

Turkey keeps up gas grid investment

Argus, 22.03.2017



Turkish energy regulator EPDK has approved gas grid investments of TL592.3mn (\$162.6mn) this year, as state-owned Botas expands storage and LNG import capacity.

Only funds used for transmission infrastructure are subject to EPDK approval and state-owned Botas' other key investments will be in storage capacity this year. The firm is expanding the 1bn m³ Tuz Golu underground storage facility to 5bn m³ and raising withdrawal capacity to 80mn m³/d by 2023. Injections for the first 500mn m³ addition at Tuz Golu started in February and the second 500mn m³ phase should be completed in 2019.

The cavern will have 20mn m³/d of withdrawal capacity for the 2017-18 winter. Botas is also expanding the Siliviri storage site, by 1.5bn m³ to 4.3bn m³ by 2020. Injection capacity will rise to 45mn m³/d from 16mn m³/d and withdrawal capacity to 75mn m³/d from 25mn m³/d. Botas assumed control of the facility in September, taking over operations from state-owned oil firm TPAO. Siliviri withdrawal capacity was expanded by 5mn m³/d last year.

Botas aims to expand sendout capacity at its 6mn t/yr Marmara Egerlisi LNG terminal to 8.4mn t/yr by 2018. And will start work and investment this year on a 1.1mn t/yr LNG floating storage and regasification unit (FSRU) at Ceyhan, in southern Adana province. The import terminal is expected to start operations in 2019. Turkey commissioned its first FSRU, the 145,000m³ Neptune, in December and EPDK received an application in January for an FSRU in northwest Yalova province, although capacity details were not revealed.

Expanded Turkish Stream depends on Hungary, Serbia

Argus, 16.03.2017



The Turkish Stream natural gas pipeline's proposed second leg largely depends on signing long-term take-or-pay deals with Hungary and Serbia, Russian energy minister Alexander Novak has said.

Both countries receive Russian gas through Ukraine at present. Russia's state-controlled Gazprom has yet to start negotiations on extending existing agreements with the countries, most of which will expire in 2021. The firm only recently guaranteed supplies to Hungary until 2021. Gazprom sells gas to Hungary through three agreements — two that will run to the end of 2021, and the other to the end of 2028.

The first two cover supplies of up to 4.2bn m³/yr to Panrusgaz, a joint venture between Hungary's state-owned MVM, Gazpromexport and Gazprom affiliate Centrex. Gazprom sells around 2bn m³/yr to Centrex through the third deal. It sold 5.5bn m³ to Hungary last year, and 5.9bn m³ in 2015.

Gazpromexport has a contract to supply up to 5bn m³/yr under a five-year agreement with Serbia's Yugorosgaz, which unites it with domestic utility Srbijagas and Centrex. The agreement will remain valid until the end of 2021. Actual sales to Serbia stood at just 1.8bn m³ last year, albeit up from 1.7bn m³ in 2015.

Russian supplies could also be delivered through the proposed 55bn m³/yr Nord Stream 2 pipeline, in transit through the Czech Republic, Slovakia and Austria. Transmission capacity to Hungary through the Hag line from Austria is 152.4 GWh/d — around 5.3bn m³/yr — after Hungarian regulator Mekh granted transmission system operator FGSZ access to the link's full technical capacity at the start of this month.

But the Velke Zlievce-Balassagyarmat pipeline between Slovakia and Hungary — mostly unused since its commissioning — has capacity of around 4.4bn m³/yr. Combined capacity would be enough to supply Hungary and Serbia downstream at present imports.

But Serbia is looking to develop an alternative supply route for Russian gas, as deliveries through Nord Stream would be far more expensive than current supply, Srbijagas said. FGSZ and midstream operator MGT planned long-term auctions for annual capacity along Hungary's import routes from Austria and Slovakia, which could have been reserved to fulfil supply contracts. But Mekh blocked the sales for delivery beyond the 2018-19 gas year at both border points, because of the uncertainties surrounding Russian transport. Russia will start to build the first 15.75bn m³/yr leg of Turkish Stream by the middle of this year, and Moscow and Ankara have begun discussing plans for the second stretch, Novak said.

Gazprom expects to halt transit deliveries through Ukraine to Romania, Bulgaria and Turkey at the end of 2019, redirecting them through the first 15.75mn m³/yr leg. The points of delivery for gas delivered to Bulgaria will be amended with the commissioning of the first section. But the changes will not affect the commercial terms of supply contracts, Moscow said.

Who will determine the energy route in Eastern Mediterranean?

Yeni Safak, 23.03.2017



Eastern Mediterranean is a region that has high potential in terms of energy supply security. The increased likelihood of carrying natural gas to Turkey and through to EU countries increases the significance of the Eastern Mediterranean in the field of energy.

As a matter of fact, the United States and European Union countries all support the inclusion of Eastern Mediterranean energy in the energy gas equation because introducing energy from the Eastern Mediterranean would form an alternative to Russia, which holds significant power in the field of energy.

However, introducing energy from the Eastern Mediterranean to the energy system is not merely an economic matter, as there are different countries in the region each with their own dynamics. One of the countries that is both a direct actor in energy and has an impact on regional dynamics is Israel.

Although Israel acts like it owns natural gas source and like a reluctant seller with the 620-billion-square-meter natural gas reserves in its Leviathan field, it needs to take into account the cost of carrying such a large amount of reserves.

What determines significance in the energy equation is not being in possession of energy, but rather its usability. Energy that is not used or not in circulation is richness for the land alone. It should be remembered that under these market conditions, what is important in natural gas markets is consumption, namely, the transmission of natural gas to international markets.

Even though Israel acts like a reluctant seller in the international energy field, it, too, is very well aware of this fact. Hence, it is working to determine new routes to carry natural gas. Actually, looking at these three actors, Israel's goal to exclude Turkey from the energy equation is clear in the different blocs it is trying to form.

It is working to develop routes that do not include Turkey to shift its center of gravity in energy to Greece, Greek Cyprus and Egypt. Of course, the economic cost is not the sole reason that Israel prefers these countries. The fact that all three countries have problematic relations with Turkey should not be ignored.



Following its protection of coup plotters after the July 15 coup attempt, Greece also joined the problems that exist with Egypt and Greek Cyprus. In other words, the moves made in energy are not independent of the incidents happening in the political domain.

On a different note, as the owners of the gas in the Mediterranean, in addition to Israel, the Palestinians also need to take a certain share of this income. Similar to how the energy revenue is shared between the Kurdistan Regional Government (KRG) in northern Iraq and the Iraqi central government.

However, despite all this, the dynamics within the energy sector itself are strengthening Turkey's position in the energy equation. In recent years, the price of liquefied natural gas (LNG) has also dropped along with the decrease in oil prices. In this case, selling natural gas from the Eastern Mediterranean to Egypt's LNG plants will not provide a profitable agreement in terms of cost.

Also, the questions regarding Egypt's current political state and future are ongoing. In addition to economic power, political stability is also necessary for the construction of a natural gas line and LNG terminals. What is needed is not a short-term relationship, but an atmosphere of long-term political stability and economic confidence.

In terms of the Greek Cypriot government, a project named the East Med natural gas pipeline is projected to go to Crete and from there to mainland Greece is on the agenda. Israeli gas also being transferred to the pipeline to reach the European market is among the transfer options for gas from the Leviathan field. However, the limited natural gas reserves below Greek Cypriot waters are not adequate to meet the needs of such a high-cost project. Also, as long as the Cyprus problem remains unsolved, the implementation of this project does not seem likely.

Hence, in order to transfer the offshore gas from Israel and Cyprus to Europe through Turkey and for Turkey to become both a bridge and trade hub for energy, the Cyprus problem first needs to be solved.

Regardless of the angle or route, both Turkey's geographical position and the state of natural gas prices and political dynamics in the energy equation, gives Turkey the advantage over actors that have natural gas reserves.

With its existing geographical position and strong economy, Turkey is the most ideal route in long-term energy projects requiring mutual trust and stability. Turkey also always has different alternatives in its region and, in terms of its position, is a reluctant consumer.

Gas talks with Turkey may wrap up in summer, says Israel energy minister

Bloomberg, 21.03.2017



Talks between government officials on building a natural gas pipeline from Israel to Turkey may conclude as early as this summer, Israeli Energy Minister Yuval Steinitz said.

The aim is to create a framework that would let companies on both sides advance their own negotiations, with gas flowing to Turkey in about three years, Steinitz said in an interview on Bloomberg Television. Israel is also in talks for a more ambitious pipeline that would pass through Cyprus and Greece to Italy, whose energy minister plans to visit Israel in early April to discuss the project, he said.

“The purpose is to conclude by this summer a government-to-government agreement on a gas pipeline stretching from Israel to Turkey, in order to export natural gas from Israel and also the vicinity, to Turkey,” he said. “My vision is that three years from now we will be able to export natural gas to Turkey and six years from now we will be able to complete this cross-Med pipeline” to Italy, he said.

The Israeli push to connect the eastern Mediterranean through pipelines in a region riven by old conflicts is going to be hard to pull off, especially as world energy prices remain depressed. A conduit to Turkey would have to go through Cyprus, which has been divided since a Turkish invasion of the north in 1974.

Israel has discovered two large offshore reservoirs holding an estimated 930 billion cubic meters of natural gas, more than enough to supply its own domestic needs for at least two decades. It is auctioning new fields this summer and is trying to find nearby export destinations to bring in billions of dollars in revenue while strengthening Israel’s geopolitical standing in the region. Jordan has already signed an estimated \$10 billion deal to import Israeli gas and Steinitz said talks continue to export gas to two idle liquefaction facilities in Egypt.

The partners in Leviathan, Israel’s largest offshore gas find, started working on a \$3.75 billion development plan to service the domestic contracts and the Jordanian market. The companies, led by Houston-based Noble Energy Inc. and Israel’s Delek Group Ltd., are planning to extract surplus gas for export to either Turkey or Egypt in a second phase of development.

The Tel Aviv Oil & Gas Index rose 0.7 percent to 1,098.47 at 10:15 a.m. in Tel Aviv. Israeli gas stocks were among the best performers on the country’s benchmark equity index. The pipeline to Italy, which Steinitz says would be the world’s longest undersea pipeline, would be more technically complicated and expensive than the conduit to Turkey, and may require additional gas findings offshore Israel to make it commercially viable.

“The general idea is very clear,” Steinitz said. “The East Med Basin, the economic waters of Cyprus, Israel, and Egypt, maybe also Lebanon in the future put together, will be some kind of replacement” to the North Sea.

Mediterranean LNG buyers purchase March cargo

Argus, 22.03.2017



An LNG cargo diverted from Lithuania earlier this month has been purchased by buyers in Greece and Turkey. The 140,000m³ Arctic Voyager delivered a partial cargo to Greece’s 1.2mn t/yr Revithoussa terminal on 19 March and is now declaring to deliver to Turkey’s 4.4mn t/yr Aliaga terminal on 24 March.

The vessel loaded a cargo at Norway’s 4.2mn t/yr Snohvit plant on 7 March, initially declaring for Lithuania’s 2.9mn t/yr Klaipeda LNG import terminal before diverting to Greece. The Arctic Voyager is carrying around 120,000m³ of LNG, market participants said.

The vessel delivered 81,620m³ to Revithoussa and the balance of the cargo, approximately 38,380m³, was sold to a buyer in Turkey. Greek smelting firm Aluminium of Greece purchased the partial cargo at around the low \$5s/mn Btu, a party close to the deal told Argus.

The buyer in Turkey could not be confirmed but private-sector firm Egegaz, which operates the terminal, and state-run gas firm Botas could be buyers as they have the ability to store and discharge a cargo alone. Aliaga has received only two spot LNG deliveries this month, on 2 and 12 March, both from Snohvit. And Egegaz issued a tender last month seeking a cargo for end-March delivery.

Turkish regulator EPDK lowered 2017 storage obligations for pipeline gas importers in November. But spot LNG importers need to reserve capacity equivalent to 2pc of volumes sold to distribution firms that exceed the amount of LNG imported.

With the recent drop in LNG prices, spot LNG may be an attractive option for Turkish buyers to meet some of their storage obligations, as they expect pipeline gas import costs to rise in the second quarter. The formula price for the second quarter — using constituent front-month oil-indexed values with a 10pc discount — stood at \$204.50/000m³ (\$5.68/mn Btu) yesterday. Any spot LNG offered below this level could be attractive for Turkish buyers, which have reserved storage capacity.

Turkish vessel to begin deep-sea drilling in Black Sea

Daily Sabah, 19.03.2017



The seismic detection vessel “Barbaros Hayrettin Pa a,” belonging to the Turkish Petroleum Corporation, has started to conduct deep-sea drilling and seismic exploration of oil and natural gas resources in Samsun, Ordu and Giresun in the Black Sea.

The Turkish Petroleum Corporation, which is a subsidiary of the Ministry of Energy and Natural Resources, has begun natural gas and oil exploration in the Black Sea. The ship Barbaros Hayrettin Pa a which anchored in the Samsun Port harbor on Saturday and received logistic support, started to conduct research on Samsun, Ordu and Giresun offshore.

Moreover, onboard the vessel, which will conduct research for three months in the region, are 44 crew members, including mostly researchers. Two weeks ago, Energy and Natural Resources Minister Berat Albayrak announced that Turkey plans to perform deep-sea drilling and seismic exploration of oil and natural gas resources in the Mediterranean and Black Seas.

“As of 2017, we are starting to search for energy resources in the Mediterranean and the Black Sea. We are planning to dedicate two vessels to the drilling process,” Albayrak said at the IHS CERAWEEK energy conference in Houston, Texas.

Albayrak noted that surveys, which are currently operated by the Hayrettin Pa a Seismic Exploration Ship, will be upgraded with another ship, saying: “With the second ship being launched, Turkey will actively conduct its exploration activities in multiple dimensions and with more advanced capabilities,” Albayrak added.

Stating that Turkey has entered a new phase of development with significant changes in energy, investments and steps being taken, Albayrak said they, as the Ministry, have recently accelerated steps regarding oil and gas exploration.

“Especially this year, we will take important steps to address exploration and drilling issues, particularly in the Black and Mediterranean Seas,” Albayrak said, adding that with a second vessel coming on the heels of the first seismic survey vessel Barbaros Hayrettin, Turkey will launch exploration in both the Mediterranean and Black Sea, also conducting more active two-dimensional and three-dimensional seismic explorations in both seas.

Albayrak emphasized that more than 60 percent of the world’s oil and natural gas resources are located in Turkey’s region, noting that the country is entering a new era and taking significant steps in making new investments in energy.

The future of a Caspian gas rig swings between the EU and Russia

TRT World, 20.03.2017



A white metal building protruded upwards in a large empty field along the coast of the Caspian Sea in the east of Azerbaijan. Welding sparks flickered from its floors, making the structure look like a matrix, lighting up from afar.

Men in fluorescent coveralls purposefully walked in and out of the building. In it, two pipes, each as wide as a redwood tree trunk, stood crisscrossed with their ends severed. Six months later, these pipes are planned to be one of the main arteries of an ambitious energy project aimed at transforming Azerbaijan into a key gas exporter at the crossroads of Europe and Asia.

“We are sitting on two trillion cubic metres of gas,” Elman Nasirov, a close aide to Azerbaijan’s President Ilham Aliyev, told TRT World. “If we can get gas to Europe it will be a game-changer and everybody would win.”

Azerbaijan’s focus on developing its gas fields began just as falling oil prices hit its economy in 2011. A large part of the country’s revenues come from the sale of crude oil, covering one-fifth of its Gross Domestic Product.

Baku’s concerns over its singular source of revenue matched with those of Europe, which sought to explore new energy fields to diversify its energy mix away from Russia. In Azerbaijan, it saw a potent energy source.

The European Union (EU) member states came together in May 2009 for a summit named “Southern Corridor – New Silk Road.” The summit planned out what eventually became the Southern Gas Corridor, a proposed 3,500-kilometre-long network of three gas pipelines from Azerbaijan’s Caspian Sea basin.

They are expected to carry 16 billion cubic metres of gas from the Shah Deniz rig alone, and likely more if other gas sources are added to the network. The South Caucasus Pipeline (SCP) would carry gas from Azerbaijan to Georgia and relay it through Turkey’s Trans Anatolian Natural Gas Pipeline (TANAP) before passing it on to Greece, Albania and Italy through The Trans Adriatic Pipeline (TAP).

The Trans-Anatolian Natural Gas Pipeline (TANAP) project, set to carry Azeri gas to Europe, is now ahead of schedule, the Turkish government said in late January. But the future of the Southern Gas Corridor will not be shaped by hollow pipes. It will be shaped by geopolitical realities instead, where Russia, Europe and Turkey are engaged in a power play for supremacy.



“The corridor will allow Brussels more negotiating power and help end Russian price monopolies,” said Marat Terterov, founder of Brussels Energy Club. Marat said Lithuania won big concessions from Russia’s Gazprom after the country began importing liquid natural gas from the Middle East. The option of trading liquid gas from the region gave Lithuania a much needed bargaining chip against Russia. Soon after, “Russia gave Lithuania a 25 percent discount [in natural gas],” he said.

The Southern Gas Corridor will be sourced from the Shah Deniz installation. The gas will be supplied to Turkey, Georgia and several eastern European countries. Azerbaijan has cautiously steered through delicate international tensions, staying neutral when Russia annexed Ukraine’s Crimea in March 2014. The EU, one of the major stakeholders in the Southern Gas Corridor, condemned Russia’s military advances, describing the presence of its troops in Crimea as illegal.

“At the moment politics dominates the debate on gas supply in Europe,” Terterov said. “And this project will help de-politicise the debate.” Azerbaijan was careful not to antagonise either Russia or the EU. The stakes are too high for the country: while European markets offer economic growth, Russia holds the market levers to control gas prices.

In the long run, this could mean that if Azerbaijan tilts away from Moscow and somehow happens to pivot towards Brussels, Russia can hit back hard by selling gas at rock bottom prices, making Azeri gas uncompetitive.

“Gazprom could, in theory, offer large volumes of below-cost natural gas into the transit infrastructure crossing Turkey and Greece just to block Azeri gas and any other gas from accessing the European market,” said Antonia Colibasanu, a Russian energy analyst with US-based think-tank Geopolitical Futures.

The Azerbaijani government is fully aware of Russia’s sheer volume of gas and its own limitations. “This is not against Russia,” Nasirov, President Aliyev’s advisor said. “Azerbaijan has a balanced strategy that doesn’t support any one side. We want to use our energy to make friends. This is our vision of strategic balance. It is President Aliyev’s vision.”

Russia produces 500 billion cubic metres of gas per year and caters to 34 percent of Europe’s energy needs. That’s 161 billion cubic metres of gas per year. It has access to an estimated 24 trillion cubic metres of natural gas reserves, according to state oil firm Gazprom.

In comparison to that volume, Azerbaijan’s total production is 29 billion cubic metres a year. With Shah Deniz, the production will go up to 45 billion cubic metres a year. “Completely replacing Russia is not a goal in itself,” Colibasanu said. “But having something else that would not allow Russia fully controlling the energy sector, especially in regions like Central and Eastern Europe [which are transit areas and are also emergent economies] is needed for strategic purposes. Which is why Europe invested in diversifying away from Russia.”

Russia, on the other hand, considers Azerbaijan as its ally. Sergey Markov, a senior advisor to Russia’s President Vladimir Putin, told TRT World in Baku that Azerbaijan’s ruling elite were Russophiles, who couldn’t afford to leave Russia out. “Most of Azerbaijan’s ruling elite speaks Russian as a first language,” said Markov. Azerbaijan will kick start the Shah Deniz gas platform by the year’s end.

The gigantic 29,000 tonne installation will be set up in the Caspian Sea, 90 kilometres off the coast of Baku, and its severed pipes will be connected to the gas source. "It'll be a remarkable sight and will take at least two months to execute," said Aslan Aliyev, the overseer of the project. "Shah Deniz will become a model for future platforms in the Caspian Sea."

The success and further expansion of the Southern Gas Corridor will be defined by whether Russia and the EU dilute their competing foreign policies. In early February, Russia's energy giant Gazprom brought discomfort to the EU when it hinted toward developing a counter gas deposit in the eastern Mediterranean.

"I wouldn't be surprised if Russia has given some sort of blessing or endorsed the corridor. It is a very fine line, not that Russia is giving orders to Baku, not at all. But there are things that happen behind the scenes which we are not aware of," Terterov said.

Lebanon: Israel's maritime zone law means war

Globes, 23.03.2017



The speaker of the Lebanese parliament Nabih Berri claims that the maritime zone law that Israel is formulating, and includes declaring some 860 square kilometers of disputed waters as Israeli territory, could trigger a war between the countries, reports the Lebanese newspaper "Al Joumhouria."

Berri said, "This is a new assault by Israel. What has been revealed by Israeli media was not arbitrary, but rather reveals a path taken by Israel in a bid to control Lebanon's gas and oil wealth within Lebanese economic borders." "Anyway, if the Israeli disposition is correct, which I tend to believe, it is tantamount to a war sparked by Israel.

It is another maritime Shebaa Farms Conflict which opens the situation to many dangerous possibilities." In January, the Lebanese government decided to issue tenders for gas and oil exploration licenses for five offshore blocks, three of which are in areas overlapping waters disputed with Israel.

At the same time, steps have been taken in Israel to formulate the maritime zone law, which was suspended in 2014 from concern that it would require Israel to sign the international maritime convention, which would bring the matter to an international tribunal where Israel would have no control. Lebanon believes that its economic waters contain 850 million barrels of oil and no less than 2,700 BCM of natural gas, similar to Israel's potential, including the fields that have already been discovered. A tender process it began in 2013 but never came to fruition attracted 52 oil and gas companies.

Commenting on this issue at the Cerweek Conference in Houston, Minister of National Infrastructures, Energy and Water Resources Yuval Steinitz said, "In early February, we sent an official letter to the UN expressing our protest about the actions by Lebanon, which published a tender for its marine economic waters that extended into the edge of Israel's economic waters. Israel will maintain its rights, but is open to a dialogue in this context."

Israel has also asked the US and the UN to pressure Lebanon to change the oil and gas exploration tenders being planned by the latter in five maritime blocks. Former Foreign Ministry diplomat Eran Etzion, who headed the diplomatic planning division from 2008-2013 and who was involved in the Israel-Lebanon maritime border, said, "This topic is complicated and sensitive."

It contains diplomatic, security, legal and of course energy issues. With the current tensions between Israel and Syria and Iran and Hezbollah being empowered, special caution is required in handling the matter.

In the past, Israel was correct to act in coordination with the US and even initiated quiet diplomacy that brought results, albeit limited. In the Trump era, and with Russia playing a more significant role than in the past, a new diplomatic and energy opportunity has opened up for Israel. Let us hope the government will know how to take advantage of it."

New pipeline plan may help save the Dead Sea

Financial Times, 22.03.2017



The Lido Hotel, on the northern shore of the Dead Sea, is one of the Holy Land's more evocative recent ruins. The hotel was built when the British administered Palestine (1920-1948), and guests would drink sweet Arab coffee on the hotel's terrace and gaze across the salty water which lapped at its steps.

But the Dead Sea no longer laps at the Lido's steps: its water level has been dropping at a rate of one metre per year. Today the shore lies half a kilometre away and the Lido has been long abandoned to the elements and vandals. Graffiti is scrawled over a fresco showing what used to be the mighty Jordan river and its tributaries, including the Yarmouk.

Israel, Jordan and the Palestinian Authority, which all share the Dead Sea's shoreline, are now trying to halt the decline with the ambitious, long-discussed and controversial \$1.1bn "Red-Dead" project: to divert water from the Red Sea, turn some of it into drinking water and pipe the rest north into the Dead Sea. The pipeline will start at Aqaba, the Jordanian port, where a desalination plant will be built. It will run through Jordan, generating hydroelectric power from its final stretch when it plunges several hundred metres below sea level into the Dead Sea, the world's lowest land elevation.



Freshwater from Aqaba will be bought by Israel's southern Arava region; Jordan will buy Israeli water from the Sea of Galilee; and the Palestinian Authority will buy water from an Israeli desalination plant as part of a water swap. (Pumping it north from Aqaba would be too expensive.)

According to environmentalists, about two-thirds of the drop in the Dead Sea's water level is due to the companies and farms that divert water from the Jordan river in Israel, Jordan and Syria. The remaining 30-40 per cent is caused by the large mining companies in Israel and Jordan that steer its southern waters into evaporation ponds to make potash and bromine. The Dead Sea has lost more than a third of its surface over the past two decades.

"The demise of the Dead Sea is not caused by climate change," says Gidon Bromberg, Israeli director of EcoPeace Middle East, a regional non-governmental group which also includes Jordanian and Palestinian environmentalists. He squarely blames the governments of Israel, Jordan and Syria.

Large sinkholes have appeared along the Dead Sea's shores, which officials and environmentalists link to the drop in water levels; in Ein Gedi, Israel, the highway that runs along the shore has been diverted to avoid them. On the Jordanian side, hotels have built staircases and elevators to convey tourists down to the receding shoreline.

"Jordan is very committed to the Red-Dead project, and we think it is a very important strategic project for us," says a Jordanian official involved in the project, who asked not to be named. "It is to counter one of the biggest challenges that we are facing when it comes to water shortage." Jordan has one of the world's worst water problems, ranking 173rd in terms of renewable internal freshwater per capita, according to the World Bank, only slightly better than Israel.

Compounding its desert climate and meagre natural endowments of water, primarily from aquifers, Jordan's water purification and delivery infrastructure has had inadequate investment by the government, which faces multiple and competing demands from a swelling population.

In November 2016 Jordan announced that five global consortiums had pre-qualified for a first-phase tender in the first quarter of 2017. Construction is due to begin in 2018, officials say, and the project will be in commission by 2021.

Plans to pump water into the Dead Sea have been discussed for more than a century, but always delayed due to cost concerns, geopolitical ructions or worries about the environment. Planners' priorities have shifted as they pondered what they wanted from a desert waterway — power, water, neighbourly relations, leaving a mark on the landscape or, more recently, simply arresting the alarming drop in the Dead Sea's level.

In the 19th century, British engineers and early Zionists mooted the idea of a Mediterranean-Dead Sea canal (nicknamed "Med-Dead"), generating hydroelectric power in the water's final plunge from 200m above sea level to 430m below it at the Dead Sea.

Discussion of the project revived in Israel after the 1973 global oil shock, but it was deemed unviable. A Red Sea-Dead Sea canal, debated for decades after Israel's founding in 1948, gained currency after the Israelis signed a peace agreement with Jordan in 1994.



It was formally pursued from 2002 by Israeli, Jordanian and Palestinian officials, with plans to produce 800m cubic metres of drinking water per year and release more than 1bn cubic meters of brine into the Dead Sea.

It was abandoned for cost and environmental reasons. In Washington in 2013, the three governments signed a memorandum of understanding on the more modest current plan, the Red Sea-Dead Sea Water Conveyance Project.

Israeli, Jordanian and US officials have championed the project as a vehicle for economic co-operation in a region where, despite the 1994 peace treaty, widespread animosity toward Israel exists. (An agreement by Jordan to buy \$10bn of Israeli natural gas over 15 years has generated street and parliamentary protests.)

While the desalination and water purification and transfer portion of the scheme will be a “Build-Operate-Transfer” project designed to finance itself, the conveyance system piping water north to the Dead Sea will not pay its way. Israel and Jordan are looking for \$400m in grants and loans on favourable terms to underwrite the project, and say they are making progress.

An Israeli official says that the US, EU, Japan and Italy have pledged money towards the project, and further commitments will firm up as donors finalise their due diligence. “I am sure there will be more pledging,” says Oded Fixler, deputy director-general at the Israel Water Authority.

Environmentalists have warned that the project will replenish only a fraction of the water the Dead Sea is losing every year, so levels will continue dropping. They also say that because the Red Sea and Dead Sea have different chemical compositions, there is a risk that the water in the latter could turn from its trademark blue to a milky white.

This would in turn endanger tourism, they say. “We are calling on our governments and the international community to at least study alternatives of how to dispose of the brine, and not assume dumping it in the Dead Sea is the only option,” says Mr Bromberg.

The most effective way of diminishing the Dead Sea’s shrinkage, he says, would be to sharply reduce the diversion of water from the Jordan river and to give the mining companies greater incentives to invest in less water-intensive technology.

Jordanian and Israeli officials insist that the environmental concerns are being taken seriously, including in a study by the European Investment Bank now under way. They say the project will be closely monitored, especially when the discharge begins replenishing the Dead Sea’s water levels. When and if this happens, Israelis, Palestinians and Jordanians will welcome the revival of their natural wonder, even if it comes too late for the Lido hotel.

Saudi pledges stable oil supply as market confused by data

Reuters, 23.03.2017



Output or exports? OPEC members have argued for decades over which of the two they should monitor to gauge compliance with oil-output cuts. This month, Saudi Arabia has thrown a third metric – supply - into the debate.

The move saw oil prices declining, with confused traders fearing Riyadh would pump more crude, thus complicating OPEC's efforts to reduce glut and prop up the market. But sources in Riyadh argue that those worries are overblown. They say that while Saudi production could fluctuate slightly from month to month, supply will remain stable at around 10 million bpd, fully in line with the Saudi OPEC quota.

“What we are watching closely is the supply. Saudi Arabia will not supply the market more than 10 million bpd,” a Saudi-based industry source said. On Jan. 1, a deal between the Organization of the Petroleum Exporting Countries and some non-OPEC states to curb production by 1.8 million bpd came into effect.

Production is the volume of crude pumped from the wellhead, while supply is the amount of crude sent to the market, domestically and for export. This may vary from production on a monthly basis based on movement of barrels in or out of storage.

For the past couple of years, the difference between Saudi production and supply figures has not been large. Discrepancies in January and February were notable after the OPEC agreement as the market has focused more on production and compliance.

Riyadh's plea for OPEC and market watchers to focus on Saudi supply rather than production or exports is driven by the kingdom's unique position in OPEC as a holder of huge stockpiles. Saudi Arabia, the world's top oil exporter, has long been OPEC's only holder of significant spare capacity, a cushion to help smooth possible shortages in global supply.

Spare capacity can be achieved through increased pumping or by taking oil out of storage. Riyadh expanded the latter over several decades as its domestic needs grew and new refineries were built. Saudi oil inventories peaked in October 2015 at a record 329.43 million barrels but have declined every month since as the country drew down its stockpile to meet domestic demand without affecting exports.

At the end of December 2016, the kingdom held 272.621 million barrels of crude inventory – almost a tenth of all oil held in storage in industrialized nations, or members of the Organisation for Economic Cooperation and Development.



By comparison, the U.S. Strategic Petroleum Reserve, an underground facility in Louisiana and Texas that serves as the largest emergency supply in the world, has the capacity to hold more than 700 million barrels of oil.

Riyadh has often communicated two sets of output figures to the market: its pumped crude production, which it reports directly to OPEC, and a supply figure usually leaked to journalists by industry sources familiar with the matter.

Supply can give a fuller picture of how much oil is reaching the market and it is monitored by OPEC secondary sources as well as industry media such as Reuters, although production is the main metric used to gauge compliance. The past two OPEC deals were also based on production.

Saudi sources say operational issues require the regular addition or withdrawal of oil from storage. Saudi Arabia, which is responsible for a third of OPEC's output and more than a tenth of global production, told OPEC its production increased to 10.011 million bpd in February from 9.748 million bpd in January. But it later issued a statement saying its January supply was higher than output at 9.99 million bpd, meaning it drew oil from storage, while in February supply stood below output at 9.90 million bpd, meaning it moved oil into storage.

The current OPEC output quota for Saudi Arabia is set at 10.058 million bpd. So when the market widely praised Riyadh in January for producing below its output target, the kingdom never said it was actually supplying more crude.

While the OPEC agreement focuses on compliance with production, not exports, some analysts have suggested exports will be key to help rebalance the market. Olivier Jakob from Petromatrix consultancy said Saudi exports have declined over the past year much less than its output, partially due to reduced crude burn in winter and as the country tries to switch its power generation to natural gas.

"With a low level of reduction in Saudi crude oil exports versus a year ago and the increase from Iran, the Gulf region was exporting about 250,000 bpd more crude oil than a year ago. This has not allowed much of a rebalancing in the first quarter," said Jakob.

OPEC restraint needs to stretch into 2018

Forbes, 20.03.2017



The old traders' adage 'better to travel than arrive' has proved true in 2017. Last year was the year to hitch a ride on oil, Brent near doubling to US\$55/bbl from the Q1 lows. Investors piled into oil-leveraged equities through 2016, the MSCI Energy index surging 23% and outperforming the broader market by 18%.

The nagging feeling though was that prices had already made the big move, by year end encroaching on our annual average Brent forecast of US\$57/bbl for calendar 2017. The journey had been pretty smooth in the early weeks of this year, an altogether happier state of affairs for upstream operators.

But upward momentum ceased, and investors' appetite dulled. Then on March 8th crude prices suddenly dropped, with WTI falling below US\$50/bbl. The sell down of oil and gas shares accelerated, and MSCI Energy has now lost two-thirds of 2016's hard earned relative gains.

Confidence plays a huge role in any market, commodity or otherwise though it's the fundamentals that ultimately determine price. Last year's big rally in oil markets was triggered initially by confidence, that two years of financial pain was forcing OPEC to shift strategy and support prices.

The fundamentals were taken care of by removing 1.3 million b/d of supply from the market in January, fostering the belief that OPEC and its Russia-led confederates' action would hasten the rebalancing of supply and demand.

Our Macro Oils team, led by Ed Rawle, sees three main reasons. First, global demand has disappointed so far this year. Chinese New Year, mild weather in the US, and the effects of demonetization in India slowed or stalled demand growth in each of these three engines of demand growth. We think these January hiccoughs are transitory, and that global demand growth of 1.3 million b/d is still achievable for this year as a whole.

If we are right, 2017 will be the third best year for demand growth this decade. Second, growth in US supply. Tight oil operators are putting a lot of capital to work again - the horizontal rig count has doubled from the lows of last year.

We have just added another 40 rigs to our assumptions for 2017 and 2018, 70% into the Permian. Our latest production outlook suggests tight oil will recover from the August 2016 lows of 3.9 million b/d to reach the previous peak of 4.45 million b/d in August 2017, a span of just 12 months.

Our Base Case anticipates 0.7 million b/d of net new tight oil volumes by Q1 2018, though around 0.2 million b/d is at risk should cost inflation take off. Even so, the rapid recovery in US production demonstrates the law of unintended consequences at work. OPEC's resolve to support prices at the expense of its own market share will be increasingly tested by tight oil growth in the coming months.

Thirdly, the market balance into 2H 2017 and 2018 is delicately poised. We already assume in our Base Case that OPEC and partners will extend current production cuts through 2H 2017, driving an implied global stock draw through the second half of this year.

But into next year, one way or another, the market will need to absorb a lot of oil. In total, around 2 million b/d of additional supply is on its way if no new agreement is struck: 0.9 million b/d as OPEC itself turns the taps back on, and 1.1 million b/d from non-OPEC (US tight oil, and Russia). This is roughly double the 1.0 million b/d demand growth we expect next year. The implication is either a substantial inventory build in 2018 or OPEC and partners are forced to reach a new agreement.

Optimism has been palpable across the industry in recent months, feeding off OPEC's action. But the real risk of a glut lurks just below the surface and won't go away. Oil and gas companies and investors in the sector will be hoping the financial pressures that led to OPEC to seize back the initiative will continue to have the desired effect.

Why Saudi Arabia must push OPEC to extend production cuts

Stratfor, 20.03.2017



When news broke on Nov. 30, 2016, that OPEC had finally agreed on a deal to cut oil production, its first since 2008, traders sent Brent crude prices leaping 9 percent to break the \$50 per barrel threshold.

But after the deal was implemented, and despite reduced output among OPEC and non-OPEC producers of 1.4 million to 1.5 million barrels per day, the price of Brent fell back below \$50 per barrel on Wednesday. There are a number of factors driving continuing soft prices, but OPEC members' compliance with the deal does not appear to be a significant one.

This weekend in Kuwait, an OPEC committee charged with monitoring production output will meet to discuss compliance. The same meeting will also bring a key question into focus: Will OPEC members be willing to extend the deal beyond its June expiration?

Total production cuts among OPEC members rest at more than 90 percent of agreed-upon levels, with a compliance rate of about 40 percent among non-OPEC countries. Compared with previous deals, compliance levels are high.

Saudi Arabia has driven the OPEC percentage up by trimming considerably more production than it had pledged. For instance, Saudi output for February averaged about 770,000 bpd less than it produced in October 2016, a 58 percent deeper cut than it had agreed to in November.



While compliance is not the driving issue, the big question will be whether Saudi Arabia will push for an extension beyond June. That's when Saudi domestic consumption generally begins to ramp up as it burns more oil to generate electricity to meet increasing demand during the hot summer months.

As the de facto leader of OPEC, Saudi Arabia's intentions weigh the most when considering an extension. It has sought to mollify concerns from oil market participants that the deal will not be extended by saying that it will push for an extension if global crude inventories do not fall to their five-year averages by the time a decision is supposed to be made at OPEC's next general meeting, May 25.

Given that it is simply impossible for oil inventories to fall that much before May, an extension of the production cuts seems inevitable. Saudi Arabia and other oil producers spent two years pummeling the oil market with a glut in supply, resulting in two years of increasing oil inventories.

Although it no longer has the ability to control the price of oil, Saudi Arabia feels that market management can still result in a drawdown of supplies. But what the Saudis need in order to accomplish that goal is time.

One of the contributing factors to the recent oil price decline has been the natural seasonal fluctuation in supply. Generally, during the first few months of a year, global oil inventories increase as energy demand slips from its peaks in the summer and winter months. Later in the year, the market could go into deficit, causing sustained withdrawals from stockpiles, which right now are considerable.

OPEC estimates show that among the countries in the Organization for Economic Cooperation and Development, commercial crude oil stocks exceed five-year averages by a whopping 209 million barrels, and commercial products inventories exceed the five-year average by 69 million barrels. That implies that in order to return existing inventories to the five-year mark, on average demand would have to exceed supply by 1 million bpd for roughly nine months, or 1.8 million bpd for five months. That is an achievable goal, but only with time.

This line of thinking is a powerful influence on Saudi Arabia's current strategy. If Saudi Arabia cannot hold the production cut deal together, then other producers would increase production, and Saudi Arabia would likely have to follow suit in order to meet domestic demand and also not lose its market position overseas.

The market might still maintain a deficit during the summer months, but the real risk would come when demand falls again in autumn. If a production deal is not reinstated by then, oil inventories could once again swell. At that point, there would be little chance of resurrecting a supply deal in quick order. Prices, of course, would be deeply affected almost as soon as a failure to extend the deal is announced.

As Saudi Arabia looks to 2018, its priorities will be seeing a reversal in oil inventories and forestalling the possibility of oil prices falling back below \$40. Riyadh knows that by and large, a swift recovery in oil prices is unlikely. Efficiencies have brought the marginal costs of shale oil production down to the \$50 to \$60 range for most U.S. plays, if not lower.



This provides short- and medium-term caps on oil price increases. The fact that Saudi Arabia cannot rely on a return to higher oil prices means that its vital Vision 2030 and five-year National Transformation Program, which aim to shift the Saudi economy away from its reliance on petroleum, remain the absolute top drivers behind its economic and domestic policies.

Its reform effort will rely on the initial public offering of shares of Saudi Aramco, planned for 2018. The country will use the proceeds of those sales to help pay for many of the economic reforms and finance development of the non-oil sector.

Since the Saudi Aramco deal is so vital to the future of that economic reform package, Saudi Arabia may be willing to overlook poor compliance with a production cut agreement from other participants, such as Russia, or will refrain from aggressively pushing Iran, which is exempt from the current production cut measure, to limit its production should it join the deal. But that doesn't mean Saudi Arabia will not be aggressive about trying to coerce other OPEC members to extend the production cuts. It simply cannot afford to allow the production deal to expire. Its efforts would receive a boost if other producers follow suit.

Many of its Gulf Cooperation Council allies, including Kuwait, have also expressed the need to extend the deal. Additionally, many of the supply hawks within OPEC, such as Venezuela, remain supportive of an extension.

The biggest area of concern for Saudi Arabia over oil production remains compliance by Russia. The country had agreed to trim production over time to reach 300,000 bpd, the second-highest figure by any producer in the deal, and although it has not yet hit that mark, it is ahead of schedule in implementing cuts.

That said, the lion's share of Russia's cuts have been shouldered by Rosneft, which alone has trimmed output by 83,000 bpd, representing roughly two-thirds of Russia's cuts in production. Rosneft has consistently lobbied for Russia not to be involved in any agreements and earlier this month noted that it had concerns about extending the deal because other of the country's producers have not fulfilled their promises.

This is likely a message from the oil giant's chief, Igor Sechin, aimed squarely at rival Russian producers, warning them to get on board because Rosneft will not increase its share. Rosneft is likely leveraging its participation in the cuts to exact concessions from the Kremlin on a string of other issues (such as taxes and assets control).

Should Rosneft oppose extending the deal, Russia's overall involvement would decline entirely. If Russian participation wanes, it would be a huge blow to Riyadh, which is competing with Russia for market share in places such as China.

Nevertheless, it is clear what Saudi Arabia's optimal outcome is. Saudi Energy Minister Khalid al-Falih has his work cut out for him over the next two months as he strives to extend the production cut deal in the face all of its complications.

World's top LNG buyers form alliance to push for flexible contracts

Reuters, 23.03.2017



The world's biggest liquefied natural gas (LNG) buyers, all in Asia, are clubbing together to secure more flexible supply contracts in a move which shifts power to importers from producers as oversupply grows.

KOGAS said it had signed a memorandum of understanding in mid-March with Japan's JERA and China National Offshore Oil Corp (CNOOC) to exchange information and "cooperate in the joint procurement of LNG. "Together, the three companies purchase a third of global LNG production, giving them a strong hand to challenge restrictive contract terms that have squeezed buyers' finances.

Influential buyers' clubs are largely unheard of in commodity markets where it is the producers, such as the Organisation of Petroleum Exporting Countries (OPEC), who wield power, enforcing production quotas to manage prices.

A painful period of high LNG prices before 2014 left Asian importers scrambling to contain losses and led to the first talks between India, Japan, South Korea, China and Taiwan about joint purchases. Several joint LNG-buying deals have been set up since then but none approach the scale of the latest agreement, which is the first involving the game's biggest players.

Under Thursday's agreement, the buyers aim to extract concessions from producers that would give them supply flexibility, such as having the right to re-sell imports to third parties, something they are not allowed to do currently under so-called destination restrictions.

"We have created a platform to share, discuss and solve our common issues such as traditional LNG business practices, including destination restrictions," said JERA spokesman Atsuo Sawaki.

The alliance of three big buyers across three countries will put pressure on exporters such as Qatar, Australia and Malaysia. They prefer to have clients locked into fixed supply contracts which run for decades and make buyers take fixed amounts of monthly volumes irrespective of demand, with no right to re-sell surplus supplies to other end-users.

The agreement has been helped by the fact the power wielded by OPEC is unparalleled in the commodities world. Attempts to create an OPEC-style body through the Gas Exporting Countries Forum has failed to gain traction because gas and LNG markets are more fragmented than oil, while similar moves in coffee, railroads, rubber and tin have all collapsed over the decades. The LNG market is undergoing huge changes as the biggest ever flood of new supply is hitting the market, with volumes coming mainly from Australia and the United States.



JERA, KOGAS and CNOOC will all struggle with having excess supplies in the next few years, sources at three major LNG producers told Reuters, curbing the consortium's ability to strike any new deals this decade.

Reworking existing deals, however, is feasible and may hit the world's biggest producer Qatar the hardest as many of its mid-term supply deals with Japan start to expire from around 2023, industry sources said.

A senior Qatar Petroleum official hinted that buyers - emboldened by temporarily oversupplied markets to demand better terms - may come to regret their actions when the cycle turns. "Right now the market is over-supplied but if we went into a period of a tighter market, how would these buyers organisations hold up? That is an important question," the official said.

"If there is a market crunch and gas tightens it could recreate incentives for buyers to lock in long-term contracts." More practically, the deal complements the buying habits of each company - KOGAS largely buys for winter, CNOOC for summer and JERA across both seasons - offering opportunities for swapping cargoes, industry sources said.

"Flexibility is becoming critical for LNG buyers ... as the rise of solar capacity is going to make consumption of LNG more seasonal," said Kerry Anne Shanks, head of LNG research for Asia/Pacific at Wood Mackenzie.

New production has resulted in global installed LNG capacity of over 300 million tonnes a year, while only around 268 million tonnes of LNG were traded in 2016, according to Thomson Reuters data.

That has helped pull down Asian spot LNG prices LNG-AS by more than 70 percent from their 2014 peaks to \$5.65 per million British thermal units (mmBtu). It has also given importers more suppliers to choose from, putting pressure on major producers like Royal Dutch Shell , Chevron, ExxonMobil and Woodside Petroleum to grant more flexible contract terms.

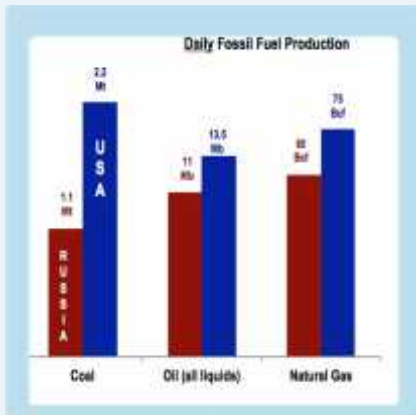
Companies forming cartels are difficult to challenge at the World Trade Organization, which does not have rules about anti-competitive behaviour and only governs trade relations between member countries. But WTO rules do oblige state-run firms to trade on commercial and non-discriminatory terms.

Thomas Cottier, a law professor and senior research fellow at the World Trade Institute at the University of Bern, said the LNG alliance may or may not comply with the WTO rules. "To the extent that governments are directly or indirectly involved, it may violate rules on state trading or the prohibition to encourage voluntary export restraints. However, conduct of private companies is subject to domestic anti-trust law and is not part of WTO law," he told Reuters by email.

Even if an LNG supplier such as Qatar, Russia or Australia launched a dispute at the WTO, several other major gas producers such as Iran and Turkmenistan are not members of the WTO and therefore have no right to have their complaints heard there.

China's LNG imports continue to rise

LNG World, 23.03.2017



China, world's largest energy consumer and the third-biggest LNG importer, boosted its imports of the chilled fuel in February by 28.5 percent year-on-year. China's LNG imports increased to 2.37 million mt in February when compared to 1.85 million mt in the same month in 2016, according to data.

The country's imports rose to 3.44 million mt in January, the second-highest monthly import level, behind a record 3.73 million mt set the month before as a cold snap across the country spurred demand. China's LNG imports are expected to significantly rise in the next five years as it is seeking to cut its addiction to coal to reduce pollution.

All drill, no frack: U.S. shale leaves thousands of wells unfinished

Reuters, 24.03.2017



U.S. shale producers are drilling at the highest rate in 18 months but have left a record number of wells unfinished in the largest oilfield in the country – a sign that output may not rise as swiftly as drilling activity would indicate.

Rising U.S. shale output has rattled OPEC's most influential exporter Saudi Arabia and pushed oil prices to a near four-month low on Wednesday. U.S. production gains are frustrating Saudi-led attempts by the world's top oil exporters to cut supply, drain record-high inventories and lift prices. Investors watch data on the number of rigs deployed in North American oil and gas fields as a leading indicator for output.

But the rising rig count and frenetic drilling activity in the Permian Basin in West Texas is not all about pumping oil. During the 2014-2016 downturn in global oil prices, the number of wells left incomplete grew as companies shut down rigs, laid off workers and retreated from the fields. When prices picked up, operators were expected to pump the oil from those incomplete wells before spending money on drilling new ones. Instead, the number of incomplete wells has risen. A record 1,764 wells were left unfinished in the Permian in February, according to U.S. government data going back to December 2013. In February alone, 395 wells were drilled and only 300 completed. That was the highest drilling rate in the Permian in two years.



The surprise surge in unfinished wells indicates that investors, traders and oil market players may need to reinterpret rig count data. “You would now be looking at the number of wells drilled and the uncompleted wells and not necessarily the rig count,” said Bruce Bullock, director of the Maguire Energy Institute at Southern Methodist University in Dallas.

Reuters interviews with more than a dozen well completion service providers, oil and gas lawyers and industry experts show that some operators are drilling because their leases require them to do so within a specified time limit to keep their leases. But they may not be required to actually pump the oil immediately after they have drilled the hole.

To complete a well, shale producers stuff the hole with sand, water and chemicals at high pressure until the rock fractures and releases the oil contained in its pores. There is typically a lag of a few months between drilling and completion in government data, so some of the increase in unfinished wells can be explained by rising activity.

Some leases do require firms to produce a minimum volume of oil. On those leases, many firms will frack one well and leave others incomplete. That allows them to meet their contracts with land holders but gives them flexibility to come back and pump the oil later.

The value of land in the Permian has rocketed as oil prices recovered to around \$50 a barrel, so oil firms are now scrambling to do the required drilling to keep leases they had left dormant. “During the period where we had the downturn in price, there were a lot of leases that were in danger of being lost ... they had to drill a well to maintain it,” said Michael Stoltz, an attorney who represents energy firms in Texas for Stubbeman, McRae, Sealy, Laughlin & Browder Inc.

A new lease could cost the operator as much as five times more than a few years ago, said Joe Dancy, an oil and gas lawyer, who helps negotiations on such deals. Drilling costs are also on the rise, adding to the rush by producers trying to stay ahead of price inflation.

Fracking is more expensive than drilling and is time consuming. As much as 70 percent of well completion costs are tied to fracking, while 30 percent is for drilling, experts say. Fracking crews are in short supply, which is another reason that oil firms have delayed completion.

As activity has picked up in the Permian, the labor market has tightened. Many oil workers found jobs elsewhere during the downturn, so rebuilding the workforce is taking time. “There were a number of completions that were originally scheduled in first quarter and you’ve seen those slide to Q2 and that’s really being driven by ... access to service crews and things like that,” said Tom Stoelk, the CFO and interim CEO of Northern Oil & Gas Inc (NOG.A), a producer focused on the Williston Basin in North Dakota and Montana. The number of incomplete wells could complicate OPEC’s attempt to balance markets, as they could be completed relatively quickly if the oil price rises.

If all the incomplete wells in the Permian pump instantaneously, output from the field could jump as much as 300,000 barrels per day (bpd), according to consultancy Wood Mackenzie. In February, the field accounted for about 2.1 million bpd, or about 23 percent of total U.S. crude output of about 9 million bpd, according to U.S. government data. Landowners lease their land to energy companies for an upfront lump sum or signing bonus and subsequent royalty payments.



A standard lease lasts three years, with an option to extend for another two years, said sources who work with companies on such agreements. Leases vary greatly. Some require drilling but no production, others require production, and some require a well every six months.

None of them require firms to complete all the wells they drill. Continental Resources Inc (CLR.N), which has about 185 such drilled but uncompleted wells (DUCs) in the Bakken in North Dakota, says that innovation during the downturn meant it could now complete those wells more cost efficiently. "We're glad we saved all those wells," CEO Harold Hamm said at an industry conference this month.



Announcements & Reports

Russian LNG: Progress and delay in 2017

Source : OIES

Weblink : <https://www.oxfordenergy.org/wpcms/wp-content/uploads/2017/03/Russian-LNG-%E2%80%93-Progress-and-delay-in-2017-OIES-Energy-Insight.pdf>

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/>