Oil & Gas Bulletin



Expert: Gazprom keen on TAP as TurkStream link for EU

Anadolu Agency, 10.05.2017



Gazprom has expressed interest in using the Trans Adriatic Pipeline (TAP) to link the second line of the TurkStream gas pipeline because TAP's route is already established, John Roberts, a senior fellow at Atlantic Council's Global Energy Center told Anadolu Agency.

Roberts hailed the TurkStream pipeline as a project that will improve Turkey's energy security because it allows greater flexibility for gas transit to the country. The TurkStream pipeline is an export gas pipeline stretching across the Black Sea from Russia to Turkey and further to Turkey's border with neighboring countries.

One line is expected to supply the Turkish market, while a second line will carry gas to southern and southeastern Europe. Each line will have the throughput capacity of 15.75 billion cubic meters of gas per year.

Gazprom on Sunday announced that the construction of the offshore section of the TurkStream gas pipeline project commenced in the Black Sea near the Russian coast. "It [TurkStream] does not really change the balance of gas coming to Turkey.

One of the big elements in changing that will be the completion of the expansion of the Baku-Tbilisi-Erzurum system and the development of the TANAP pipeline," he said. TAP will transport natural gas from the giant Shah Deniz II field in Azerbaijan to Europe. The approximately 878 kilometerslong TAP pipeline will connect with the Trans Anatolian Pipeline (TANAP) at the Turkish-Greek border at Kipoi, cross Greece and Albania and the Adriatic Sea, before coming ashore in southern Italy.

Roberts affirmed that the EU does not have any role in the construction of the second line of the TurkStream project, which plans to reach EU markets through Turkey because its construction is outside the EU.

"Where the EU comes into the picture is with the termination of the second line on the Turkish border with Greece at Ipsala in Turkey which is opposite Kipoi in Greece. At that point, the question is what happens to the gas in that line?

The Russians have said that they would like to supply it to the European Union and, in some cases, this will go to customers already served by Ukraine," he explained. Roberts argued that the underconstruction TAP pipeline, which travels from Kipoi all the way through southern Italy, is key for the delivery of extra capacity. "That pipeline is designed to have an initial capacity of 10 billion cubic meters (bcm) which has already been booked by Azerbaijan.



But it will have an additional capacity of 10 bcm. Now that capacity under EU regulations is available for whoever wants to book it on the best commercial terms. As of around 2019-2020, whenever TAP is opened up for business, the only supplier that we can see on the horizon capable of delivering anything like an extra 10 bcm is Gazprom through the second line of TurkStream," Roberts said.

"There is no theoretical or legal objection to Gazprom asking for what is called an open season in which the TAP pipeline authorities have to allow it to compete. And since we would not expect anybody else to compete, we would expect a deal," he explained.

However, Roberts argued that Gazprom would have to give about two years notice of its plans to pump gas into a pipeline because although the physical pipe is there to carry the gas, extra compression is needed to push the extra gas through.

TAP would have to put in place the extra compression, which would cost billions of euros for all involved, according to Roberts. "It is not a small thing. So my guess is that Gazprom, which already signaled its interest in using TAP, will use TAP because of its route. If they do not, somebody has to come with 5 or 6 billion dollars or euros to build an entirely new pipeline," he concluded.

Gazprom starts construction of Turkish Stream gas pipeline to Turkey

AFP, 08.05.2017



Russian gas firm Gazprom said on May 7 that construction had begun for a gas pipeline under the Black Sea to Turkey, which is meant to eventually also serve the European Union.

"Construction of the TurkStream gas pipeline began in the Black Sea near the Russian coast," Gazprom said. "Implementation of the project is on schedule and our Turkish and European customers will from the end of 2019 have a reliable new route for importing Russian gas," said Gazprom's Alexei Miller. Russia first floated the project in 2014 after the EU blocked plans for a pipeline under the Black Sea to Bulgaria at the height of the Ukraine crisis.

A diplomatic crisis following the shooting down of a Russian bomber overflying the Turkish-Syrian border delayed the project, which was revived when bilateral relations were mended last year. Two lines capable of carrying 15.75 billion cubic meters of gas per year each will be built.

With Turkish Stream, Russia aims to not only reinforce its capacity to deliver gas to Turkey, but to also make it a transit country in place of Ukraine, even if the prospects of that are uncertain given the EU's hostility toward new Russian pipelines.



Israel's Delek group seeks to conduct natural gas exploration in Turkey

Daily Sabah, 08.05.2017



Citing the likely presence of significant oil and natural gas resources in the eastern Mediterranean, Israeli oil and gas exploration firm Delek Drilling Exploration has said that it aspires to take its investments in Turkey even further.

Yossi Abu said they believe there are more oil and gas resources in the region while emphasizing the launching of Turkey's gas exploration activities in the Mediterranean was an important step by the Turkish government. "As a company that is highly experienced in exploration activities in region, we are very happy to invest in Turkey's focused efforts in exploration and production," Abu said.

Speaking to Anadolu Agency (AA), he asserted that Delek Drilling is the exploration and production wing of Delek Group, one of Israel's largest corporate groups that operates in various sectors. Pointing to the fact that the company has, for the past two decades, conducted exploration and production activities predominantly off the shore of Israel, Abu said, "Israel has continued its oil and natural gas exploration activities through long-term government structures and companies for a long time and Delek Drilling began operating after the privatization of the energy sector in the mid-1990s."

Abu claims that Delek Drilling is the first company to have conducted offshore explorations off the coast of Israel with the Mari B. project. "After this, along with our long-time partner Noble Energy, we first discovered Tamar, the largest natural gas reserve ever discovered in the world, in 2009, followed by Leviathan, which boasts an even larger reserve than Tamar. Moreover, the company also achieved three new discoveries around the world. Now, we have a considerable amount of proven reserves off the shore of Israel."

The Delek CEO said that Turkey's natural gas exploration activities in the Mediterranean are the second most important step taken by the Turkish government after explorations in the Black Sea. "We believe that there is potential for more oil and natural gas resources to be uncovered in the region [the Eastern Mediterranean]; therefore, the steps taken by the Turkish government to launch natural gas exploration activities in the Mediterranean are very important.

I think there is potential for exploration of more oil and gas off the shore of Turkey. We are very happy to invest in natural gas exploration and production in Turkey as a highly experienced company in exploration activities in the region." He also highlighted that if the Turkish government allows, they will also assist with seismic analyses and other research activities. Earlier, a Turkish seismic ship embarked on explorative surveys on April 21 in the eastern Mediterranean for oil and gas resources and will continue conducting test drillings until May 31.



The explorations form part of the "assertive course of explorative and sounding works," announced by Turkey's Energy Minister Berat Albayrak. Abu also noted that they were closely monitoring developments in the Turkish natural gas market, reiterating the government's recent introduction of a comprehensive strategy program for the energy sector.

Stressing that one of the key points in the new strategic program is the diversification of suppliers, Abu stated that Israel can play a crucial role in this regard with gas from the Leviathan and Eastern Mediterranean reserves, adding that this will be a new source for the Turkish market.

Underlining that this is not only a new but also a reliable source, Abu said the Turkish government provides incentives to people who are willing to invest in natural gas storage, adding that there are currently investment projects for storing between 2 and 4 billion cubic meters of natural gas.

According to him, the Leviathan has 620 billion cubic meters of gas reserves and if it can be connected to the Turkish market, Turkey will reach a significant gas storage target within the scope of these projects. He also pointed out that in Turkey, between \$2 and \$3 billion has already been invested in storage projects that can hold at least 4 billion cubic meters of gas.

In the first phase of the Leviathan project, Delek has already decided to supply natural gas to regional markets including Palestine, Jordan, and Egypt along with the Israeli market. Abu said that the company is now moving towards the second stage of the project, under which gas can potentially be sent to either liquefied natural gas (LNG) terminals in Egypt or offered to the Turkish market.

"Therefore, we are frequently visiting Istanbul and Ankara. There are ongoing talks on these two alternatives and I really see a window of opportunity to construct a pipeline from Israel to Turkey," he said. "We are holding very constructive talks with the government through the Ministry of Energy, and we remain deeply committed to this project. This strikes a real balance between Turkey's needs and what we can provide."

Noting that demand for gas in the Turkish market peaks during the winter season, Abu said, "Our demands for gas from the Levant basin are at their highest during the summer. So, this project offers a good combination for the both sides."

With a possible agreement likely to be signed between Turkey and Israel within the framework of the normalization process, which gained momentum in the second half of last year, the option of transferring resources from the region to international markets through Turkey has also improved.

Following a visit by Israeli Minister of National Infrastructure, Energy, and Water Resources Yuval Steinitz to Turkey last October, the two countries initiated dialogues for the proposed natural gas pipeline project. Leviathan and Tamar, Israel's largest natural gas fields, are estimated to hold some 800 billion cubic meters of natural gas reserves. Minister Steinitz had announced that besides these two, another 2.2 trillion cubic meters of natural gas were yet to be discovered in the region.



Changing geopolitics of natural gas in Black Sea region

Eurasia Review, 12.05.2017



Russian dominance over natural gas deliveries into Europe has been weakening, thanks in large part to the new ways in which natural gas can be transported as well as new sources of supply.

These developments are transforming the geopolitics of natural gas in the Black Sea region. Turkey hopes to exploit its geographic position to become a natural gas hub for Europe. New natural gas pipelines running from Russia and Azerbaijan towards the Black Sea region will certainly remodel the geopolitics of natural gas in Europe.

Also, relations between Black Sea states will undergo important changes as Turkey grows in geopolitical importance for both the region and Russia, while Ukraine will lose prominence as a designated transit country for natural gas. Notably, Russia stands to lose some of its political influence in the region as new non-Russian sources of natural gas come online.

Historically, Europe has depended on Russia for its natural gas supply, much of it shipped via the Black Sea region. European imports from Russia oscillated between 20% and 30%. And until the last decade, these deliveries were relatively stable and uneventful. Even during the Cold War, the Soviet Union refrained from deriving political benefits from Western Europe's dependence on its natural gas.

But this stable relationship began to change as the iron curtain fell and Russia lost its grip on Eastern Europe. Reduced control over transit countries such as Belarus and Ukraine has disrupted stable deliveries of natural gas to Europe.

Consecutive breaks in Russian gas supplies to Europe via Ukraine (2005/2006, 2007/2008, and 2008/2009) culminated in the total shutoff of natural gas supplies for Ukraine after Russia invaded and annexed Crimea in 2014.

These actions amplified European concerns about the security of the gas supply and encouraged Europe to reduce dependence on Russian gas. If unchecked, this dependence gives Russia too much influence over domestic policies, especially in Eastern and Central Europe, where some countries rely completely on Russian natural gas supplies.

Consequently, Europe has diversified its natural gas supply. The changing natural gas market has allowed Europe to diversify. Discoveries of natural gas in the U.S., Australia, and Azerbaijan, together with the advent of commercialized liquefied natural gas (LNG), gave natural gas a global reach. LNG reduced regional dependencies because gas no longer needed to be shipped via pipeline.



Today, U.S. or Australian natural gas can flow freely to any place in the world in the form of LNG and can compete with the regional suppliers like Russia or Norway, which deliver gas via traditional pipeline infrastructure. Thus, today, the natural gas market is beginning to resemble the oil market, where price—rather than location—determines transactions.

Eastern European countries see these new conditions as an opportunity to reduce their dependence on Russian natural gas. Many of these countries, which have relied on Russia for much, if not all, of their supply, support diversifying away from Russia, including by increasing LNG imports.

Lithuania and Poland have recently completed LNG import terminals and are planning to expand them. Poland aims to build another terminal by 2020. Estonia has two facilities slated for completion by 2020.

In addition, Eastern Europeans support importing natural gas from Azerbaijan via the Trans-Anatolian Natural Gas Pipeline (TANAP) that is under construction. Conversely, Eastern Europe is opposed to Nord Stream 2, which many people in the region argue will expand dependence on Russian gas into the future.

Western Europe, which consumes less Russian gas, focuses more on guaranteeing dependable supply rather than limiting Russian influence. Western Europeans generally tolerate diversification away from Ukrainian transit routes.

For example Germany, which has strong economic ties to Russia, sees Nord Stream 1 and the planned Nord Stream 2 as a solution. These two pipelines would deliver Russian natural gas directly to Germany via a route under the Baltic Sea. This plan is in line with Russia's strategy to avoid using Ukraine as a transit country.

This strategy also entails resurrecting Russia's plans for South Stream, a pipeline that first intended to enter Europe via Bulgaria and Romania, but faced regulatory issues within the European Union. The new plans avoid the EU's regulatory and compliance issues by re-routing the new pipeline through Turkey.

The changing natural gas trade in Europe is re-shaping the Black Sea region. One consequence is that Russia's position will weaken, creating a new role for Turkey as an intermediary between Russia and Europe. Another consequence is that Turkey will become a country where two major natural gas pipelines meet: TANAP and the Turkish Stream.

Russia. With new supplies of natural gas to Europe coming either via TANAP or in the form of foreign LNG, Russia's dominance over Europe's energy supply will weaken. As existing long-term contracts expire, Russia may have to cut prices if it is to remain competitive with LNG. Russia, eager to keep its reputation as a dependable natural gas supplier, will diversify its transit routes away from Ukraine. This plan includes swapping the South Stream for the Turkish stream.

The move is important not only for Russia's trade with Europe, but also for its future ventures. Lack of dependability and Europe's move to reduce its dependency on Russian gas has already put Russia in a weaker position vis-à-vis China.



According to analysts, the 10 year long negotiations that ended in a Sino-Russian gas deal in 2014 included more concessions from Russia than from China. Beijing realizes that Russia's expansion into Asia is a necessary step given Europe's move away from Russian gas.

Russia's reputation for dependability is crucial as it enters other markets where no direct pipeline connection is possible. Russian operators Novatek and Gazprom plan new LNG export terminals, including Arctic LNG 2, three LNG trains in Yamal, two LNG trains on the Baltic Sea, and a Shtokman-Teriberka terminal on the Barents Sea.

Ukraine. Russia hoped that Kyiv's long-term reliance on artificially low-priced Russian gas would help build Russian political influence. As Ukraine's drifted toward the EU and NATO, Russia hiked gas prices in retaliation.

At first, Russia demanded higher gas prices and prompt payment of old debts accumulated over previous gas supplies. Then, in 2014, Russia took it one step further when it attacked Ukraine and seized Crimea.

Ukraine is trying to wean itself from Russian gas by importing gas from the EU. And while the country still remains a transit route for some gas destined for Europe, Russia has reduced the volume there in favor of the Nord Stream 1 or the Opal pipeline in Central Europe. This change has hit Ukraine's finances, with estimates suggesting that Ukraine will lose \$2bn in transit fees each year.

Ukraine must rethink its strategy, especially given pipeline developments and new LNG deliveries. The government has plans to restructure the country's energy sector. Ukraine is eager to hop on the "LNG train" and is planning new onshore and floating facilities in the Odessa area, which should open by the end of this decade.

The current instability, however, has a highly negative impact on all these efforts, especially as Turkey positions itself as a potential contender to take over Ukraine's place on the market. Turkey. Turkey has the most to gain as it becomes the new natural gas corridor to Europe.

With confidence in dependability of supplies from Russia and Ukraine dwindling, Turkey is becoming a major transit country for Russian gas as well as for Azerbaijani gas. The massive Shah Daniz natural gas and oil fields in Azerbaijan may become a staple of the European energy diet.

But how Turkey plays its cards will be crucial for its future relations with both Europe and Russia. Most importantly, the country must be vigilant not to fall into Russia's sphere of political influence. Russia has already provided Turkey with lower natural gas prices and promised further discounts when the Turkish Stream becomes operational. But this seemingly beneficial deal may have far reaching consequences in terms of Turkey's dependence on Russia for low priced gas and on transit fees as a source of revenues.

Turkey is moving in the right direction by diversifying beyond Russia via TANAP and investing in LNG import terminals. At the same time, an agreement to build Turkish Stream, an expensive and long-term infrastructure project, signals that Russia and Turkey hope for more friendly relations and stronger economic ties going forward.



Beyond the Russian-Turkish relationship, the move towards Turkey's role as an energy hub will redefine the country's position towards other Black Sea nations. It may be a sign of better relations between Turkey and Greece, engaged for years in a conflict over Cyprus island.

Because both the TANAP and the Turkish stream will resurface at the Greek border, the countries will have strong incentive to put animosity aside in order to benefit from energy cooperation. On the other hand, Romania and Bulgaria will be on the losing part of the equation as they fail to receive the benefits of hosting the cancelled South Stream pipeline.

The energy landscape of the Black Sea is changing rapidly. The traditional balance of power is changing as Russia loses some of its grip on natural gas supply, and as new transit routes are being drawn via Turkey. But it will take time before the pipelines are built and gas starts flowing. Until then, we should expect the geopolitical games to continue.

Azerbaijan could emerge as a natural gas power powerhouse

Oilprice, 05.05.2017



Back in 1994, when the so-called "Contract of the Century" was signed, forming an international partnership to develop the giant Azeri-Chirag-Guneshli (ACG) oil field, lots of experts believed that Azerbaijan would not have to worry about money for a long time.

But just 23 years later, Azerbaijan's government finds itself wrestling with revenue dilemmas. Today, Azerbaijan still holds roughly 7 billion barrels of proven oil reserves and produces 841,000 barrels on a daily basis. Yet that volume represents a significant drop from peak output of 1.1 million barrels a day in 2010.

Lower yields, rising concerns about the depletion of reserves and falling world oil prices have sent Azerbaijan searching for alternative sources of revenue. Baku's chief hope is to develop its natural gas potential.

According to conservative estimates, Azerbaijan sits atop 1.3 trillion cubic meters of gas and condensate, most of it in the offshore Shah Deniz field, which is believed to be among the largest in the world. Production there began in 2006, and is expected to increase significantly during the second development phase, currently underway.

Azerbaijan's ambition is to supply natural gas through Turkey, Greece, and Albania to Italy and the rest of Europe – via the planned Trans-Anatolian (TANAP) and Trans-Adriatic (TAP) pipelines that will form the Southern Gas Corridor. Deliveries are scheduled to begin in 2018, with around 4 billion cubic meters (bcm) per year slated for the Georgian and Turkish markets.



The plan is to then expand this volume to 12 bcm a year in 2019, and finally to a full capacity of 16 billion cubic meters a year in 2020, 10 bcm of it headed for Europe. But even the boost from Shah Deniz exports is not projected to be enough to place Baku on sound financial ground. The ultimate success of Azerbaijan's effort to emerge as a global natural gas power rests with new offshore exploration.

One recent discovery, announced in 2010, is the Umid gas field in the south Caspian Sea, estimated to contain 200 billion cubic meters of gas and 40 million tons of condensate; the country's state energy company, SOCAR, has been producing gas there since 2012, and has recently finished drilling the third well.

Also of great promise is the adjacent Babak field, yet to be developed, with potential gas reserves of 400 billion cubic meters, plus 80 million tons of condensate. Further off the coast, the Shafag-Asiman field holds an additional 300 billion cubic meters of gas, which Azerbaijan plans to extract in an equal-share partnership with BP. (This field may contain oil too, according to a seismic survey.) And another offshore deposit, Nakhichevan, is being jointly explored with the German company RWE.

The difference-maker for Azerbaijan's ambitions as a gas exporter is the Absheron field, discovered in 2011. This field's development, currently in its first phase, could greatly boost potential supplies (its reserves are estimated at 350 billion cubic meters of gas and 45 million tons of condensate) capable of filling Europe-bound pipelines of the Southern Corridor.

This could bolster Europe-bound flows from the Shah Deniz field, and ease concerns that the European Union might have over future supplies. All in all, according to SOCAR's strategy document, these steps could expand Azerbaijan's gas export volumes to a massive 40 bcm per year. The problem is that this will not happen until 2025 at the earliest, and in the meantime, Azerbaijan has several challenges to overcome.

More importantly, it will be at least five years before Azerbaijan begins to see its anticipated windfall from natural gas. The Absheron field will not start producing until late 2021 or early 2022, and the first gas deliveries from Shah Deniz will not reach Europe until 2020 or later.

For Baku, it may be a race against time. At present, Azerbaijan faces a gas shortage. It needs 12 billion cubic meters to satisfy its own domestic demand, and in 2016, it was forced to import around one-tenth of it from abroad.

In fact, in the first five months of that year, SOCAR's gas production had actually decreased by 5.4 percent compared to the same period in 2015. The fall triggered new discussions with Gazprom over potential gas imports from Russia, on the order of 3 bcm to 5 bcm per year, with Baku asking Moscow for a discount.

Combined with low oil prices, this shortfall translates into a pressing cash flow problem. Azerbaijan has already had to borrow money – around \$5 billion – from international financial institutions to fund its share of Southern Corridor construction costs. It has also sold \$1 billion worth of Eurobonds, and is preparing to sell more, in addition to securing a \$400 million loan from the World Bank.



When it comes to the TAP project, where Azerbaijan is responsible for 20 percent of the costs, the EBRD has confirmed talks to provide about \$550 million in direct financing and to attract another \$1.1 billion from commercial banks.

Azerbaijan's high construction expenses are somewhat offset by the falling world price of steel, which is needed for pipelines; Baku has saved \$2 billion on TANAP alone. But its budget is still strained, forcing it to prioritize some energy development projects over others.

This will likely leave it focused on the Shah Deniz field and the Southern Gas Corridor initiative, while other projects that have no foreign partners –including the Umid and Babak gas fields – risk falling behind. Absheron will probably stay on track, thanks to the involvement of France's Total.

This set of problems might soon have repercussions for Azerbaijan's domestic politics. The country's sovereign wealth fund SOFAZ – long a cornerstone of its energy development efforts – is being rapidly depleted. It stood at a modest \$64 million in 2016, a big drop from \$323 million in 2015 and \$523 million in 2014.

This trend is likely to continue as Azerbaijan pursues its natural gas ambitions, and it might not be long before its people feel the effects on their livelihoods. Baku can only hope that its natural gas reaches Europe before then.

Europe to give preference to Southern Gas Corridor

Azernews, 08.05.2017



Europe could give a preferential treatment to gas to be delivered via the Southern Gas Corridor route from Caspian Sea and Central Asian region, Cyril Widdershoven, a Middle East geopolitical specialist and energy analyst, a partner at Dutch risk consultancy VEROCY and SVP MEA-Risk, told Trend.

He was commenting on the possibility of rivalry between the Southern Gas Corridor and TurkStream projects. In principle, it is possible to ensure cooperation between the two projects, but this largely depends on the position that the European Union and its members are going to take.

"When looking at Brussels' energy security position, new Russian supplies are not welcomed at present. This will affect the commercials of TurkStream without any doubt," he added. The offshore construction of TurkStream gas pipeline started May 7. "Pipe-laying in the Black Sea and the onshore construction at the Turkish landfall will continue throughout 2018 and 2019 and we plan to deliver the first gas by late 2019 as planned," a source in South Stream Transport B.V. told Trend.



Russia and Turkey signed an intergovernmental agreement October 10 on the implementation of the Turkish Stream project. The agreement envisages construction of two branches of the main gas pipeline under the Black Sea, the capacity of each branch being 15.75 billion cubic meters of gas.

One branch is meant to supply gas directly to the Turkish market and the other for the supply of gas by transit through Turkey to Europe. The intergovernmental agreement also stipulates that these two offshore branches should be built by December 2019.

On Dec.8, 2016, South Stream Transport B.V., 100-percent subsidiary of Gazprom, signed a contract with Swiss Allseas Group on constructing the first line of the Turkish Stream gas pipeline's offshore segment.

Later in February 2017, the two companies inked an agreement on constructing the second line of the pipeline's offshore section. The Southern Gas Corridor is one of the priority energy projects for the EU. It envisages the transportation of gas from the Caspian region to the European countries through Georgia and Turkey.

At the initial stage, the gas to be produced as part of the Stage 2 of development of Azerbaijan's Shah Deniz field is considered as the main source for the Southern Gas Corridor projects. Other sources can also connect to this project at a later stage.

As part of the Stage 2 of the Shah Deniz development, the gas will be exported to Turkey and European markets by expanding the South Caucasus Pipeline and the construction of Trans Anatolian Natural Gas Pipeline and Trans Adriatic Pipeline.

Few takers for Israel's new gas exploration tenders



The Ministry of National Infrastructure, Energy, and Water Resources' tender is likely to yield meager results, even though the deadline for participating in it was postponed from April until July.

According to sources, three to five companies are expected to take part, and despite the grandiose declarations issued when the tender was announced last November. The Association of Oil and Gas Exploration Industries in Israel termed the tender a "historic decision," and Minister Yuval Steinitz has since repeated at every opportunity his intention of turning Israel into a "regional natural gas power."

Globes, 11.05.2017



In reality, the situation is very different. A month ago, the Greek Cypriot government signed a series of agreements with leading companies, including ENI, Exxon Mobil, and Total for gas exploration in the blocks it was marketing, and the Lebanese government announced two weeks ago that 26 companies had passed the initial selection stage in its new offshore oil and gas exploration tender.

This tender is creating a dispute with Israel, given the disagreement about ownership of territory included in three of the five blocks that Lebanon is marketing on its marine border with Israel. The skeptics assert that, as shown by the successful preliminary procedure held by Lebanon in 2013, in which 43 companies made it to the next stage, but which was eventually canceled, nothing will happen this time, either.

At the same time, the number of companies that made it through the process and their identity indicates that the market has confidence in Israel's northern neighbor. These companies include, among others, Indian energy giant ONGC Videsh, with 33,000 employees; Russian oil producer Lukoil, whose revenue totaled \$114 billion in 2014; Malaysian company Sapurakencana, with 13,000 employees in 20 countries; Algerian government company Sonatrach, with 120,000 employees; and Qatar Petroleum, which is entering the Cypriot market.

In Israel, it appears, Greek company Energean, operator of the Karish and Tanin gas reservoirs, and Edison, owned by French company EDF, are almost sure to bid in the tender. Most of the energy market players commenting on the subject regard this as a failure, but another party asserted that this is only an interpretation, and that even a small number of companies can lead to a gas discovery and a greater success in future exploration tender.

The tender itself is based on work commissioned by the Ministry of National Infrastructure, Energy, and Water Resources from Beicip-Franlab, which found that the undiscovered gas potential in Israel waters amounted to 2,200 BCM, 70% more than the amount of gas discovered.

Various sources told "Globes" that they agree that there was great potential for finding significant amounts of gas. The sources cited two reasons for the looming failure of the tender. The first involves factors over which Israel has no control, while the second concerns primarily Israel's regulatory policy.

The first reason consists of factors such as the low price of oil (about \$50 a barrel), which makes natural gas less attractive; Israel's security situation, in which Israel is involved in a war every few years and is exposed to missile attacks; and the geopolitical situation, which encourages companies operating in the Persian Gulf and the Arab world in general to refrain from activity in Israel.

Other reasons include the bad reputation gained by Israeli regulation, which is perceived as unstable, at least for the coming years, and there is almost nothing Israel can do on the matter. Other factor dampening interest in Israeli energy exploration licenses include:

The small size of the Israeli market; the dependence of the Israeli market on Tamar and Leviathan; the fact that until Energean has reported that it has signed agreements with customers and closed financing deals for the development of the Karish gas field; domestic competition is purely theoretical; and the major difficulty in finding export markets for gas that might be discovered.



Even in the positive scenario of Israeli gas exports to Turkey, it would be in quantities that would not likely justify the development of additional gas fields. Furthermore, the widespread assumption in the global energy market is that Egypt will produce all the natural gas that it needs for its own domestic requirements and that therefore the chances of exports to Egypt are close to zero.

Gas exports to Europe also look close to impossible, mainly because they are not economically viable. So it looks as if no international company would rely on that as a basis for a business model, which would permit gas field exploration and development in Israel.

Regarding reason connected to Israel specifically, time and again local regulations are cited as a problem. This is also directed at the latest tenders, which it is claimed, have unreasonable demands.

This includes the requirement of operators to have equity of at least \$800 million, at least a decade of experience in deep water drilling, and will own at least 25% of the partnership where they are drilling - in other words they will bear the cost of at least \$25 million for each exploration drilling.

This last restriction is especially difficult for overseas companies that are willing to cooperate in the Israeli market but are not prepared to risk their money, even though the chances of energy finds are relatively high at about 30%.

Adv. Anat Klein, head of the energy and infrastructure department at Tel Aviv's GKH law firm thinks that the export market is not necessarily the main factor for the expected failure of Israel's gas license tenders. She says that there is major interest in the Far East in the possibility that Israel will have sufficient quantities of gas for exports. However, she claims that alongside the regulatory problems there are also geopolitical and security difficulties.

She said, "On the security level, it is known that Israel is a target on this or that level and it continually faces war and terror. Therefore the insurance for here is much more expensive. When you talk about production costs for these fields, these costs are a drop in the ocean but at the exploration stage it is a burden."

The Ministry of National Infrastructures, Energy and Water Resources said in response, "The Ministry continues to lead the competitive process for distributing natural gas and oil exploration licenses, and to interest various companies in joining Israel's natural gas market."



Israel's Delek seeks London listing as energy group goes global

Bloomberg, 09.05.2017



Delek Group Ltd., the Israeli energy company that bought U.K. oil explorer Ithaca Energy Inc. this year, is seeking a London listing to help further overseas expansion.

"If Delek Group wants to be international, we have to be traded on an international exchange and I think London is one of the good places to be in," Asaf Bartfeld, the company's president, said Monday. "In the near future, we plan to be listed in London." Delek, controlled by billionaire Yitzchak Teshuva, agreed to buy Ithaca for \$615 million in February to expand in the U.K. North Sea and become a "global exploration and production company."

It's now studying opportunities in North America, including in Canada and the U.S. Gulf of Mexico, Bartfeld said Monday, ruling out shale projects. The shares already trade in Tel Aviv. In March 2015, Delek's management decided to delay plans to list its shares in London because of volatility in international energy markets and regulatory issues in Israel that needed to be resolved. Back home, Delek is considering export markets for the giant Leviathan gas discovery -- Israel's biggest - in which it holds a 45 percent stake.

The field is due to start providing gas to Israel and Jordan at the end of 2019. Delek and its partners, which include Noble Energy Inc., sanctioned the project in February. The output from Leviathan could also be sent to liquefied natural gas plants in Egypt, and may also be carried by new pipelines to markets such as Italy and Turkey, Bartfeld said, adding that these options are still under discussion.



Saudi Arabia's oil policy must take its inspiration from the Fed

Financial Times, 10.05.2017



The last six months have shown Saudi Arabia's approach to market management is no longer working: crude has fallen back below \$50 a barrel, US shale oil output is again on the rise and Saudi-led Opec, is worse off than when it agreed the supply deal back in November, having cut volumes for little upside on price. In the age of shale, if Saudi Arabia wants to restore its role, it needs to embrace more radical action.

Like the Federal Reserve in the wake of Lehman Brothers collapse, the time has come for the kingdom — often described as the central bank of oil — to embrace an unconventional response to an unprecedented crisis.

Cutting production can influence the spot market but it can do little to change expectations for how the market will look a few years from now. This is what the kingdom really needs to target given the game-changing nature of the shale revolution.

In the financial crisis, the Federal Reserve quickly moved from simply cutting short-term interest rates to engaging in direct purchases of longer-term securities. The aim, ultimately successful, was to put downward pressure on long-term interest rates, encouraging investors to spend money now to help the economy recover.

Saudi Arabia has the ability to exert a similar influence over oil by hedging its long-term production through the oil derivatives market. In other words, it should concurrently cut output and sell long-dated oil futures and related contracts. While selling oil contracts to raise the price may seem counterintuitive, by signalling to the market that Saudi Arabia will assume the role of seller of first resort, it would achieve much.

It would swiftly push lower the back end of the oil market forward curve. This would likely restore "backwardation" to the oil term structure by driving long-term future prices below the spot market. Backwardation would in turn make it unprofitable for traders to store oil and speed up the normalisation of inventory levels. Furthermore, the selling of long-dated contracts by Saudi Arabia would complicate the process of forward hedging for shale producers. That in turn would increase their exposure to conventional supply management tools, amplifying the impact of gains (supply cuts) and pains (oversupply). Currently, shale producers can lock in higher prices for future production, giving them the confidence to keep drilling even for those who cannot generate cash at existing spot prices.





In the US alone, according to a Wood Mackenzie study, leading independent producers have hedged 27 per cent of their expected 2017 production, 10 percentage points more than this time a year ago. Second, Opec's cuts reopened the US energy high-yield credit market, effectively allowing shale oil producers to grow production faster than expected. It is no coincidence that horizontal oil rigs in the US have increased by 40 per cent since January. Hedging would lower Saudi Arabia's borrowing costs as it does for Mexico, which has the world's largest sovereign oil hedging programme, at a time when the kingdom is debuting in dollar-denominated Islamic bonds with plans to raise \$10bn-\$15bn this year.

Finally, hedging would have bullish ramifications, we think, for the valuation of the state oil company Saudi Aramco as the kingdom would clearly reaffirm its central role in the market. Saudi Arabia should recognise that — unlike the US — a stable oil market is no longer in its interest. The kingdom has to come to terms with the heritage of former oil minister Ali al-Naimi.

Price stability, which Mr Naimi valued greatly, no longer works in its favour. Volatility does. A stable price environment makes credit for shale oil plays cheaper. Uncertainty makes it more expensive. Uncertainty would also deter "carry traders" from buying discounted forward contracts hoping for prices to roll up the curve.

The kingdom has shied away from getting involved in the back end of the oil forward curve because it would have an overwhelming impact on a relatively illiquid portion of the market. But shale oil changed everything. The Saudis can no longer bring a knife to a gunfight: they have to pursue unconventional policies using unconventional tools.

There are capital risks associated with this strategy (should the long-dated hedges be unwound at a loss) but we believe the rewards would be incommensurate. In fact, precisely because the impact of such a policy may be potentially overwhelming, a show of intent by the kingdom rather than volume may suffice to reshape the oil market. For Saudi Arabia, the time has come for bold, unconventional measures. The alternative is no longer working.



Saudi Arabia and Russia signal oil-cuts extension into 2018

Bloomberg, 08.05.2017



Saudi Arabia and Russia signaled they could extend production cuts into 2018, doubling down on an effort to eliminate a supply surplus just as its impact on prices wanes.

In separate statements just hours apart on Monday, the world's largest crude producers said publicly for the first time they would consider prolonging their output reductions for longer than the six-month extension widely expected to be agreed at the OPEC meeting on May 25. Ministers from some members of the OPEC have also discussed the possibility of deepening the supply curbs, said four delegates, who asked not to be identified because the talks were private.

The delegates didn't say that the discussions resulted in any kind of agreement for additional cuts. Russia is ready to support extending the oil deal beyond 2017, the nation's Energy Ministry said. "We are discussing a number of scenarios and believe extension for a longer period will help speed up market rebalancing" Minister Alexander Novak said in a statement.

Speaking in Kuala Lumpur earlier Monday, his Saudi counterpart Khalid Al-Falih said he was "rather confident the agreement will be extended into the second half of the year and possibly beyond" after talks with other nations participating in the accord.

Russia and Saudi Arabia, the largest of the 24 nations that agreed to cut production, are reaffirming their commitment to the deal amid growing doubts about its effectiveness. Surging U.S. production has raised concern that OPEC and its partners are failing to reduce an oversupply. Oil has surrendered most of its gains since their deal late last year.

"The producer coalition is determined to do whatever it takes to achieve our target of bringing stock levels back to the five-year average," AI-Falih said. While U.S. shale output growth and the shutdown of refineries for maintenance have slowed the impact of cuts by OPEC and its partners, the Saudi minister said he's confident the global oil market will soon rebalance and return to a "healthy state."

Oil producers almost have an agreement to extend the cuts for six months or more, Kuwait's Oil Minister Issam Almarzooq said in emailed statement. Algeria supports prolonging the agreement beyond 2017, said Energy Minister Noureddine Boutarfa.

As OPEC and its allies curbed supply, production in the U.S., which is not part of the agreement, has risen to the highest level since August 2015 as drillers pump more from shale fields. But American crude inventories are showing some signs of shrinking, falling for the past four weeks from record levels at the end of March.



"We need to see the OPEC/non-OPEC deal extended to 2018, otherwise there's a risk oil prices will fall below \$40," Alexandre Andlauer, an analyst at AlphaValue SAS in Paris, said by email. "We will have to wait two years to get a stable Brent oil price at around \$55."

OPEC signals cuts extension, oil traders ponder response

Reuters, 08.05.2017



May 8 Saudi Arabia's energy minister has indicated OPEC will extend its current production cuts for at least another six months to the end of 2017 and maybe further.

"Based on consultations that I've had with participating members, I am confident the agreement will be extended into the second half of the year and possibly beyond," Khalid al-Falih said on Monday. "I believe the worst is now behind us with multiple leading indicators showing that supply-demand balances are in deficit and the market is moving towards rebalancing," Falih told an audience in Kuala Lumpur. "We should expect healthier markets going forward," he said.

From the beginning, oil producers envisaged the agreement on production cuts might need to be extended to rebalance the oil market fully. OPEC's original agreement on revised production levels was reached on Nov. 30 last year and always subject to review in the normal way at the organisation's next scheduled ministerial conference on May 25.

OPEC's subsequent agreement with non-OPEC producers made this explicit by stating output would be cut from Jan. 1 for six months with the option to extend the curbs for a further six months. Earlier this year, Saudi officials cast doubt on whether an extension would be necessary given high levels of compliance with the agreement.

Falih told reporters in January an extension would probably not be needed ("Saudi energy minister: unlikely to extend producers' agreement," Reuters, Jan. 16). "My expectations (are) that the rebalancing that started slowly in 2016 will have its full impact by the first half," he said.

"Based on my judgement today it's unlikely that we will need to continue (the agreement) - demand will pick up in the summer and we want to make sure the market is supplied well. We don't want to create a shortage or squeeze." But as global crude stocks remain high and prices come under renewed pressure, Riyadh seems to have concluded an extension is inevitable to drain excess inventories and restore confidence. Saudi and other officials from the Organization of the Petroleum Exporting Countries have been dropping increasingly strong hints in recent weeks that an extension was likely, even while they tried to keep their options open. However, with hedge funds turning bearish and oil prices giving up most of their post-agreement gains last week, the need for a clearer signal has become urgent.



With hedge funds embarking on a fresh cycle of short selling in oil, OPEC ministers seem to have concluded it was no longer practical to wait another two weeks until their formal meeting on May 25. Most oil traders had already concluded that OPEC had no option but to extend the production cuts so the clearer language from Falih and other ministers is unlikely to shift expectations.

What was new was Falih's willingness to contemplate extending the agreement even further, beyond 2017. Some analysts have concluded even a six-month extension would not be enough to bring stock levels down to their long-run average.

In their view, production cuts would need to be extended into the middle of 2018, a concern Falih acknowledged implicitly. Whether Falih's comments are bullish or bearish for oil prices is mostly a matter of perspective: is the barrel half full or half empty?

From a bearish perspective, Falih admitted what many oil analysts have been saying: market rebalancing is taking longer than expected at the start of the year. From a bullish perspective, Falih confirmed Saudi Arabia and other oil producers are prepared to do "whatever it takes" to bring global crude inventories back to the five-year average.

If OPEC decides to roll over its current agreement for a further six months without substantial changes when ministers meet on May 25, the decision may not boost prices much, though it could stop them weakening further.

In the past, oil prices have risen significantly in the aftermath of an announcement by OPEC that it is cutting production, according to researchers, who examined all OPEC announcements between 1983 and 2008. But rollovers generally had little impact on prices or even a slightly negative effect ("The behaviour of crude oil spot and futures prices around OPEC and SPR announcements," Demirer and Kutan, 2010). "If OPEC announces a production cut, the surprise leads to an upward adjustment in prices ... However, if they maintain the status quo, the market takes this as a failure to agree on a production cut and therefore adjusts prices downward."



Gazprom may hold new gas auctions in Europe in 2017

ICIS, 09.05.2017



Russian energy giant Gazprom is likely to hold a new natural gas auction in the Baltic states this year as some suppliers in those countries have already used gas intended to last for the whole of 2017, a source close to the matter told ICIS on the sidelines of the Flame conference in Amsterdam.

Head of Gazprom Export, Elena Burmistrova, also said that the company was going to continue developing the auction mechanism to "understand it deeply." She said that "some more" gas auction may take place this year. The source said that they will be held in the regions where the previous auctions were conducted.

Gazprom held two auctions in 2016, one in the Baltic states and one in central Europe, and one auction in 2015 in central Europe. Burmistrova said that auctions have helped Gazprom diversify its portfolio in Europe. "Last year, we made a lot of effort to balance our [natural gas] portfolio, half of which is oil-indexed and half is hub-indexed now," she said.

When asked whether Gazprom will be moving to more hub indexation, she said: "This is the future." However, she added that in the short-term the company will keep oil-indexed contracts as prices on some European hubs were still not fully "reliable."

"We see that some hubs are more advanced, like the [Dutch] TTF, while some may still be used by regional [market participants] to their advantage," she said. She added that Gazprom's investment into LNG projects are based on the oil price.

The company is planning to invest into new natural gas projects as it expects a growth in European gas demand in the next seven years. Burmistrova said that last year Gazprom had export a record amount of gas into Europe, with its share on the European market rising to 34%. "Theoretically, we want to increase our share [further], but I'm not sure the European Commission will allow that to happen," Burmistrova said.



Europe a global gas price signal, but US influence set to rise

ICIS, 09.05.2017



European gas hubs are currently providing the "marginal price signal for the global market", but the US Henry Hub is likely to become increasingly influential in the future, delegates at the Flame gas conference have said.

Olly Spinks, director at consultancy Timera Energy, said the relatively low volume of US LNG that has so far been delivered to Europe was not an indication of the continent's lack of relevance in the global market. "Although the physical cargoes dispatched out of the US don't necessarily end up in Europe, the decision around how to price those cargoes are coming from European hub signals," he said.

European hubs are also a key factor determining how portfolio players – which account for a large share of US liquefaction capacity – make decisions about how to "exercise optionality" of their contracts, he added.

With regards to Asia, Spinks also said European hubs were providing a floor to Asian gas prices with periods of greater convergence – as has been the case in recent weeks – likely to be a good indicator of global LNG oversupply that should be monitored by market participants.

As US production capacity continues to build, however, Spinks said he expected the Henry Hub to become increasingly influential on global gas pricing. "The spread [between the Henry Hub and Europe] could come down a lot in terms of the true variable cost of getting gas out of the US to Europe, compared to what is currently observed in forward pricing," he said. "Over the longer term, when you get that convergence the Henry Hub is going to be the predominant driving force for global pricing."

Based on ICIS price assessments and NYMEX closing futures on 8 May, the TTF premium to the Henry Hub ranged between \$1.67-2.67/MMbtu for delivery periods between Q3 '17 and Q4 '19. On the sidelines of the conference, one head of trading at a major European energy market participant, but with only a small physical LNG position, said his company was now actively managing spread positions between the Henry Hub and the major European markets "up to about a year ahead on the forward curve".

He said that he expected many of Europe's other big energy trading firms to be doing the same, either to hedge physical positions or to speculate on the development of the spread. David Maerz, head of global trading analytics at oil major BP, also said he expects the Henry Hub to become an increasingly significant global price driver, with the US on the verge of becoming a net exporter of gas in the short-term and likely to become the leading supplier to the global market in the next 10-15 years.



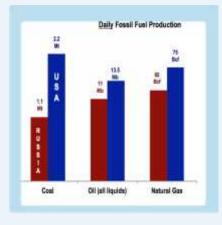
One possible implication that Maerz highlighted was global gas prices' increased exposure to the seasonality of the US domestic market. "The North American market is very seasonal and is about twice the size of the European market and about two-and-a-half times the size of the global LNG market, so a cold winter in North America is going to have a very material impact on global LNG prices in that year," he said.

Other delegates at Flame said the reduced influence of oil prices over the European spot gas market could be another implication of rising US LNG supply and greater Henry Hub influence, particularly if oil prices recover and the market rebalances while the gas sector is still grappling with potential LNG oversupply.

Timera's Spinks also believed the influence of oil on European gas prices could wane, but highlighted new "cap and collar" pricing structures within oil-indexed supply contracts as a key factor for this. Following renegotiation, some Russian oil-indexed supply contracts now include an element of hub-indexation which prevents contractual prices from deviating above or below prices at key European hubs, according to predefined thresholds.

OPEC: Rising US shale production keeps pressure on crude prices

Financial Times, 11.05.2017



US shale oil output is growing at a faster than expected rate, keeping pressure on prices despite steep supply curbs from some of the world's biggest producers, Opec said in its monthly market report on Thursday.

Despite countries inside the cartel and outside, making big cuts to output as part of a deal agreed late last year, global excess inventories remain stubbornly high, the group's research arm said. "Oil futures on both sides of the Atlantic recovered [month-on-month], but their upward potential is still limited by a resurgence of shale and other oil output," the research arm of the producers' group said.

High compliance levels with the supply cut deal – with an aim to reduce output by 1.8m b/d – has been met with a resurgence in the US shale industry, keeping prices within a tight range. The group revised higher total 2017 crude output from outside the cartel by around 370,000, driven by greater than anticipated US production. Non-Opec output is expected at 58.2m barrels a day.

"US oil and gas companies have already stepped up activities in 2017 as they start to increase their spending amid a recovery in oil prices," Opec said. Total US liquids production is forecast to increase by 820,000 b/d with crude oil making up the bulk of the rise. In addition to the growth in the US, higher oil production is expected in Canada and Brazil.



Due to higher than initially forecast output from these countries, Opec trimmed its demand expectations for the cartel's crude in 2017 to 31.9m b/d, which is around 320,000 b/d lower than the previous month.

As it is more than current total Opec production – close to 31.7m b/d, according to estimates from consultants and energy analysts submitted to the cartel – this suggests stockpiles will still drop if output does not rise further.

The production estimate includes those countries exempt from the supply cut deal such as Libya and Nigeria whose output has been volatile. The secondary source data showed production by Opec kingpin Saudi Arabia – which has led cuts this year – rose marginally in April but was still below 10m b/d.

Opec said while commercial oil stocks in industrialised nations fell in March to just over 3bn barrels it is still just under 10 per cent above five-year average levels – one target of the Opec-led cuts. It is expected the cuts deal will be extended past the first six months of 2017 when the cartel's ministers meet in Vienna later this month.



Announcements & Reports

The Dutch Gas Market: Trials, Tribulations, and Trends

| Source | : OIES |
|---------|--|
| Weblink | https://www.oxfordenergy.org/publications/dutch-gas-market-trials-tribulations-trends/ |

Monthly Oil Market Report

| Source | : OPEC |
|---------|--|
| Weblink | http://www.opec.org/opec_web/en/publications/338.htm |

Natural Gas Weekly Update

 Source
 : EIA

 Weblink
 : http://www.eia.gov/naturalgas/weekly/

This Week in Petroleum

Source : EIA Weblink : http://www.eia.gov/petroleum/weekly/

Upcoming Events

6. Enerji Yönetimi ve Politikaları Çalı tayı

Date : 11 - 12 May 2017 Place : zmir - Turkey Website : http://www.ieu.edu.tr/tr

Iraq Petroleum 2017

Date: 22 - 23 May 2017Place: London, United KingdomWebsite: http://www.cwciragpetroleum.com/

Turkmenistan Gas Congress

| Date | : | 23 May 2017 |
|---------|---|----------------------------------|
| Place | - | Turkmenbashi, Turkmenistan |
| Website | - | http://www.oilgas-events.com/TGC |



ISTRADE

| Date | : 25 - 26 May 2017 |
|---------|-----------------------|
| Place | : Istanbul, Turkey |
| Website | http://petroturk.com/ |

24th Caspian International Oil & Gas Exhibition

Date: 31 May - 03 June 2017Place: Baku, Azerbaijan

Website : http://www.caspianoilgas.az/en-main/

Astana Expo 2017

- Date: 01 June 31 August 2017Place: Astana, Kazakhstan
- Website : https://expo2017astana.com

Future Oil & Gas

| Date | : 06 – 07 June 2017 |
|---------|------------------------------|
| Place | : London, United Kingdom |
| Website | http://www.futureoilgas.com/ |

Offshore West Africa

| Date | : 06 – 08 June 2017 |
|---------|--|
| Place | : Lagos, Nigeria |
| Website | http://www.offshorewestafrica.com/index.html |

Big Gas Debate 2017

Date: 14 June 2017Place: London, United KingdomWebsite: http://www.theenergyexchange.co.uk/big-gas-debate/

ETCSEE 2017

| Date | : 14 - 15 June 2017 |
|---------|-----------------------------------|
| Place | : Prague, Czech Republic |
| Website | http://www.energytradingcsee.com/ |



Supported by PETFORM



International Conference on Oil & Gas Projects in Common Fields

 Date
 : 02 July 2017

 Place
 : Amsterdam, The Netherlands

 Website
 : http://www.waset.org/conference/2017/02/amsterdam/ICOGPCF

Cuba Oil & Gas Summit 2017

Date: 02 July 2017Place: Havana, CubaWebsite: http://www.cubaoilgassummit.com/

22nd World Petroleum Congress

| Date | : 09 - 13 July 2017 |
|---------|--------------------------------|
| Place | : Istanbul, Turkey |
| Website | http://www.22wpc.com/22wpc.php |

European Gas Conference

| Date | : 20 - 21 September 2017 |
|---------|--|
| Place | : Amsterdam - The Netherlands |
| Website | https://www.icisconference.com/europeangas |

European Gas Summit

| Date | : 26 - 27 September 2017 |
|---------|---|
| Place | : Rotterdam - The Netherlands |
| Website | https://www.platts.com/events/emea/european-gas/index |

7th Iraq Oil & Gas Conference

| Date | 2 | 28 – 30 November 2017 |
|---------|---|--|
| Place | - | Basrah, Iraq |
| Website | : | http://www.basraoilgas.com/Conference/ |