producers, but also for other countries such as Canada, the UK, Brazil and China," OPEC said of the outlook for non-OPEC supply. This would lead to "a higher quarterly distribution throughout the year with a record-high level projected for the fourth quarter", OPEC said. OPEC, Russia and several other non-OPEC producers, but not the United States, began to cut supply in January 2017 in an effort to erase a global glut of crude that had built up since 2014. They have extended the pact until the end of 2018. The deal has helped boost oil prices, which topped \$71 a barrel this year for the first time since 2014 and were near \$65 on Wednesday. But it has also encouraged a flood of shale, fuelling a debate about the curbs' effectiveness.

Oil pared much of an earlier gain on Wednesday after the release of the OPEC report. The Iranian oil minister said OPEC could agree at its next meeting in June to start easing the curbs in 2019, the Wall Street Journal reported. He also said OPEC should aim for oil around \$60 to contain shale growth. Top exporter Saudi Arabia, however, said in February it was premature to discuss an exit strategy. Faster-than-expected growth in demand due to a robust world economy has added a tailwind to the OPEC supply effort. Although OPEC in the report slightly raised its estimate of growth in world demand to 1.6 million bpd, it now projects the expansion in supply outside the group will exceed gains in demand. This brings OPEC's view closer to that of the International Energy Agency, which expects a less rosy 2018 supply/demand balance. While rivals are pumping more, OPEC's production in February fell, according to the report. Total output dropped by 77,000 bpd to 32.186 million bpd, led by declines in Iraq, the United Arab Emirates and Venezuela, according to figures OPEC collects from secondary sources. Adherence by the 12 OPEC members with output targets rose to 147 percent, according to a Reuters calculation based on the OPEC figures, higher than 137 percent in January based on last month's report. The figures that OPEC members reported themselves showed some deeper declines in production. Venezuela, whose output is dropping amid an economic crisis, told OPEC its production sank by about 183,000 bpd to 1.586 million bpd in February.



The number is believed to be the lowest in decades. With outside producers expected to increase supply by more than demand, OPEC cut its estimate of the global requirement for its crude in 2018 by 250,000 bpd to 32.61 million bpd. Should OPEC keep pumping at February's level and other things remain equal, the market could move into a deficit of about 420,000 bpd, suggesting inventories will be drawn down. This is less than the deficit of about 560,000 bpd implied last month. The supply cut's original aim was to shrink oil inventories in developed economies to their five-year average. The latest figures gave a mixed picture on stock movements. Stocks rose by 13.7 million barrels in January to 2.865 billion barrels, although this was only 50 million above the five-year average, the closest yet OPEC has come to the original target. OPEC is now talking of looking at other metrics to assess the market's rate of return to balance

## Eni sells 10 pct of Egypt's Shorouk concession to Mubadala Petroleum

Reuters, 11.03.2018



Italian oil company Eni said on Sunday it would sell a 10 percent stake in the Shorouk concession in the Zhor field in Egypt, to Mubadala Petroleum for \$934 million.

Eni currently holds through its subsidiary IEOC a 60 percent stake in the block, the biggest ever gas discovery in the Mediterranean, with 400 million standard cubic feet per day. Rosneft holds a 30 percent share and BP 10 percent. "(The deal) represents a further signal about the strength and quality of this world-class asset," said ENI Chief Executive Claudio Descalzi.

Production at Zohr began late last year and should add 70,000 boe/d (barrels of oil equivalent) for Eni this year, Descalzi said last month.



# Total finalizes acquisition

### Danish Maersk Oil

Reuters, 09.03.2018



Total finalized the Maersk Oil acquisition signed on Aug. 21 last year making the company the second largest operator in the North Sea, the French oil company announced.

The acquisition brings to Total around 1 billion barrels of oil equivalent of 2P/2C reserves and resources, mainly in the OECD countries, Total said. It also brings production of about 160,000 barrels of oil equivalent per day (boe/d) in 2018, ramping up to more than 200,000 boe/d by the early 2020s, it added. "The acquisition of Maersk Oil allows the Group to reinforce its existing leading positions in the U.K. and in Norway, as well as to enter Denmark,"

Total said, making the company the second largest operator in the North Sea with an output of 500,000 boe/d by 2020. "This major acquisition is a success on many levels," Chairman and CEO of Total Patrick Pouyanne was quoted as saying, adding that there is a strong overlap between Maersk Oil and the Group's assets, which are set to generate more than \$400 million of synergies per year. The company is committed to preserve and further develop Maersk Oil's heritage, Pouyanne said noting that Total's regional hub for North Sea activities is now headquartered in Copenhagen.

## Eni signs concession deal for Abu Dhabi offshore field

Oil & Price, 12.03.2018



Eni signed two concession agreements for the acquisition of a 5 percent stake in the Lower Zakum offshore oil field and a 10 percent stake in the oil, condensate and gas offshore fields of Umm Shaif and Nasr, the company announced in Abu Dhabi on Sunday.

According to the announcement, the agreements consist of a total participation fee of about \$875 million for a 40-year duration. The agreements represent a strategic move for Eni in gaining access to a country with hydrocarbons reserves that are among the largest in the world. Lower Zakum is located about 65 kilometers off the coast of Abu Dhabi.



The discovery dates back to 1963 and production began in 1967. "It has a target production of 450,000 barrels of oil per day. Umm Shaif and Nasr are located about 135 kilometers from the coast of Abu Dhabi and have a target production of 460,000 barrels of oil per day," according to the agreement. In both concessions, Abu Dhabi National Oil Company (ADNOC) owns a 60 percent stake while the operator is ADNOC Offshore. In addition, Eni agreed to sell a 10 percent stake in the Shorouk concession offshore Egypt, where Zohr's super-giant gas field is located, to Mubadala Petroleum, a wholly owned subsidiary of Mubadala Investment Company. Eni, through its subsidiary IEOC, currently holds a 60 percent share, while other partners Rosneft holds a 30 percent interest and BP has a 10 percent stake. The agreed consideration is \$934 million. The completion of the transaction is subject to the fulfillment of certain standard conditions, including all the necessary authorization from Egypt's authorities.

## **Europe needs to import more natural gas: OMV CEO**

Anadolu Agency, 09.03.2018



Europe needs to import more natural gas because of the decline of local production, OMV Chairman and CEO Rainer Seele said.

Speaking at CERAWeek 2018 by IHS Markit energy conference, Seele spoke on Wednesday about the European natural gas market, renewable energy use and policies to combat climate change. "After a long period of stagnation, we are going to see growth in the European gas market. My outlook is triggered by two arguments," Seele said. He argued that firstly Europe is transitioning from coal to gas,

Secondly, gas-fired power generation is capable of competing with nuclear and coal sources. "Europe needs to import more gas because indigenous production is declining much faster than we all anticipated," he said. He affirmed that Europe would stay in the first instance as a pipe market given that more additional quantities are being invested in and imported from Russia, as this gas is "extremely cheap." Seele explained that gas flow from the Nord Stream II, the gas pipeline project that runs directly from Russia to Germany, rids Europe of additional fees from transit countries making gas even cheaper. "We support the Nord Stream II pipeline because it is the only pipeline that imports gas from Russia into the European market with a direct connection without any transit countries involved, so we have the highest security for supply," he said.



He said additional LNG cargos are also welcome in Europe, but higher gas demand and prices in Asia are forcing the U.S. to choose that region over Europe for its LNG exports. Seele emphasized that natural gas would also benefit the fight against climate change and lower carbon emissions. "I don't think we have to convince any politician that gas is the cleaner fuel with all the ecological benefits," he said. "But, when it comes to politicians, they think that renewables are the only solution for the climate. Therefore, they are striving for climate strategies that are 100 percent based on renewables. I don't know which economy can consume at such a high-cost level," he added. Seele stressed that as CO2 emissions are becoming a major priority for Europe, natural gas would be the best short-term option and solution to meet these CO2 targets. "That's the reason why I like to import gas, and it doesn't matter where it comes from. We need to have cheap energy, and we shouldn't only have an ecological discussion while ignoring the economic effects," he concluded.

## Cheniere 'extremely focused' on Asia for LNG

Anadolu Agency, 09.03.2018



American liquefied natural gas (LNG) exporter heavyweight Cheniere Energy is "extremely focused" on the Asia-Pacific region, the company's President and CEO Jack Fusco said Wednesday at CERAWeek 2018 by IHS Markit in Houston.

Two years ago during the 2016 energy conference Cheniere showed the audience a video clip of its first LNG cargo ship loading at its Sabine Pass LNG terminal in the state of Louisiana. "The first cargo we shipped two years ago went to Brazil," Fusco said, and confirmed since then the company exported over 300 cargos to 25 different countries.

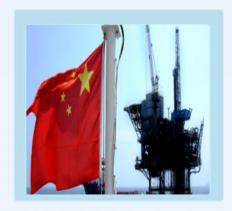
While Cheniere's LNG cargos went to countries in Latin America, Asia and Europe over the past two years, "recently, it went more to Asia, and specifically to China," Fusco said.Once heavily dependent on coal to generate electricity, heating, and providing power for its massive industry, China is now shifting towards using natural gas. We see a shift in what China is trying to do -- to clean their air and to generate electricity. It's more of a social issue in China. They want and need cleaner air, and we see that shift as long-term in nature. I don't see that will change any time soon," Fusco said. Demand for LNG in China has been "fantastic" and increased 40 percent year-over-year, the CEO said. "I think it's gonna continue that way looking at the number of regasification terminals that are being built," he added. He also noted that the U.K. and Western Europe struggled between natural gas and coal over the past two years. "What we have seen early on is when we were delivering U.S. LNG to Europe, we were displacing coal. As Asia demanded more and more for the product, Europe switched back," he explained. Gas prices have also increased in Asia more so than in Europe during that period due to higher demand. Fusco noted that Cheniere Energy has opened offices in Beijing and Tokyo, in addition to Singapore. "We can double the size of the company if we are successful in Asia," he concluded.



Cheniere signed a deal in February with PetroChina, a subsidiary of China National Petroleum Corporation, to begin selling about 1.2 million tons of LNG per year. While the agreement will run through 2043, the volume of the shipments will ramp up in 2023. The company announced Monday that its first LNG cargo had sailed for India. Its 20-year deal with the Indian state-owned natural gas company GAIL India Ltd. will supply with India 3.5 million metric tons of LNG every year.

## Huge Chinese demand fuels the next U.S. gas boom

Oil & Price, 11.03.2018



China's push for cleaner air and fuel is driving an unprecedented demand for natural gas, and the United States is well-positioned to seize this opportunity and export even more of its growing gas production to the thirsty nation.

U.S. companies have plans for even more liquefied natural gas (LNG) export trains and facilities to come online in the coming years, and this winter's surge in Chinese LNG demand and imports underpins a second wave of LNG investment in the United States, analysts and company executives believe.

The Chinese push to cut pollution and make millions of households switch to natural gas from coal for heating resulted in China becoming the world's second-largest LNG importer in 2017, outpacing South Korea and second only behind Japan, the U.S. EIA said last month. Chinese LNG imports surged 46 percent last year. And while China increased its domestic production and pipeline imports last year, it was not enough; natural gas shortages in northern China led to record levels of LNG imports during the winter. Overall, natural gas imports accounted for 40 percent of China's 2017 natural gas supply, and LNG made up more than half of those imports. True, China is planning to hit an all-time high for natural gas production this year, which includes raising the share of gas in its energy mix—still, domestic production growth will be woefully insufficient compared to its soaring consumption. So, the United States is all too happy to step in to supply part of that demand. Cheniere Energy is one such supplier, which signed last month two long-term deals—through 2043—to supply LNG to China National Petroleum Corporation (CNPC), with the LNG price indexed to the Henry Hub price plus a fixed component.



"We expect these agreements to support the development of Corpus Christi Train 3, and we are now focused on completing the remaining necessary steps to reach a final investment decision later this year," Cheniere's President and CEO Jack Fusco said. Earlier this month, Fusco told CNBC that this is "just the beginning of a long-term relationship" with China, noting that Cheniere already has four operational trains, with another three trains coming online shortly. Since Cheniere started exporting U.S. LNG in February 2016, Latin America and Asia have been the two leading destinations for American exports, but recently, every "spare drop" was shipped to China, Fusco told the CERAWeek conference in Houston this week. Between February 2016 and December 2017, China was the third-largest market for U.S. LNG—behind Mexico and South Korea—accounting for 13.5 percent of all U.S. LNG exports, U.S. Department of Energy data shows.

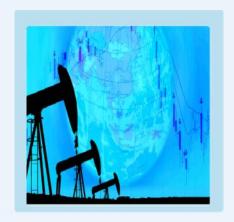
The growing Chinese appetite for natural gas could justify new LNG export facilities investment in the United States where natural gas is cheap and abundant, executives and analysts concur. "As we saw this winter, demand in Asia and China kind of surprised the market. What we saw was supposed to be a market that might not be hitting supply-demand balance until the mid-2020s," Kevin Brown, research analyst at Tortoise Capital Advisors, which is a shareholder in Cheniere, told CNBC. "It's at a place now where we see the balance coming maybe earlier, in the 2020s, pushing people to have to make that second wave of LNG investment," Brown said. "We are on the precipice of the first time I've seen in my career when we have demand-pull and supply-push happening at the same time to support almost \$200 billion in infrastructure investment that's needed in the U.S.," Meg Gentle, president and CEO of LNG company Tellurian, told CNBC. Tellurian was co-founded by Charif Souki, who also founded Cheniere and was its CEO and president until December 2015.

Future investment in more U.S. LNG export infrastructure is expected to pay off in the long term because global natural gas demand will only rise, and China will account for 40 percent of that demand growth until 2022, the International Energy Agency (IEA) said. On the other hand, the United States—the world's largest gas consumer and producer—will account for 40 percent of the world's extra gas production to 2022 "thanks to the remarkable growth in its domestic shale industry," the IEA estimates. While U.S. domestic demand for gas is growing, more than half of the production increase will be used for LNG exports. The United States will be on course to challenge Australia and Qatar for global leadership among LNG exporters by 2022, according to the IEA. Vying for global leadership in LNG exports, the United States is on course to boost its export capacity and meet a growing share of the booming Chinese gas demand.



## UK oil, gas revenue forecasts to 2023 revised up

Rigzone, 14.03.2018



A new economic outlook report by the Office for Budget Responsibility (OBR) has revised up UK oil and gas revenues by an average of \$559 million a year to 2022-23.

UK oil and gas revenues are now expected to come in at \$1.5 billion (GBP 1.1 billion) in 2017-18, \$1.2 billion (GBP 0.9 billion) in 2018-19, \$1.1 billion (GBP 0.8 billion) in 2019-2020, \$1.3 billion (GBP 1 billion) in 2020-2021, \$1.1 billion (GBP 0.8 billion) in 2021-22 and \$1.2 billion (GBP 0.9 billion) in 2022-23. Higher sterling oil and gas prices in the near term and higher oil and gas production were listed as some of the factors for the revised revenue forecasts.

Established in 2010, the OBR provides independent and authoritative analysis of the UK's public finances.

## Need for oil investments dominates CERAWeek this year

Anadolu Agency, 14.03.2018



Global oil demand is rising, U.S. oil production is surging, and oil prices are higher than last year, but it was the oil industries' lack of investments dominated at CERAWeek.

The 37th annual CERAWeek energy conference took place last week in Houston, Texas -- the world capital for energy -- with the participation of some 6,000 government officials, company executives, business people, investors and experts from more than 30 countries. With oil prices hovering around \$60-\$65 a barrel and rising oil, natural gas production in the U.S., a lot of smug smiles were seen among the participants.



A second shale revolution is taking place in the U.S. and American shale oil producers are focusing on short-term investments that reap quick yields. The U.S.' crude oil production last month climbed above 10 million barrels per day (mbpd) to surpass Saudi Arabia, and now ranks second after Russia. However, the low price environment between 2015-2016 caused many financial constraints for oil and gas companies and negatively impacted their long-term investments. Although the second shale revolution has paved the way for American producers to take a slice from Saudi and Russian shares in the market, the oil industry still needs long-term investments and deepwater projects to meet the rising global oil demand. The global oil sector needs around \$20 trillion over the next 25 years, Saudi Arabian energy giant Aramco President and CEO Amin Nasser said last Tuesday at the conference.

Due to low oil prices during 2015-2016, the industry lost around \$1 trillion, and now needs new production capacity of 20 mbpd in the next five years, according to Nasser. International Energy Agency (IEA) Executive Director Fatih Birol emphasized last Monday that the level of investment in the global oil market remains low and said it needs to increase. He noted that more than 10,000 oil fields across the world saw production declines between 2000 and 2017. "We lose 3 mbpd each year because of decline in fields. The oil industry needs to replace one North Sea every year. Production growth is not only needed to meet the oil demand, but it needs to replace one North Sea each year," he said. "Are we seeing enough investments? Absolutely not," he underlined. Birol noted that due to low oil prices there was a huge decline in upstream investments during 2015 and 2016. The level of investment remained flat in 2017 and is expected to rise only 6 percent in 2018 year-over-year.

He explained that one of the main reasons for the level of investments remaining low is due to the fact that investments are more focused on short-term projects. In last year's conference, Birol warned that crude oil prices could rise sharply by 2020 due to falling investment in new oil projects. "In 2016, there were \$450 billion of oil investments. This is 25 percent below the previous year. Investment must increase at least 20 percent every year to compensate for demand growth," Birol said. "In 2017, if we don't see a substantial increase, the market tightens after 2020. Spare production capacity shrinks to historically low levels ... World crude stocks are in decline. With OPEC's plan, stocks will continue to withdraw," he said last year. Meanwhile, the cartel is sticking to its production cut agreement until the end of 2018. It called for further cooperation between oil producing countries to maintain sustained levels of production and stability in prices.

OPEC Secretary General Mohammad Sanusi Barkindo noted last Tuesday that 24 oil producing countries have participated in the Declaration of Cooperation, which was signed at the end of 2016 to curb the output of oil producing countries in order to raise oil prices. "All countries and sectors have to come together. We cannot continue to walk in isolation. We have to work together to maintain sustainability," he said. In November 2014, OPEC's biggest producer and most influential member Saudi Arabia refused to cut its own output and the cartel's, letting oil prices drop to their lowest levels in 13 years at the beginning of 2016. Most actors saw this as an attempt to push high-cost shale producers out of the global oil market. However, during last year's CERAWeek, Barkindo said "We, in OPEC, never had a war with U.S. shale," adding that the cartel met with shale oil producers in the U.S. to share experiences and managerial expertise in a low price environment.



This year, Barkindo stated that the dialogue between OPEC and American shale producers is continuing. "We were happy to break the ice last year. It is in our interest to continue dialogue, to learn experiences from them, to survive this cycle ... We are selling to the same market, and every producer is needed to meet future demand," he said. Although OPEC's so-called dialogue was an attempt to send a conciliatory message to the market, any cooperation with American shale companies is actually considered against U.S. antitrust laws. No U.S.-incorporated oil firm is able to form an agreement with OPEC under any setting, nor with any foreign government and their representatives, in accordance with U.S.' laws and regulations. Such activities, or any hint of those activities, would draw the attention of the U.S. Department of Justice and Federal Trade Commission, which can then start investigations or impose large fines. In November 2016, OPEC agreed to cut its production for the first time in eight years. Moreover, it cooperated with Russia, who supported such a decision for the first time since 2001. Nevertheless, it is still unclear whether Saudi Arabia and Russia will extend the output cut deal beyond the end of this year, or gradually return to their previous output levels before the agreement.

Neither the Saudi Minister of Energy, Industry and Mineral Resources Khalid Al-Falih, nor Russian Energy Minister Alexander Novak was present at this year's CERAWeek conference. Novak was mistakenly reported in February to have met with his Saudi counterpart on the sidelines of CERAWeek, but Al-Falih had accompanied Saudi Crown Prince Mohammad bin Salman during his visit to London. Al-Falih did not provide any clear signals over the extension of the production cut deal. However, he is believed to have discussed Saudi Aramco's initial public offering (IPO) that was expected to occur this year but has now been delayed until next year. The Financial Times reported Sunday that British officials consider that any foreign floatation of Aramco, apart from the Saudi exchange Tadawul, is likely to occur in 2019 at the earliest.

## Natural gas exports could be hit by Trump's trade war

Oil & Price, 10.03.2018



President Donald Trump's newest tariffs on Chinese imports – a hefty 25 percent levy for steel and 10 percent for aluminum –is already fueling speculation about an impending trade war.

However, the Trump administration isn't likely to stop with steel and aluminum but is also considering limiting Chinese investment in the U.S. and imposing tariffs on a broad range of products in a push back against both the massive trade deficit between the two countries and intellectual property theft.



"The U.S. is acting swiftly on intellectual property theft. We cannot allow this to happen as it has for many years!" Trump said in a Twitter post on Wednesday. In an earlier tweet, the president said China had been asked to develop a plan to reduce their "massive trade deficit with the United States." China, for its part, responded on cue yesterday. An op-ed in the Beijing-based Global Times, which often expresses the views of the Chinese Communist Party (CCP), fired back. Particularly irked over Trump's tweet that China has been asked to develop a trade deficit plan, the op-ed said that China won't be "bullied" by Trump's trade war threat. "US trade protectionism has become the No.1 hot spot in the world, even stealing the thunder of the North Korean nuclear crisis. The US may be the first country to have clamored for war against the entire world, although the battlefield is the economy," the op-ed said.

The piece then shifted to what has been on everyone's mind – will China retaliate? "China should face trade friction with the US in a calm manner. Meanwhile, it must retaliate against US tariffs that forcibly interfere with Sino-US trade and violate World Trade Organization rules. China must show it won't be bullied," it added. And, that's the question isn't it? Will Beijing retaliate or not, and if so, how much will it match Trump's actions? Moreover, will that relation include U.S. crude oil and liquefied natural gas (LNG) shipments? Currently, the U.S. exports just over 2 million barrels of crude oil per day, much of it finding its way to Asia and particularly China, as the U.S. slowly eats away at Saudi market share in the region and the country. Since West Texas Intermediate crude prices trade at a discount to Brent and other crudes, the U.S. usually has a pricing advantage over its competitors in the region. Saudi Arabia for its part uses Oman and Dubai prices as an underlying benchmark for its official selling price (OSP) in Asian markets.

While U.S. oil exports to China is still small, it has grown from nothing before 2016 to a record 400,000 barrels per day in January, worth almost US\$1 billion. Meanwhile, that amount will continue to grow amid increased U.S. shale oil production and as U.S. output reaches near 11 million bpd, effectively bypassing Russia at the end of the year or the start of next year to become the top global oil producer. Yet, trade retaliation from Beijing could potentially include U.S. oil imports, particularly since Beijing has a plethora of oil export suitors all vying for the country's lucrative oil market. However, natural gas is more complicated. While China does have plenty of crude oil options and gas options too for that matter (both LNG and piped gas), the country may be more pressed to not include U.S. LNG on any list of trade retaliatory measures.

The most pressing reason for this: As Beijing rushes headlong with its mandate to make gas 10 percent of the it's power generation mix by 2020 and more by 2030, China needs long term U.S. LNG supply agreements as part of its energy security mix in addition to supply from Qatar, Australia, Malaysia and in time Russia. Since U.S. LNG is priced against the Henry Hub benchmark in Louisiana instead of an oil indexation like other producers (offering the opportunity to lock in lower prices for long-term off-take agreements) and since the U.S. will have five major LNG export projects operational by 2020 (becoming the third largest global LNG producer with a shot by the middle of the next decade of even rivaling top producer Qatar and Australia) - China might want to leave the U.S. gas part of its energy equation intact and pick another sector to use in retaliation.



# IEA: Global oil demand picks up but still lags rising supply

Reuters, 15.02.2018



Global oil demand is expected to pick up this year but supply is growing at a faster pace, leading to a rise in inventories in the first quarter of 2018, the International Energy Agency (IEA) said on Thursday.

The IEA raised its forecast for oil demand this year to 99.3 million barrels per day (bpd) from 97.8 million bpd in 2017. Commercial oil inventories in industrialised OECD nations rose in January for the first time in seven months to 2.871 billion barrels, 53 million barrels above their five-year average, the Paris-based IEA said.

The January increase of 18 million barrels over the December inventory level was roughly half the size of rises normally seen at this time of year, according to the agency, which advises Western governments on energy policy. But it said Venezuela, where an economic crisis has cut oil production by 50 percent in two years to lows not seen in more than a decade, could still trigger a renewed drawdown in stocks. "With supply from Venezuela clearly vulnerable to an accelerated decline, without any compensatory change from other producers, it is possible that the Latin American country could be the final element that tips the market decisively into deficit," the IEA said. In a bid to drain inventories, the Organization of the Petroleum Exporting Countries, Russia and several other producers have been implementing a deal to cut output by about 1.8 million bpd from January 2017 until the end of 2018.

Assuming no change in OPEC output for the rest of the year, the IEA said it expected a small increase in OECD inventories in the first quarter of 2018 with declines after that. The agency said it expected supply from non-OPEC nations to grow by 1.8 million bpd in 2018 to 97.9 million bpd, led by the United States, where crude output was forecast to rise by 1.3 million bpd during 2018 to more than 11 million bpd by the end of the year. OPEC crude output fell in February to 32.1 million bpd, led by Venezuela and the United Arab Emirates. The IEA raised its estimate for demand for OPEC oil to 32.4 million bpd for 2018 from last month's forecast of 32.3 million bpd. The agency said the decision by U.S. President Donald Trump decision to impose tariffs on imports of steel and aluminium, which has prompted threats of retaliation from major trading partners, posed a risk to global economic growth forecasts. "A slowdown would have strong consequences, particularly for fuel used in the maritime sector and in the trucking industry," the IEA said. It said growth in world trade had been strong, accelerating from 2.5 percent in 2016 to 4.7 percent in 2017, citing this as the likely reason behind a sturdy 1.8 percent rise in 2017 in global gasoil demand.



# Driftwood LNG, a new supply model for a globalizing industry

Platts, 14.03.2018



After failing to attract interest in its fixed delivered price proposal last year, US-based Tellurian is back with another innovative proposition for its Driftwood LNG export project one that offers potential buyers the opportunity to invest across the US gas supply chain and lift LNG at cost.

While no offtake agreements have yet been signed, this supply model would blend in better in a globalizing market, where stakeholders are seeking to build trading capabilities, expand portfolios across the supply chain, and mitigate new risks through greater destination and indexation flexibilities.

"With our cost-plus model, we are going to enable those buyers to access supply at a very low cost and become traders in their own right," Martin Houston, vice chairman of Tellurian, said in a recent interview with S&P Global Platts. Tellurian is offering equity interest in its wholly-owned subsidiary Driftwood Holdings, which includes upstream US gas assets, pipeline infrastructure and the Driftwood LNG plant, stressing that buyers would be able to get LNG from the Louisiana-based liquefaction facility for approximately \$3/MMBtu. "By investing, they then buy the right to lift LNG at the operating cost, which we think would be around \$3/MMBtu FOB," Houston said. "We pay the same \$3/MMBtu, so we have a strong incentive to drive operating costs down." This would be half the cost of a cargo sold against the Platts Gulf Coast Marker, a daily FOB spot price assessment for LNG exported from the US Gulf Coast, which averaged \$6/MMBtu in 2017. The GCM was only \$1.12/MMBtu below the JKM average of \$7.12/MMBtu in 2017, whereas the most economic freight rate between both regions averaged \$1.27/MMBtu in the same year.

Tellurian is expecting to receive approval from the US Federal Energy Regulatory Commission and reach final investment decision on the 27.6 million mt/year export facility by the end of 2018, with operations due to begin in 2022-2023. In early 2017, Tellurian surprised investors with an unprecedented marketing proposal, offering 7 million mt/year of LNG under mid-term contracts from 2023 at a fixed delivered price of \$8/MMBtu to Japan, with the idea of reducing market price volatility. However, no customers had taken up the offer by October, according to Tellurian Senior Vice President Mark Stubbe, as Japanese utilities remained concerned over locking themselves into a price that could eventually work to their disadvantage.



For Japan, the ability to mitigate new risks is becoming particularly important, as its domestic downstream markets become more liberalized and competitive. The first phase of Japan's LNG liberalization saw it open up its domestic power and gas retail sectors in April 2016 and April 2017 respectively. And further liberalization is on its way, with the division of former regional monopoly power generation plants and transmission and distribution systems by 2020 and the unbundling of natural gas pipeline operations by 2022. The transition is not exclusive to Japan. The reconfiguration of supply and demand in the LNG industry is changing the nature of LNG trading globally, and gradually replacing the traditional supply model with shorter, more flexible deals, and a more liquid, transparent spot market. More than a third of global LNG transactions are now conducted outside of the long-term contract framework and the share is set to rise, driven by regulatory changes, growing flexible supplies, the need to optimize portfolios to protect netbacks in a lower price environment, and an increasing number of participants acquiring trading skills.

"There is no real reason why anybody should sign up to a long-term traditional take-or-pay contract," Houston said. However, this transition will be gradual and lengthy, Houston added, and oil indexation will prevail for years to come, as legacy oil-linked contracts overlap with their newer more flexible incarnations.

## Energy execs says tariff gambit could hit shale, LNG project costs

Reuters, 07.03.2018



The global oil and gas Energy executives say the Trump administration's proposed steel and aluminum tariffs could bump up the cost of big-ticket projects needed for rapidly rising U.S. shale oil and gas output by three to 10 percent.

Higher construction costs could slow growth in production and exports of crude and natural gas from shale that has made the United States the world's largest gas producer and second largest oil producer. President Donald Trump's proposal is emerging as a potential spoiler for new U.S. pipelines, drilling rigs, offshore platforms and refineries to handle coming oil and gas production.

Companies including Exxon Mobil Corp (XOM.N), Kinder Morgan Inc (KMI.N) and others have outlined tens of billions of dollars of new steel-intensive petrochemical and pipeline expansions in the United States. The administration has not yet formally unveiled its plan. It is unclear whether exemptions would be available for certain sectors, or for steel from places such as Canada, the biggest foreign provider of the metal to the United States. U.S. trading partners have said they could counter tariffs with their own levies on U.S. exports. If the proposed tariffs were in place when natural gas company Freeport LNG was building its first three liquefied natural gas (LNG) production lines, they would have raised the multi-billion dollar construction cost by about \$200 million, or between 3.5 percent and 5 percent, Chief Executive Michael Smith said in an interview.



Freeport LNG is in the process of building a fourth production line at the LNG plant in Texas. Steel tariffs would affect the economics of the plant but not deter the company from building it, Smith said on the sidelines of an industry gathering in Houston. If the tariffs lead to a trade war with China, then Freeport LNG could suffer because China is among the long-term buyers for the gas, he said. U.S. export capacity was less than 2 million tonnes per annum (Mtpa) in 2015, and is expected to top 77 Mtpa by 2022, which would make it the world's No. 2 exporter behind Australia. Steel accounts for as much as 30 percent of new drilling project costs. While higher costs would not halt new drilling in U.S. shale fields, "it could slow it down," Jim Burkhard, vice president of oil research for consultancy IHS Markit, said in an interview. Benchmark U.S. steel prices hit a seven-year high on Monday. according to data provider S&P Global Platts. Last month, Turkey's Borusan Mannesmann said it would provide about half the steel for the Gulf Coast Express pipeline, a \$1 billion Kinder Morgan project to move nearly 2 billion cubic feet per day of natural gas from the Permian to Texas Gulf Coast. Kinder Morgan declined to comment on the pipeline suppliers. When the proposal was first announced, sources at Exxon Mobil told Reuters that increased costs from tariffs could affect the company's plans to build another crude oil distillation unit at its Baytown refinery that would make it the largest in the United States. The proposal is part of a \$20 billion expansion of several refining and petrochemical complexes along the U.S. Gulf in coming years.

Since 2010, \$85 billion worth of petrochemical projects have been started or completed across the United States. The shale production boom has overcome bigger hurdles, including the Organization of the Petroleum Exporting Countries' efforts to stem its rise a few years ago by flooding the market with oil. U.S. energy production is projected to reach 13.2 million barrels of oil per day in 2023, up from an average of 9.3 million bpd last year, IHS estimates. Some pipeline projects could be hamstrung if developers cannot buy parts made outside of the United States, said Greg Armstrong, CEO of energy storage and transport company Plains All American Pipeline (PAA.N). His firm has about \$1.5 billion in steel-intensive projects on the drawing board, and some of the steel required is not made domestically. "It's a thornier issue than is printed in the headlines," said Armstrong. "If you can't get what you need, you kind of have to go somewhere else" outside the United States, he said.



## Brent oil above \$65 at week beginning March 12

Anadolu Agency, 12.03.2018



International Benchmark Brent crude increased to \$65.44 per barrel while American benchmark West Texas Intermediate (WTI) saw \$60.00 at 09.26 GMT+3 on Monday.

Brent crude was trading at \$64.30 per barrel while WTI saw \$60.64 at 11.51 GMT on Friday. The number of oil rigs in the U.S. has fallen for the first time in seven weeks, according to data released Friday by the oilfield services company Baker Hughes. The oil rig count decreased by four to reach 796 for the week ending March 9, the data showed. After rising for six consecutive weeks.

This marked the first weekly decline in the number of oil rigs. In addition, according to the U.S. Energy Information Administration data on Wednesday, crude oil inventories and production increased for the week ending March 2. Commercial crude oil stocks rose by 2.4 million barrels, or 0.6 percent, to reach 425.9 million barrels.



### **Announcements & Reports**

### Frameworks for Energy Investment in Development Organizations

Source : CSIS

Weblink:

https://csisprod.s3.amazonaws.com/s3fspublic/publication/180312\_Barnett\_EnergyInvestmentDevelOrgs\_Web.pdf?VFrqs35Xh5tr\_svUe8\_S\_rxg5GIJ8CAj

### Ending the LNG Drought (Commentary)

Source : CSIS

Weblink : https://www.csis.org/analysis/ending-lng-drought

### EU-Russia: Energy, Policy and Competition

Source : OIES

Weblink : https://www.oxfordenergy.org/publications/eu-russia-energy-policy-competition/

## After the Gazprom-Naftogaz arbitration: commerce still entangled in politics

Source : OIES

Weblink: https://www.oxfordenergy.org/wpcms/wp-content/uploads/2018/03/After-the-Gazprom-Naftogaz-arbitration-commerce-still-entangled-with-politics-Insight-31.pdf

### Norwegian Gas Exports - Assessment of Resources and Supply to 2035

Source : OIES

Weblink: https://www.oxfordenergy.org/wpcms/wp-content/uploads/2018/03/Norwegian-Gas-Exports-Assessment-of-Resources-and-Supply-to-2035-NG-127.pdf

#### Oil 2018

Source : IEA

Weblink : https://www.iea.org/oil2018/



### **Upcoming Events**

### The Fifth Eastern Mediterranean Gas Conference

Date : 21 - 22 March 2018
Place : Nicosia, Cyprus

Website : http://www.cvent.com/events/eastern-mediterranean-gas-conference-2018/event-summary-23f9449dfa9442e1930a5291c82d410d.aspx

### Eurasian Gas Summit

Date : 21 - 23 March 2018Place : Budapest, HungaryWebsite : https://eurasiangassummit.com/

### The 10th International Petroleum & Natural Gas Summit

**Date** : 27 - 28 March 2018

Place : Beijing, China

Website : http://oil.zhenweievents.com/en/

## The 8<sup>th</sup> International Offahore Engineering Technology & Equipment Exhibiton

Date : 27 - 29 March 2018
Place : Beijing, China

Website : http://www.chinamaritime.com.cn/en/

#### Kuwait Oil & Gas Summit

Date : 16 April 2018
Place : Kuwait City
Website : www.cwckuwait.com/

### 3rd SOCAR International Caspian and Central Asia Downstream Forum

Date : 24 – 25 April 2018
Place : Baku, Azerbaijan

### 3<sup>rd</sup> LNG International Summit

Date : 25 - 26 April 2018
Place : Hamburg, Germany

Website : http://lngsummit.org/



### International Conference on Petroleum & Petrochemical Economics

Date : 26 April 2018
Place : Istanbul, Turkey

Website : www.waset.org/conference/2018/04/istanbul/ICPPE

### Mediterranean Oil & Gas Summit

**Date** : 02 – 03 May 2018

Place : Rome, Italy

Website : https://10times.com/mediterranean-oil-gas-summit

#### Iran Oil Show

**Date** : 06 – 09 May 2018

Place : Tehran, Iran

Website : https://10times.com/iran-oil-show

### FLNG Global 2018

**Date** : 14 – 15 May 2018

Place : Amsterdam, The Netherlands

Website : https://www.clocate.com/conference/FLNG-Global-2018/49265/

Supported by PETFORM

### Flame Conference 2018

**Date** : 14 – 17 May 2018

Place : Amsterdam

Website : https://energy.knect365.com/flame-conference/?vip\_code=FKA2659PETFORM



### 4th International LNG Congress

Date : 04 – 05 June 2018
Place : Berlin, Germany
Website : http://lngcongress.com/

### 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

## 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/