

Second seismic vessel to begin explorations next week

Daily Sabah, 13.04.2017



Energy and Natural Resources Minister Berat Albayrak has announced the oil exploration vessel Oruç Reis will be launched in the Mediterranean Sea, while the Barbaros Hayreddin will be searching the depths of the Black Sea.

Stressing that Turkey will buy a drilling vessel this year for the first time in the history of the Republic, Albayrak noted that from now on, a Turkish drilling vessel will be searching for oil in the sea. Attending Channel 24's broadcast, the minister made significant statements with regards to oil exploration activities to be launched in the Mediterranean as well as the future of the energy sector.

Albayrak stated that Turkey sides with the instigators of all projects that comply with three criterion, suggesting that the projects should be mutually beneficial for both parties, contribute to regional energy supply and security and be instrumental in establishing global peace and stability.

Highlighting that Turkey does not have the luxury of choosing a country or market from this perspective, Albayrak said they can be stakeholders to all of them. Recalling that talks with Russia on an important pipeline are still in progress as well as talks with Israel, Albayrak said Turkey is at the crossroads of a total of 10 pipelines, including eight ongoing projects and two in progress. "Eight of the pipelines are natural gas and two are oil pipelines. In this scope, Turkey has contributed to all its stakeholders," Albayrak said.

Underlining that Turkey will be more effective and active in the Mediterranean from now on at the point of drilling activities, including seismic research, other fields and beyond, Albayrak recalled that Turkey has always acted in a positive and constructive manner and will continue to do so, stressing that they will not allow a ground that will legitimize the unlawfulness by taking the necessary steps.

With regards to Turkey's strategy in the coming period, Minister Albayrak said that Turkey has never conducted and will never conduct any projects outside the law in both the Black Sea and the Mediterranean, adding that drilling projects have always been conducted in the scope of international and domestic law.

Albayrak said that at least one or two wells will be drilled in the sea under the auspices of newly launched steps, saying: "This will be done because by evaluating the data we find in this framework and scientific field, we will start taking pinpoint steps regarding the best fields. There is a lot of hope here, I believe we will get positive results."

Shale gas and its impact on Turkish economy

Eurasia Review, 10.04.2017



”Shale Gas” is on the agenda. What is “Shale gas”? Is Shale Gas production as easy as you might think? Is it cheap? Can we produce? What is the cost of production? What happens to the environment in Shale Gas production process?

Shale gas is basically natural gas. Only the thermal calorific value is a bit low. Shale gas production is same as Natural Gas production by non-traditional, non-conventional method. The soil structure “thin-bedded, rich in organic matter”, is suitable for producing oil and gas is called “Shale”. “Shale Gas” is the method of taking the Natural Gas that is trapped between the deep underground rocks.

Shale Oil (Shale Petroleum) are removed by the same methods. Shale Gas and Shale Oil production technology are not new practice. Since 1947 there has been market practice in the United States.

Soon, the US will build large number of LNG terminals and become one of the world’s largest gas exporters. Rich Shale Gas sources will change the world gas market prices and balances. Traditional natural gas deposits are found in separate volumes of crude oil or on crude oil reserves. Shale Gas is the volume of natural gas trapped in impervious soil rocks. “Horizontal Drilling” and “Hydraulic Fracturing” have gained economic value with the development of the Shale gas producing technology.

Existing natural gas reserves produced by traditional methods suffice for the world’s needs of about next 60 years. With Shale gas to be produced by non-conventional methods, this period is extended up to 250 years.

China has 1.275 Trillion cubic feet (Tcf), US 862 Tcf visible reserves, it is estimated that Turkey has 15 Tcf Shale Gas reserves. Horizontal wells used to drill for Shale Gas in environmental technologies inevitably affect the nearby wildlife.

The fluid used during well excavation and hydraulic cracking consists of 98% of sand and surface water, and the required contribution of 1-2% consists of chemicals that will reduce friction during soil excavation. It is not possible for chemicals to contaminate groundwater if appropriate technologies are used in deep underground hydraulic cracking.

Because the depth of sand and chemicals is about 3000 meters below ground, far below the depth of the deepest underground water. Much quantity of fresh water (about 15-20 thousand m³) is needed during the excavation of each well. We estimate that Shale Gas may be found in Southeast Anatolia and Thrace region in Turkey.



There is no visible reserve yet proven. It is necessary to open large number of wells for visible-proven reserve figures. It is not possible to reach a quick result quickly with 1-2 drilling wells, that is not true.

The rapid increase in natural gas prices at international spot markets, the decline in production from existing sources, the natural gas depletion, the reduction of traditional natural gas resources that are easily accessible, and the new developments in Shale Gas production technologies have increased the investment appetite for Shale Gas.

Crude oil prices were at US \$ 55 per barrel in February 2017 at international markets. The delivery price of Russian natural gas in February 2017 at Germany border was 6.00 US \$ for MMBTU. Ref. IndexMundi. Natural Gas, Russian Natural Gas price in Germany, US Dollars per Million Metric British Thermal Unit

This is the current price at Turkish border as they have not sold it to us under the price they sold to Europe. As long as Natural Gas is needed, the prices of natural gas will increase. Let's also say the price of Natural Gas USA Henry Hub. As of February 2017, the price for 1000 Sm³ is USD 136 – or USD 3.50 / MMBTU. Ref. IndexMundi, Natural Gas, Natural Gas terminal spot price at the Henry Hub in Louisiana, US Dollars per Million Metric British Thermal Unit

By the end of 2016, Turkey is 98% dependent on imported natural gas and 92% dependent on imported oil. The most important cause of the current account deficit is the energy shortage, namely imported natural gas and imported coal.

Hydraulic Cracking method for Shale Gas was introduced with the legal regulations of the US norms and legislation. US Shale Gas production was 14 Billion Nm³ in 2005 and 241 Billion Nm³ in 2011. In 2010, 15,467 wells were opened in the US. There will be more encouragement in this regard during the presidency of Donald Trump.

For Shale Gas production, 3000-3500 meters depth in the well before the rock excavated for the production of Shale gas, then it is necessary 1000-1500 meters of horizontal drilling. During the horizontal drilling, chemical liquid and sand are pressurized, then underground layer cracking is made in 20-30 different points. 40-50 meter underground layer is cracked in each crack, then Shale Gas which is emerging is collected from these cracks into the well.

The sand that is added to the water (or liquid) that keeps the formed cracks open. Shale Gas production wells can be opened at intervals of about 500 meters in between. It is estimated that the approximate USA budget price for each Shale Gas production drilling well is between US \$ 200-500 thousand.

We also should consider the environmental risks of Shale Gas production technology. Because of the high pressure liquids used in deep soil drilling, local small earthquakes can occur, which may trigger big ones. There is also a risk that chemicals may interfere with drinking water when cracks occur at shallow depths. We notice that 25-75% of the water injected into the ground is returned to the surface. Returned dirty water is dangerous which may contaminate domestic use water, and if serious checks are not carried out, return dirty water may cause environmental pollution.



With the US Natural Gas to add up Shale gas production, it can affect world gas prices, but we do not expect that prices will fall much in short term. Because in the US, the trend towards gas fired thermal power plants began instead of coal-fired power plants.

The coal-fired power plants are shutting down, more combined cycle power plants are commissioning to use more Shale Gas. The Shale Gas quantity to export is limited. The average cost per new well to be opened in the US has increased. Now, with the average production cost of Shale Gas is over US \$ 7 per MMBTU, new wells do not have the economic features.

Is there Shale Gas in Turkey? We guess, yes it exists, but we do not know how much yet. We have not yet drilled a significant number of reliable results. Even if we have reserves, it will take at least 8-10 years to find and exploit it and use it on the market. Significant investments are needed to transport gas in order to reach the market from the production well of Shale Gas. Our ball-park guess is that the Shale gas we produce will reach consumers at a price that is not less than \$300 per 1000 cubic meters.

We need to set up organizing shipyard zones that will be able to produce off-shore platforms for overseas off-shore searches in places such as search- drilling technologies, improvement of drilling rigs, increase of R&D studies, in shipyards such as in Istanbul Tuzla, zmir Alia a, Antalya, Mersin.

During Donald Trump's US presidency, that is to say, over the next 4-8 years, the production of Shale Gas will increase, gas prices will decrease, conversion to combined cycle power plants and more gas consumption are expected. First of all, it will occur in the US and then in other countries with relatively low prices, natural gas will be replace coal.

Coal will be sold more cheaply at international markets. Carbon emissions and water vapor will increase the greenhouse effect. Due to energy policies of President Donald Trump, Renewable energy investments will unfortunately be reduced first in the US, then perhaps all over the world. Global warming will eventually increase. Turkish current account deficit will be even greater if we do not care about.

EU backs Israel-to-Italy pipeline to alter East Med energy chessboard

Hurriyet Daily News, 13.04.2017



On April 3, the European Union and the governments of Italy, Greece, Cyprus and Israel pledged their support for the construction of the world's longest undersea natural gas pipeline to transport Eastern Mediterranean gas to EU markets via Greece and Italy. Costing over \$6 billion, the more than 2,000-kilometer mega-pipeline could transform the energy geopolitics of the region.

The so-called Cross-Med pipeline would reduce the European Union's reliance on Turkey's Trans-Anatolian Pipeline (TANAP) as the major supply route for non-Russian natural gas.

While Ankara hoped TANAP would turn Turkey into the clearinghouse for Middle Eastern and Central Asian natural gas to reach Europe, the EU's ongoing efforts to diversify its supply routes is changing the Eastern Mediterranean energy chessboard.

Although the Cross-Med pipeline has been dismissed by analysts as commercially unfeasible due to low gas prices, several contracts recently signed between the Greek Cypriot-administered Republic of Cyprus (ROC) and international energy companies suggest that the experts' skepticism may be short-sighted.

On April 5, two days after the Cross-Med summit, Qatar Petroleum and ExxonMobil signed an exploration and production-sharing contract with the ROC for Block 10 in Cyprus' exclusive economic zone. In March, the Italian energy giant Eni announced that it had purchased a 50 percent stake in Cyprus' Block 11 from the French energy major Total.

Block 11 is adjacent to Egypt's Shorouk concession in which Eni made the 2015 discovery of the massive Zohr natural gas field. The Eastern Mediterranean's largest gas find, Egypt's Zohr field, contains 850 billion cubic centimeters of natural gas, 50-60 percent of which may be recoverable. If the Zohr's carbonate reservoir extends across the border between Egypt and Cyprus' exclusive economic zones, then Cyprus could be sitting on a major natural gas find in Block 11.

The Cross-Med pipeline project is predicated upon the prospect that the Eastern Mediterranean will become one of the EU's major energy suppliers. From a geological viewpoint, that prospect is not far-fetched.

According to assessments conducted in 2010 by the United States Geological Survey, the Levant Basin, including Cyprus and Israel's exclusive economic zones, along with Egypt's Nile Delta and Mediterranean coast, potentially contain 10 trillion cubic meters of recoverable gas.

If this region is considered as a whole, the Egypt-Israel-Cyprus triangle could become one of the world's top 10 natural gas producers. As the EU moves to eliminate coal as an energy source for power production, it may turn more to natural gas to prevent price and supply shocks, even while it continues advancing the use of cleaner renewable energy sources.

In such circumstances, Eastern Mediterranean gas would be one of the EU's most attractive supply options. For this reason, EU European Climate and Energy Commissioner Miguel Arias Canete, who participated in a recent summit in Tel Aviv, declared, "This is an ambitious project, which as the commission, we clearly support, as it will have a high value in terms of security of supply and diversification targets."

TANAP, the main pipeline of the Southern Gas Corridor extending from Azerbaijan through Turkey to Greece, Albania and Italy, is slated to transport natural gas from the Caspian Sea to the EU. With the inclusion of natural gas from the Kurdish region of Iraq and Israel (which would have to cross Cyprus' exclusive economic zone), Ankara hoped that the Turkish market would become a chief organizing framework for the distribution of natural gas from the Caspian Basin and Middle East to Europe.

High-level officials from Israel and Turkey will soon engage in talks for the export of Israeli natural gas to Turkey. A win-win for both nations, Israeli exports to Turkey would contribute to TANAP becoming a strategic transit corridor for non-Russian natural gas to reach the EU. Still, with the Cross-Med pipeline officially on the table, the Eastern Mediterranean chessboard has changed. While Turkish-Israeli cooperation will likely be unaffected, Greek Cypriots may feel less incentivized to arrive at an equitable solution with the Turkish Cypriots for a reunited Cyprus.

Turkish companies seeking to expand in Gulf exhibit products in Qatar

Daily Sabah, 12.04.2017



Turkey attracted \$19 billion in foreign direct investment (FDI) from Qatar in a 10-year term up until 2015, marking it as the fourth country the Qataris invested in the most.

However, Turkish companies now seek to expand their business ties with Qatar, aiming to get their share from the investments that the Qatari government is set to make for FIFA World Cup 2022. More than 150 Turkish companies from sectors like construction, health and furniture will showcase in Expo Turkey by Qatar, which will be held in Doha on April 19-21.

The event aims to bring together businessmen from the two countries to enhance the Turkish-Qatari strategic economic partnership through trade and raise the volume of bilateral trade to \$1.5 billion. It is currently about \$750 million per year.



Expo Turkey by Qatar, which is to be held at the Qatar National Convention Center (QNCC) in partnership with Turkey's Medyacity, is set to contribute to this aim with around 10,000 visitors. "This exhibition between Turkey and Qatar is not a simple exhibition to buy and sell goods.

By considering the economic indicators of Qatar and the know-how of Turkey, research was conducted to determine which steps to take between the business worlds of the two countries, and business development plans were made accordingly by us," said Chairman Hakan Kurt of Medyacity to Daily Sabah. "In 2003, international trade between Turkey and Qatar was \$24 million, and by the end of 2015 this number increased to \$770 million. Trade between Turkey and Qatar has increased 20-fold in the last decade. However, I would like to point out specifically that this number has not been on par with the diplomatic and strategic cooperation indicators between Turkey and Qatar," he added.

Qatar has promising projects for investors due to the country hosting the 2022 FIFA World Cup, which requires a lot of infrastructure investment. The country was planning to spend about \$200 billion for upcoming projects, and 43 percent of the budget is to be reserved for infrastructure projects. However, with a recent declaration last week, the country is expected to cut this budget around 40 percent, however it still remains a huge one.

Turkey's exports to Qatar have increased significantly over the last decade. The bulk of the \$440 million worth of exports to the country last year consisted of ships, yachts, electrical and electronic products, machinery and furniture. Turkey's imports of \$271 million from Qatar in 2016 are largely oil and oil derivatives, aluminum and plastic products.

The contracting industry is the most important sectors offering potential for foreign investors in Qatar, where the national income per capita is about \$130,000 in accordance with the purchasing power parity due to oil and natural gas production and reserves.

On the second day of the fair, a special event will be hosted to bring together top business people from the two countries. 40 Turkish and 40 Qatari business people are set to attend the Turkish - Qatari Business Leaders Summit on April 20. "Crucial investments will be discussed during this event. We aim to develop business ties and network between Turkish and Qatari business communities," Kurt explained.

The event will be held in a 30,000 square-meter area with the attendance of 150 Turkish companies. While the exhibitors of the event mostly consist on Turkish firms, visitors are expected from the surrounding region. "Qatar is in the center of the region. So, there are business people willing to visit this event from the Gulf region. We believe around 10,000 visitors will visit the fair," Kurt said.

Turkuvaz Media Group will follow the event for its readers and audiences as the media sponsor of the event. Qatar National Bank, Tekfen Construction, Turkish Airlines, Kuzu Group, Commercial Bank-A Bank and Sheraton Doha are among the sponsors of the event.



EBRD close to deciding on TANAP's financing

Azernews, 12.04.2017



The European Bank for Reconstruction and Development (EBRD) is close to deciding on financing of the Trans Anatolian Natural Gas Pipeline (TANAP) project, said Aida Sitdikova, the EBRD director for energy in Russia, Caucasus and Central Asia.

Speaking on the sidelines of the 4th Caspian Energy Forum in Baku on April 12, Sitdikova said the EBRD hopes to make a decision on providing up to \$500 million worth funding for TANAP this year. "Currently, we are conducting due diligence process with the international financial institutions, which haven't yet approved TANAP's financing.

At the same time, we closely work with the Southern Gas Corridor CJSC on this issue," she added. Regarding the possible impact of Azerbaijan's withdrawal from EITI on the process of financing the Southern Gas Corridor projects, Sitdikova noted that what is important for EBRD is the substance and essence of disclosure, transparency and revenue management.

The main thing is to ensure those requirements, not necessarily within the EITI, said Sitdikova. "Azerbaijani government is currently reviewing very carefully the legislation on revenue management, disclosure and transparency. This is something that we obviously welcome," she added.

TANAP project envisages transportation of gas from Azerbaijan's Shah Deniz field to the western borders of Turkey. The gas will be delivered to Turkey in 2018 and after completion of the Trans Adriatic Pipeline's construction the gas will be delivered to Europe in early 2020.

The length of TANAP is 1,850 kilometers with an initial capacity of 16 billion cubic meters of gas. Around six billion cubic meters of this gas is meant to be delivered to Turkey, with the remaining volume to be supplied to Europe. TANAP shareholders are Azerbaijan's state oil company SOCAR (58 percent), BOTAS (30 percent) and BP (12 percent).

Russian gas in the Southern Gas Corridor could undermine the EU's diversification plans

Natural Gas Europe, 10.04.2017



Gazprom has officially declared its willingness to use the Trans-Adriatic Pipeline (TAP) as route to deliver gas to Europe. TAP is an integral part of the Southern Gas Corridor (SGC) which is one of the priority energy projects for the EU to ensure the continent's security of supply from a non-Russian source.

Although technical and legal possibilities exist for Gazprom's use of Trans-Adriatic Pipeline (TAP)'s expanded capacity, the long-term contracts securing the pipeline's initial capacity for Azerbaijani gas together with EU legislation makes this option less likely.

Nevertheless, the possibility of a Russian bid for TAP could hamper the EU's diversification plans and block future gas supplies from other non-Shah-Deniz sources. On January 24, during the European Gas Conference in Vienna, the Deputy CEO of Russia's Gazprom Alexander Medvedev said the company plans to use the capacity of TAP in order to deliver more than 100 billion cubic meters (bcm) of extra gas annually to Europe.

The reason is, according to Medvedev, that the planned capacity of Turkish Stream will not be sufficient to carry all this gas. Turkish Stream is planned to terminate near the Greek border in the Ipsala district of Turkey, the same planned endpoint as the Trans-Anatolian Pipeline (TANAP) and the access point for TAP.

TAP initially envisaged the transportation of 10 bcm/y of Azerbaijani gas from the Shah-Deniz field's stage-II (SD-II) by hooking up with TANAP at the Turkish-Greek border, and then into Southern Europe across Greece, Albania and via the Adriatic Sea to Italy's south.

Gazprom signed a Memorandum of Understanding (MoU) with Italian Edison and Greece's DEPA in 2016 on natural gas deliveries across the Black Sea from Russia to Greece and from Greece to Italy via the Interconnector-Turkey-Greece-Italy (ITGI)/Poseidon pipeline as an extension of Turkish Stream.

The Poseidon is an undersea extension of ITGI across the Ionian Sea to Italy, and is almost a mirror image of TAP. Since ITGI/Poseidon is still under question, for technical, financial, feasibility and cost efficiency reasons, Russia decided to benefit from TAP in order to overcome these challenges.



Commenting on Medvedev's statement, the TAP consortium's Head of Communications Lisa Givert said that TAP's commitment to transporting 10 bcm/y of SD-II gas was underpinned by a 25-year agreement.

The pipeline has been designed with an option to expand up to 20 bcm/y when extra gas volumes come on stream with the construction of additional compressor stations along the route, TAP confirmed. Ulrike Andres, commercial and external affairs director of TAP, said Azerbaijan is the most likely gas source for TAP's phase-II, however, "there is a minor capacity available on the secondary market for short-term transportation [...] should there be demand from shippers."

The TAP Consortium can offer its expanded capacity, in line with EU legislation, to any shipper through open seasons auctions as long as they comply with the participation requirements, Andres noted.

According to Spain's Enagas (a TAP shareholder), TAP can provide capacity to any third gas-shipper requesting transportation capacity in the pipeline on the secondary market during open season in compliance with the regulatory framework. Italy's Snam (also a TAP shareholder) said that "Gazprom's joining TAP will double its capacity. TAP's capacity can be increased up to 20 bcm with a small investment, which will be cheaper than Poseidon's expansion."

Theoretically, Russia can export gas via pipeline from the endpoint of Turkish Stream to Europe, without breaching the EU's Third Energy Package (TEP) rules and without Gazprom's presence in the TAP Consortium. The European Commission's regulation have left 50 percent of TAP's final/expansion capacity open to third party access (TPA).

When TAP's capacity is expanded from the initial 10 bcm/y up to 20 bcm/y, Russia can in accordance with this regulation request the Consortium to construct additional entry/exit points for compressors in Greece and can reserve space in the pipeline by requesting TPA to transport its gas at the second stage of gas delivery.

Moreover, BP in 2016 signed a MoU with Rosneft to purchase 7-20 bcm/y of Russian gas. The volume is largely equal to potential Azerbaijani gas supplies (10-20 bcm/y) to Europe in 2020, from the Shah-Deniz project in which BP is development operator.

Therefore, if Russia does not own the infrastructure but simply sells its gas from the Turkey-Greece border, its actions will not contravene TEP rules. Russia's Gazprom, with its current gas potential, will be in a position to supply additional gas for TAP's enlarged capacity, earlier than any other potential gas supplier given regional instability in the Middle East and a blurred perspective of Mediterranean, Turkmen and Iranian gas for Europe.

However, the Shah-Deniz Consortium has already secured 100 percent of TAP's initial capacity of 10 bcm/y for Azerbaijani gas with a 25-year-contract and with the assurance of the EU's TPA exemption for the first stage of gas delivery. Thus, Russian gas cannot be transported via TAP for at least the next 25 years due to long-term contracts together with relevant EU legislation, unless significant market or geopolitical changes take place during this period or extra gas demand and shortage emerge in the market to motivate TAP's expansion.



Moreover, TAP's expansion would enable Gazprom to deliver a maximum of 10 bcm/y, whereas Turkish Stream's second string was supposed to pump 15.75 bcm/y. Therefore, TAP's potential expanded capacity would not be sufficient to deliver Gazprom's planned volume of gas to Europe.

Although SOCAR did not consider Gazprom a rival in the TAP project, the injection of Russian gas into TAP could nevertheless create a rivalry between Russian and Azerbaijani gas in terms of volume and market share. Russian gas could block the prospects for additional volumes of Azerbaijani gas expected to come from new gas fields in TAP's stage II.

Furthermore, Russia's participation will be a strong blow to the political investments of the EU and U.S. throughout the implementation process of the project, envisaging to reduce Europe's gas dependence on Gazprom. According to Amos Hochstein, the U.S. special envoy for energy affairs, the SGC is important for Europe when the continent's economic and political security is threatened by energy monopolies.

In support of the SCG, the new U.S. Ambassador to Greece, Geoffrey Pyatt, stressed the necessity of protecting those "projects against other proposed schemes which threaten the future of Europe's energy security" and "would exacerbate European dependency on Russian gas".

TEP rules have previously prevented Gazprom's energy expansion and monopoly on gas transportation in Europe. They also foiled the construction of South Stream under anti-trust rules banning suppliers from owning pipelines without offering other third suppliers access.

Yet, after Russia mended its ties with Turkey for the implementation of Turkish Stream, Russia now seeks to use TEP rules in its favour to pre-empt TAP's future deliveries beyond 10 bcm. Therefore, the EU's energy legislation, which once played against Gazprom, now might leave the union with no option to prevent the company's access the TAP's future capacity.

This indeed threatens to derail Brussels' plans to reduce Europe's dependence on Russian gas. However, there is currently little the EU can do to block Gazprom's potential bid for using TAP's expanded capacity, as this might violate the EU's position on open market rules.

Given the uncertainty of Turkish Stream's second string, as well as the ITGI/Poseidon pipeline, Gazprom also plans to use the additional capacity of TAP, since the planned capacity of Turkish Stream will not be sufficient to bring extra amounts of Russian gas to Europe.

However, the injection of Russian gas into TAP could fuel rivalry between Russian and Azerbaijani gas in terms of future market shares. Russian gas could block additional volumes from new gas fields in Azerbaijan (as well as alternative sources from Turkmenistan, Iran, Iraq, and the Mediterranean).

This can downgrade the importance of the SGC in the context of the EU's diversification plans, undermine the security pillar of European energy policy and enlarge Gazprom's existing market share. However, the contractual commitments to SGC, the EU's legislative instruments and technical ambiguities make Gazprom's access to TAP less likely for near future. The EU can at most, along with the endeavours of the energy companies involved in TAP, extend the initial exemption from TPA for the consortium in order to keep Gazprom out.

Saudis, oil majors discuss gas investments ahead of giant IPO

Reuters, 11.04.2017



Saudi Arabia and international oil companies have discussed gas venture opportunities inside the kingdom and abroad as part of the top crude-exporting country's drive to diversify investments before the listing of national energy giant Saudi Aramco.

Saudi officials explored investment opportunities with firms including BP (BP.L) and Chevron (CVX.N) to help develop its gas reserves, the world's sixth largest, at a time of booming energy demand at home, four industry sources told Reuters. Aramco has also looked into investing in gas ventures abroad, including with Italy's Eni (ENI.MI), the sources said.

The development revives memories of talks between Aramco and global majors at the end of the 1990s and early 2000s, known as the Saudi gas initiative. Most of those talks collapsed as the parties disagreed over returns on investment.

This time, Aramco is gearing up for a share listing next year, aiming to get a valuation of up to \$2 trillion in what could be the world's biggest initial public offering (IPO). Chevron, BP, Aramco and Eni declined to comment on talks.

"We have a long-standing relationship with Saudi Arabia, so it is not uncommon for us to talk to them. We're always having discussions about business development. I don't have anything particular to say about Saudi Arabia," Chevron CEO John Watson told Reuters last week.

BP Chief Executive Bob Dudley, who traveled to Saudi Arabia at the end of last year, said this year he wouldn't rule out "creative partnerships" with Aramco but that an outright investment by BP in the IPO was unlikely. The kingdom has a long-term goal of increasing the use of gas for domestic power generation, thus reducing oil burning at home and freeing up more crude for export.

This could help increase Aramco's valuation as it generates more revenue from exports than selling oil at lower domestic prices - Saudi Arabia is the world's fifth-biggest oil consumer despite being only the 20th-biggest economy.

Saudi Energy Minister Khalid al-Falih, who is also Aramco's chairman, said last year that Aramco was interested in investing in international upstream ventures, particularly gas, and could invest in importing gas into the kingdom.

Diversifying gas assets abroad would help Aramco achieve a better valuation and is attractive for investors, industry sources said. Riyadh also plans to raise domestic gas prices, a move seen as an incentive for foreign companies.



Aramco is preparing to reveal in the next few months a new gas strategy aimed at developing resources to keep pace with rising domestic demand, sources familiar with the discussions said. It comes as part of the kingdom's push to diversify its economy away from oil, a strategy known as "Vision 2030", amid a global drive to phase out the most polluting fossil fuels.

Aramco wants nearly to double gas production to 23 billion standard cubic feet a day in the next decade. "IOCs (international oil companies) are waiting for that (strategy) to make their decisions," one industry source familiar with the matter said.

Another industry source said Energy Minister Falih had said in private meetings with Western oil executives that he wanted Aramco to partner with other companies in upstream projects. Two Saudi-based industry sources familiar with the discussions said BP's Dudley had expressed an interest in investing in gas exploration in the Red Sea. However, the two sides have yet to hold any talks on the project.

Aramco controls gas reserves in excess of 8 trillion cubic metres, according to BP's annual energy review. The Saudi company has said it wants to explore for gas in the shallow waters of the Red Sea as well as onshore shale gas.

Since gradually renationalizing the industry in the 1970s, Saudi Arabia has not allowed the majors to develop its oil. The Saudi gas initiative of the 1990s was effectively an effort by the then-minister for oil, Ali al-Naimi, to thwart attempts by companies such as Exxon Mobil (XOM.N) to partner with Riyadh in oil developments.

In a book published last year, Naimi said he was convinced that as part of gas talks during that decade, oil majors hoped to acquire cheap Saudi reserves of gas condensate, a high-quality form of crude oil.

The \$25 billion gas initiative offered in 1997-98 had some of the world's top oil companies such as Exxon and Shell expressing interest but struggling to agree terms. Riyadh later invited investors in 2003-2004 to find and produce gas in Rub Al Khail, a desert in the country's southeast.

Companies including Russia's Lukoil (LKOH.MM), Shell and China's Sinopec formed ventures with Aramco but have failed to find commercially viable deposits. They also complained about low domestic gas prices and high extraction costs. Russia's Lukoil (LKOH.MM) was the most recent foreign company to quit Saudi Arabia's search for gas.

However, Saudi Arabia last month slashed income tax on energy companies operating in the kingdom to make energy investments more attractive. "The terms will be better now," an oil executive said.

Oil retreats as US production gain offsets stockpile decline

Bloomberg, 12.04.2017



Crude retreated for the first time in seven sessions after a government report showed U.S. production climbed to the highest level in more than a year, offsetting data on declining stockpiles.

Futures ended the longest stretch of gains this year in New York. Crude output climbed for an eighth week, the longest stretch since 2012, according to the U.S. EIA. Inventories fell 2.17 million barrels, compared with a 1.5 million barrel drop forecast by analysts surveyed by Bloomberg. Prices rose earlier on reports that Saudi Arabia will support an extension to OPEC-led production curbs.

While speculation that the Organization of Petroleum Exporting Countries and its allies will extend their six-month pact aimed at eroding a global glut is helping boost prices, there's also concern that rising U.S. output will counter the reductions. In its monthly report on Wednesday, OPEC boosted estimates for rival supplies as shale drillers emerge from the industry's two-year slump.

"Overall supply and demand are coming into balance," Brian Kessens, a managing director and portfolio manager at Tortoise Capital Advisors LLC in Leawood, Kansas, who helps manage \$17.1 billion in energy assets, said by telephone. "There's a little less focus on the weekly inventory numbers and more on OPEC rhetoric."

West Texas Intermediate for May delivery slipped 29 cents, or 0.5 percent, to close at \$53.11 a barrel on the New York Mercantile Exchange. Prices touched \$53.76 earlier, the highest intraday price since March 7. Total volume traded was about 16 percent above the 100-day average.

Brent for June settlement slipped 37 cents, or 0.7 percent, to \$55.86 a barrel on the London-based ICE Futures Europe exchange. The global benchmark oil climbed the previous seven sessions, the longest stretch of gains since July 2012. Brent closed at a \$2.34 premium to June WTI.

American crude production rose by 36,000 barrels a day to 9.24 million in the week ended April 7, the most since January 2016. U.S. oil drillers boosted the rig count to 672 last week, the most since August 2015, Baker Hughes data show.

"The market isn't doing much because we've been anticipating a draw," Adam Wise, who helps run a \$7 billion oil and natural gas bond and private equity portfolio at John Hancock in Boston, said by telephone. "The market has had a strong run up and it's taking a pause before the next move." The decline left nationwide crude stockpiles at 533.4 million barrels last week.

Inventories at Cushing, Oklahoma, the delivery point for WTI futures and the nation's biggest oil-storage hub, increased 276,000 barrels to a record 69.4 million. Refineries processed 16.7 million barrels a day of crude, up 268,000 barrels from the prior week and the highest since January, according to the EIA.

Gasoline supplies fell 2.97 million barrels, while inventories of distillate fuel, a category that includes diesel and heating oil, slipped 2.15 million barrels. "The biggest takeaway is that all three main categories had draws that were bigger than expected," Kessens said. "Refinery utilization was up and should pick up as we go through the month."

Saudi Arabia will decide on an extension depending on the stance of other OPEC nations such as Iraq and Iran, as well as Russia, which isn't a member of the group but joined the output cuts, a person familiar with the kingdom's internal discussions said.

The kingdom -- OPEC's largest producer -- reduced supply below 10 million barrels a day in March, more than pledged under the deal, according to OPEC's monthly report. The group is scheduled to gather in Vienna on May 25.

Saudi debt binge amid oil gains eases bank liquidity drought

Bloomberg, 13.04.2017



Saudi Arabia's visits to international bond markets and a partial recovery in the price of oil, its biggest export, is easing a liquidity squeeze was hampering its financial system.

As the country finalized its first issue of dollar-denominated Islamic notes, six months after selling the biggest ever bond by an emerging market country, an interest rate used by Saudi banks to price loans stood at its lowest level in almost 14 months. That rate, known as Saibor, will probably fall further after the latest sukuk issue, according to Anita Yadav, head of fixed-income research at Emirates NBD PJSC, Dubai's biggest bank.

Saibor has been falling since reaching a seven-year peak of 2.386 percent on October 17, immediately before the country's debut dollar-bond sale, as oil export revenue dwindled, sending the state budget into deficit.

Cost cutting by a government usually associated with vast reserves of petrodollars, and a drawing down of its bank deposits to prop up spending, prompted a cash squeeze in the economy, helping drive Saibor higher. "Saudi Arabia is doing these jumbo bond deals, like the sukuk yesterday, that will bring money into the country and ease bank liquidity further," Yadav said.

The Saudi financial system is also benefiting from a doubling in oil prices since they hit a 12-year low in January 2016. Saudi banks' combined loans-to-deposit ratio, a key measure of liquidity, improved to 88.1 percent in February from 90.8 percent in August, according to central bank data. Bank lending grew 2.8 percent in 2016, the slowest pace since 2009, according to central bank data.

Still, the Saudi budget remains in the red and the deficit will probably be 7.6 percent of output this year, according to the median estimate of 11 analysts polled by Bloomberg. That means government spending cuts may continue, hurting growth and reducing demand for investment funds.

Loan demand in Saudi Arabia will be "subdued" this year, Moody's Investors Service said last month, while economic growth is likely to slow to 0.4 percent in 2017, the weakest in nine years, the International Monetary Fund forecast.

But with oil firmly above \$50 a barrel and the Saudi government proving it can tap international investors for enough liquidity to pay its bills, the economy has some breathing space. Brent crude was 0.1 percent higher at \$55.9 a barrel at 2:13 p.m. in Dubai on Thursday.

There has been a "significant improvement in liquidity in the kingdom over the past three or four months," James Reeve, the London-based senior economist at Samba Financial Group said in an email. This has been due to "waning demand for private credit and the fulfillment of outstanding invoices by the government."

The oil price shale can live with leaves OPEC in a bind

Bloomberg, 13.04.2017



In oil, like life, the secret to happiness is to lower your expectations. That isn't just a piece of homespun, nihilist wisdom. It's what's happening beneath the surface of the oil market. Hedging is how exploration and production companies manage their market risk.

Locking in a price for future output provides certainty on cash flow. This not only helps management sleep at night. More importantly -- in an industry as profligate as this one -- it helps their bankers and shareholders rest easier, too; maybe even dream a little. So data on hedging by producers provides some insight on where their head is at.

And, fortunately enough, Matt Hagerty and Peter Pulikkan of Bloomberg Intelligence have just released a detailed survey of 37 E&P companies pumping an estimated 4.2 million barrels a day. Their data show E&P companies getting by with less these days. First, a little history. The chart below shows the net short position of swap dealers in Nymex crude oil futures and options.



This is a proxy for hedging activity by E&P companies (which generally use swaps dealers to establish their hedging positions). The lower the number, the more oil sold short, or hedged. I've marked some periods to show what oil prices and rig counts were like at those times:

There are three phases there:

2007 to 2008: Peak-oil supply thinking, implying prices were only going up, was all the rage. Meanwhile, fracking was focused on natural gas. So industry hedging of oil was minimal.

2009 to 2014: Oil prices crash and rebound while gas prices crash and don't. E&P companies switch their focus to fracking for oil, so the oil-rig count soars and so does hedging to help finance fracking.

Late 2014 to present: Oil prices crash and so does drilling. OPEC-led efforts to support prices stabilize the market, leading E&P companies to resume drilling, and hedging to help fund it.

The real plot twist there concerns price. During the first shale wave that crested and broke in 2014, the 12-months forward oil "strip" (or average price) was bobbing around at \$100 a barrel, a very attractive level at which to sell future production. Since early 2016, as E&P firms have resumed drilling and hedging again, the strip has been more like \$50 to \$55.

I wrote here about how \$50 seemed to have become a threshold for E&P companies either cranking up or turning down, due in part to productivity gains made under pressure. Bloomberg Intelligence's hedging survey strengthens the point. Out of their 37 companies, 32 have hedged some of their anticipated oil production for 2017. Overall, 43 percent of that output is hedged at an average price of \$50 and change a barrel.

In the Permian shale basin, the engine of U.S. production growth, a dozen E&P companies in the survey have hedged an even higher share of this year's expected output at even lower prices: 64 percent at a weighted average of \$49.43 a barrel. One or two bigger producers, such as Concho Resources Inc., actually skew that average higher; the median price is less than \$47 a barrel.

It isn't as if these companies like getting less than \$50 a barrel, or are making a prediction on prices. It is just that, for the purposes of funding their businesses -- including growth plans -- it is a price they can live with.

This is why, in a slew of reports released this week by OPEC, the Energy Information Administration and the International Energy Agency, estimates of U.S. oil production growth for 2017 were all revised higher.

This, along with OPEC members maxing out production ahead of their cuts and (something to watch) softer demand than expected, mean the oil market has proven slow to tighten. All of which leaves OPEC and its partners in a bind as they head towards next month's meeting. Even the strongest in their ranks, such as Saudi Arabia, can only stomach \$50 a barrel for so long (while basket cases such as Venezuela face catastrophe). It is pretty much a given that the cuts will be extended at the meeting in order to drain more oil from the glut of inventories built up in the last few years.



Yet this raises a thorny problem. As of now, only 21 of the 37 companies in the Bloomberg Intelligence survey have hedged any of their anticipated oil production for 2018, and these hedges cover less than 10 percent of it.

The Permian set have hedged more, but still only 22 percent. The current futures strip for 2018 is \$54 and change, around where futures prices for the rest of the decade have stabilized since early 2016 even as near-month prices have bobbed up and down.

While futures prices are not predictions, the stability of those longer-term futures suggest that U.S. shale producers' costs, as reflected in their hedging programs, are expected to be price setters in the oil market in the next few years.

In other words, if shale producers can live with oil at \$50 or thereabouts, then others will have to adapt themselves to that level. Moreover, if OPEC "succeeds" in pushing up price expectations with extended supply cuts, Permian producers will thank them in the only way they know how. Namely, by laying on more hedges for 2018, using the cash to produce more oil -- and thereby pulling those prices back down.

Liam Denning is a Bloomberg Gadfly columnist covering energy, mining and commodities. He previously was the editor of the Wall Street Journal's "Heard on the Street" column. Before that, he wrote for the Financial Times' Lex column. He has also worked as an investment banker and consultant.

These companies are: Callon Petroleum Co., Cimarex Energy Co., Clayton Williams Energy Inc., Concho Resources Inc., Diamondback Energy Inc., Energen Corp., Laredo Petroleum Inc., Matador Resources Co., Parsley Energy Inc., Pioneer Natural Resources Co., RSP Permian Inc. and Resolute Energy Corp. That said, the current market is close to that level: Average Nymex prices so far this year and current futures prices add up to an implied average for of a barrel.

Iran ramps up oil output as OPEC production falls

Oilprice, 13.04.2017



The OPEC Monthly Oil Market Report is out with OPEC's crude oil production numbers for March 2017. All data is through March 2017 and is in thousand barrels per day.

Looking at the above chart it seems obvious what most OPEC nations were doing. They announced in the summer of 2016 that there would likely be quota cuts beginning in 2017. And those cuts would be a percentage of their current production. So everyone began making heroic attempts to increase production by the end of 2016. Now, after everyone who felt that they should cut, has cut, they are right back to the level that they were at before the cuts were proposed.

There is always a considerable difference between what the OPEC nations say they are producing and what the "Secondary Sources" say they are producing. The March MOMR had Saudi producing 9,797,000 bpd in February while Saudi said they were producing 10,011,000 bpd. The April MOMR has revised Saudi's February production up by 155,000 bpd.

This is a snip from one of my Excel spreadsheets. It shows revisions made in the previous two months' data by "Secondary Sources". For instance, Saudi Arabia's January production numbers were revised down by 56,000 bpd while their February production numbers were revised up by 155,000 bp. OPEC 13 Jan. numbers were revised down by 73,000 bpd while their Feb. numbers were revised up by 124,000 bpd.

Not much is happening in Algeria. They peaked almost 10 years ago and have been in slow decline ever since. Angola peaked in 2010 but have been holding pretty steady since. Ecuador peaked in 2015. They will be in a slow decline from now on.

Any change in Gabon crude oil production is too small to make much difference. Iran has increased production the last three months, though down slightly in March. However, one source says it is a fallacy.

We believe Iranian destocking is being misinterpreted as production, and actual production will decline as the year moves forward. Iraq is down 73,000 bpd from their December peak. Kuwait is down 166,000 bpd from their November peak. That is about 5.8%.

Libya still has problems, and will likely continue to have problems. Nigeria and Libya are exempt from quota cuts because of rebel problems. Don't look for those problems to clear up any way soon. Qatar has been in decline since 2008. Her decline will continue albeit at a very slow pace. Saudi Arabia cut in January, then stopped cutting.

I think this is where we will be for some time unless there is a real shake up in OPEC. The UAE is down almost 200,000 bpd since December. This is the largest percentage cut in OPEC. I don't think it is all voluntary.

Venezuela's problems will continue. They are now below two million barrels per day. They are at 1,972,000 bpd. Last March their production was 2,286,000 bpd. They have dropped 314,000 bpd in 12 months. That's 13.7 percent in one year.

Eyeballing the chart, it looks like World oil production, total liquids, is down about two million barrels per day since peaking in November 2016. OPEC crude production is down 1.45 million barrels per day since November so Non-OPEC liquids, plus OPEC NGLs, would be down just over half a million bpd since then.

Italian gas supply sources shift in Q2, Russia now dominates

Platts, 05.04.2017



Since the start of the second quarter, gas flow dynamics around Europe have shifted -- both by route, source and destination -- pointing to continued supply flexibility in the European gas market.

Italy is often a good gauge of whether supply contracts are competitive versus each other and versus European hubs at any particular time, with Russian gas seemingly the most attractive since the start of Q2. Italian buyers have import contracts with Gazprom and Sonatrach, but can also import gas from European hubs, giving them options when long-term contract prices diverge from hub prices.

Italy also has 11 million mt/year (15 Bcm) of LNG import capacity and significant storage of around 16.5 Bcm, making it well disposed to optimization. Since April 1, the country's supply trend has again shifted dramatically, suggesting new contract optimization by Italian buyers, and also comes as Italy needs to fill its storage stocks by a minimum volume on a regular basis under Italian legal requirements.

Russian gas flows to Italy have jumped sharply to more than 90 million cu m/d since the start of the month compared with an average of just 48 million cu m/d in March, according to data from Platts Analytics' Eclipse Energy.

By contrast, imports from Algeria have dropped since the start of April to a little more than 50 million cu m/d having been running at a much higher rate than Russian imports for all of March. Algerian exports to Italy averaged 68 million cu m/d last month.



And imports from northwest Europe are also down dramatically since the start of April -- at below 8 million cu m/d this week compared with a March average of 21 million cu m/d. The reversal in fortunes for Russia, Algeria and European supplies suggests that buyers have been able to optimize their supply portfolios through a higher mix of Russian gas, and less Algerian and European gas.

It also comes at a time when Libyan gas supplies to Italy have been severely cut due to the shut-in of the Wafa field by disgruntled workers. LNG send-outs are also up ahead of the start of a raft of LNG imports following the award of a tender for 16 unloading slots at the Livorno terminal for April-September.

The higher Russian imports come despite hub prices being competitive with oil-indexed contracts, especially the current month-ahead price. However, Italy's Eni is thought to have more hub pricing now in its contract with Gazprom. CEO Claudio Descalzi said last year that Eni had a price cap and floor in its contract to make sure the price it pays doesn't fluctuate too much when either oil or European hub prices diverge significantly.

In addition, an oil-indexed contract is still cheaper now than it is for the rest of the summer, so even under a heavily oil-indexed contract it is wiser to buy now than later in the year. Given the take-or-pay levels in contracts -- typically around 80% of Annual Contract Quantity (ACQ) -- companies may also want to make sure they are ahead of their commitments while prices are favorable rather than wait till later in the year when it may be even more punitive to pay an oil-indexed price.

It is also possible that Italian buyers secured their volumes currently being delivered at an earlier date when the Russian contract price was more favorable ahead of the storage injection season. Despite falling off from their March highs, Algeria supplies are still at elevated levels since the start of Q2, but the drop-off comes as the main Eni import contract has been amended for the period October 2016-September 2017 to better reflect hub prices.

The increase in Russian gas supplies to Italy has also had a knock-on effect on the delivery routes of Gazprom's volumes to Europe. Exports via the Ukrainian route to Europe have picked up since April 1, with some 147 million cu m passing through Velke Kapusany on Wednesday, the highest volume since January 9 when Europe was in the midst of a prolonged cold snap that saw demand for Russian gas soar across the continent.

The Ukrainian route via Velke Kapusany is likely the cheapest route for Russian gas to reach Italy. Supplies via the Nord Stream pipeline to Germany are a little lower since the start of April, but not by the same amount as deliveries via Ukraine are up.

Indeed, Russian pipeline gas flows to Europe generally since April 1 are much higher, at a combined 356 million cu m/d via Nord Stream, Belarus and Ukraine on Wednesday -- the highest level since the end of January.

This is despite limited gas demand in Europe given warmer-than-usual temperatures. The main demand pull currently is storage as shippers look to fill stocks quickly while prompt gas prices remain competitive with month-ahead and summer contract prices.

Day-ahead prices on the Dutch TTF hub were priced at a discount to front-month and Summer 17 prices in the past few weeks, according to Platts assessments. On Thursday, Platts assessed day-ahead TTF at Eur16.075/MWh, now a slight premium to the May contract (Eur16.025/MWh) and Q3 (Eur16.05/MWh).

But May would still be a cheaper month to inject than later in the year. The fact that Russian gas is the preferred choice in Italy suggests the Gazprom contract became especially favorable since the start of Q2. Italy -- more than any other country in Europe -- is due to become even better connected in the coming years, increasing yet further the country's optionality when it comes to gas.

If all goes to plan, Italy will be able to import gas from Azerbaijan via the Southern Gas Corridor -- TANAP plus TAP -- by 2020, while Russia's Gazprom has plans to link its TurkStream pipeline into the once defunct, but now revived, ITGI-Poseidon pipeline, with Italy its final destination.

Italy will also be able to flow gas south-north with reverse flows to Germany under the TENP project, likely at the end of the summer of 2018, according to TSO Fluxys. Momentum is also gathering for an East Mediterranean pipeline from Israel and Cyprus via Greece to Italy.

On Monday, Israel, Italy, Greece, Cyprus and the European Commission signed a joint declaration in Tel Aviv to advance construction of the 1,300-km pipeline from Israel's Leviathan offshore field to Italy via Cyprus and Greece.

The ministers said at the signing ceremony they envisaged the project would be completed by 2025. A feasibility study conducted by IGI-Poseidon for the EC estimated the cost of the pipeline at \$5.7 billion. The study was based on a capacity of 12-16 Bcm/year.

EU turns to Algeria for security of gas supply

New Europe, 11.04.2017



Algeria will remain an important gas supplier to the European Union as the bloc looks to diversify its energy resources, EU Climate and Energy Commissioner Miguel Arias Cañete said during a press conference with Algeria's Energy Minister Nourreddine Boutarfa in Brussels on April 11.

However, Cañete called for improving Algeria's regulatory framework for investments. The Commissioner and Algeria's Energy Minister held a discussion on the framework of the EU-Algeria political dialogue on energy. The strategic partnership between EU and Algeria was launched two years ago.



Natural gas is a strategic issue for both countries. Algeria is a major and reliable supplier of Europe even at difficult times, Cañete told the press conference. “On its side, Europe is and will remain the main customer for Algeria.

“We’re interdependent. Europe relies on Algerian gas for its security of supply and Algeria relies on the European market for its security of demand. We want this mutual beneficial trade and develop further. To that end, new supply contracts, new investments in exploration and production are necessary,” Cañete said.

“There are vast and untapped resources of Algerian gas. We are very close to Algeria. There are very good transport infrastructures for gas from Algeria to Europe, which means that all the necessary conditions are there for the EU to better benefit from the Algerian gas and for Algeria to better benefit from the European market,” the Commissioner added.

“But there is one aspect of our gas relationship in which progress is necessary. It is necessary that the regulatory framework for investments be improved so that Algeria becomes more attractive destination for European investments. Our expert group has already started working to identify problems that impair investments and solutions which can facilitate them,” Cañete noted.

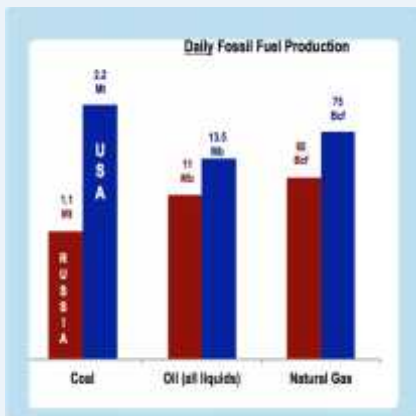
He also reminded that Algeria has huge potential for renewable energy and energy efficiency. The EU is committed to help Algeria in these fields, Cañete said. Asked about the security situation in Algeria, Boutarfa said today there is a certain level of stability in the northern African country.

“Today we take security issues into account. Algeria said there is triangular dialogue between our security services, the local firms and our partners on these questions of security and contingency plans that we have to make to defend our country. Everything is discussed with the companies,” the Algerian Energy Minister said.

Turning to the legislation on hydrocarbons, he stressed that his government is not planning to overhaul it. “The problem is linked to the implementation of tax regimes so we are in a discussion with the companies to understand what their needs are. Some companies have underlined some worries that they have and we are listening to them. We want to help these firms that invest in exploration. So we want to be better prepared for the future,” Boutarfa said.

US shale investment is back on the upswing

Bloomberg, 12.04.2017



Global upstream oil and gas merger and acquisitions reached \$136 billion, according to Evaluate Energy's M&A 2016. And one area seeing a jump in activity was the U.S. Marcellus shale, where close to eight times more was invested in asset and corporate acquisitions in 2016 than in 2015.

The Marcellus formation, primarily in Pennsylvania, West Virginia, New York and Ohio, is considered the second-largest natural gas field, after Northfield in Qatar and Iran. Marcellus spans approximately 60.8 million net acres with an estimated 500 tcf of natural gas, about 50 trillion cubic feet of which is recoverable using current technology.

In 2015, the U.S. shale industry was one of the main casualties of the oil price downturn, suffering a 75 percent drop in year-on-year merger and acquisition spending to \$13 billion. This amount was the lowest annual M&A U.S. shale spend since 2009.

A reshuffling of asset portfolios in 2016 redirected investments away from the Permian basin, and toward the Marcellus Shale which, which led to resurgence in deals as well as natural gas output. The M&A spend in the shale industry bounced back to \$48 billion during 2016, representing a 269 percent increase year on year.

Many of the players were eager to take advantage of other companies realizing that their respective Marcellus positions were noncore assets. Mega international players such as Anadarko Petroleum Corp., Statoil ASA and Mitsui & Co. Ltd. sold significant portions of Marcellus land for sums of more than \$100 million.

Southwestern Energy Company, in efforts to reduce debt, agreed a large deal to sell Marcellus acreage that had no drilling plans until 2023. The acquirers of these assets included far more Marcellus or Appalachian basin-centric companies.

Overall, the Marcellus 2016 deals totaled \$7.25 billion. This kind of year-on-year increase usually reflects one or two mega deals but not in 2016, when the total included 13 large deals (over \$100 million).

Both figures are a significant increase on 2015 activity, when only \$920 million was spent and only three large deals took place. In fact, 2016 saw more large deals in the Marcellus than in every year since 2010, the first real M&A boom, when 15 such deals were announced. The Marcellus rig count, which had seen a precipitous drop from 2012-2015 finally swung upward. Despite the decline, new-well gas production per rig in the region had risen throughout that time, due to enhanced technology and hydraulic fracking, which also helped to revitalize much of the legacy gas production.



During the recent oil crash, oil-field and gas-drilling services providers had to reduce prices, in some cases, toward levels that would have made their businesses unprofitable. Now with drilling prices starting to stabilize and recover, according to Wells Fargo, the producer price index for well-drilling costs jumped 8.7 percent in February from the prior month, the biggest monthly increase since 2005. Prices spiked on an annual basis too, by the most since August 2014.

The cost increase, nevertheless, is unlikely to stifle future production because, apart from the oil crash, there had been a structural decline in average drilling costs over the past few years. According to the EIA, costs per well increased from 2006 through 2012, a time of rapid growth in U.S. drilling activity. But since 2012 average costs have fallen partly due to more efficient technology.

The M&A trend in Marcellus should continue through 2017, as there are remaining energy assets still ripe for targeting that took a hit during the energy market slump. For example, Stone Energy Corp. in February completed its reorganization and exited Chapter 11 bankruptcy proceedings, eliminating \$1.2 billion of debt with a \$527 million asset sale to EQT Corp.

Furthermore, President Donald Trump has loosened regulation on E&Ps, thus making such plays more lucrative. In fact, in anticipation of his energy policies, the bulk of 2016 transactions took place in the fourth quarter of 2016. Now as Trump held to his word, transaction flow continues

Recently, the energy investment firm Kalnin Ventures LLC agreed to acquire more nonoperated Marcellus shale interests valued at \$16 million on behalf of Banpu p.l., Thailand's largest coal producer. Kalnin paid Range Resources \$112 million and Chief Oil and Gas LLC \$63 million last year for nonoperated interests there.

Cabot Oil & Gas Corp. has many infrastructure projects slated to come online in 2018. It announced that 67 percent of its budget would be spent on additional activity in the Marcellus with the rest going toward the Eagle Ford. In addition to E&P deals, there have been a number of midstream and oilfield services transactions this year, including Mammoth's acquisition of various services companies valued at \$134 million.

As for U.S. natural gas prices, increased M&A means more efficiency, more output and thus lower prices. It's not just about the resource-rich Marcellus shale, but that which lies beneath it -- the Utica Shale -- an organic-rich shale located a few thousand feet below, widely known as a source of natural gas, gas liquids and crude oil estimated to contain about 38 trillion cubic feet of natural gas, about 940 million barrels of oil, and 208 million barrels of natural gas liquids, according to the U.S. Geological Survey.

And from an international standpoint, Qatar has just lifted a 2005 self-imposed moratorium on developing the North Field in its efforts to capture more market share. Since 2005 Qatar was studying the effects of production in North Field which represents the majority of the nation's 872 Tcf of natural gas reserves.



Announcements & Reports

Qatar Lifts its LNG Moratorium

Source : OIES
Weblink : <https://www.oxfordenergy.org/publications/qatar-lifts-lng-moratorium/>

Does the Portfolio Business Model Spell the End of Long-Term Oil-Indexed LNG Contracts?

Source : OIES
Weblink : <https://www.oxfordenergy.org/publications/portfolio-business-model-spell-end-long-term-oil-indexed-lng-contracts/>

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

International LNG Summit

Date : 24 - 25 April 2017
Place : Barcelona, Spain
Website : <http://lngsummit.org/>

CIS Oil & Gas Summit

Date : 26 – 27 April 2017
Place : London, United Kingdom
Website : <http://cissummit.theenergyexchange.co.uk/>



FLAME

Date : 08 – 11 May 2017
Place : Amsterdam, The Netherlands
Website : <https://energy.knect365.com/flame-conference/>

Iraq Petroleum 2017

Date : 22 – 23 May 2017
Place : London, United Kingdom
Website : <http://www.cwciraqpetroleum.com/>

Turkmenistan Gas Congress

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

24th Caspian International Oil & Gas Exhibition

Date : 31 May – 03 June 2017
Place : Baku, Azerbaijan
Website : <http://www.caspianoilgas.az/en-main/>

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 2017
Place : London, United Kingdom
Website : <http://www.theenergyexchange.co.uk/big-gas-debate/>

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 2017
Place : Havana, Cuba
Website : <http://www.cubaoilgassummit.com/>

22nd World Petroleum Congress

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

7th Iraq Oil & Gas Conference

Date : 28 – 30 November 2017
Place : Basrah, Iraq
Website : <http://www.basraoilgas.com/Conference/>