

## Turkey to gain big energy finance from Islamic Dev. Bank

AA Energy Terminal, 06.10.2016



The Islamic Development Bank (IDB) plans to provide significant financial support over the next 10 years for energy projects in Turkey as this sector is a key development area for the bank, IDB's Turkey Director said.

The IDB is an international financial institution with a current membership of 56 countries. "During the last couple of years, IDB has provided \$540 million for energy projects in the private sector, facilitating the realization of more than \$2 billion worth of investments. Most of these investments were in the renewable energy sector and the rest were for improving energy efficiency," Salah Jelassi, told.

As a result of these investments, Jelassi explained that around 600 megawatts (MW) of new power plants have been put into operation and have started contributing towards Turkey's efforts to reduce its energy import dependency and current account deficit.

"IDB Group is aware of the significant infrastructure investment needs especially in new power generation, transmission and distribution facilities for the electricity sector, as well as more energy supply and storage projects in the oil and gas sectors in Turkey," Jelassi said.

"Given strong demand and ready bankable projects, we are planning to provide significant financial support in the next 10 years to Turkey and we expect a considerable portion to be directed towards energy projects. In contributing to Turkey's development goals, renewable energy and energy efficiency areas will continue to remain significant areas of intervention for the IDB Group," he stated.

Jelassi emphasized that their support is not limited to these areas in the energy sector alone but they are also focusing on other energy fields including cleaner energy generation, energy supply and storage, electricity and gas distribution systems.

He explained that one of the challenges facing investors is the high cost of financing. "As a multilateral development bank, IDB mostly provides sovereign financing on competitive terms. However, such funds are scarce and considering the size of Turkey's investment needs in the energy field, a more innovative financing paradigm has to be developed," Jelassi said.

He also emphasized that the IDB Group intends to use their financing as a leverage while mobilizing supplementary funds from the private sector through market-based structures to support new investments in different energy areas. "Through using IDB's AAA rating, the Bank may potentially assist Turkey and Turkish energy investors in accessing relatively lower cost funds for the realization of this investment target," he said.



The bank will continue to support new solar and wind energy investments in Turkey, either through public institutions, or through local financial intermediaries or even directly, Jelassi said. “As I have said before, a considerable portion of our financing in Turkey will be aimed at supporting new energy generation investments. The most important motive for supporting such projects are for contributing to Turkey’s energy security through the addition of new renewable energy power generation capacity and the associated greenhouse gas emission reductions,” he stated.

Jelassi added that there are various benefits, which the bank identified during the monitoring assessment of similar implemented projects, to such projects and which are extremely important for the bank.

“On one occasion, the project company gained the know-how to manufacture steel carrier towers for wind turbines and now this company is manufacturing such towers for similar wind power plant projects in Turkey. There are also other benefits in boosting the local economy and creating significant employment opportunities for local people,” Jelassi explained.

He highlighted that energy equipment and technologies which are used in solar and wind power plants are also very significant. He said that this is especially true in light of the national targets to decrease energy import expenditure to reduce the current account deficit, to create new employment opportunities and improve local economies.

“Therefore, it is very important for Turkey to gain the ability for wide-scale manufacturing of electromechanical equipment to be used in solar and wind power plants which will also help Turkey improve its macroeconomic indicators as well as provide sustainability advantages,” Jelassi said.

“In line with this, we intend to support the establishment of solar plants in Konya-Karapinar region since this concept also includes the development of local manufacturing capacity for such equipment and technologies,” he concluded.

Turkey’s biggest solar field is planned to be located in the large Konya-Karapinar area of Central Anatolia and aims to have around 1,500 megawatts of installed capacity. The field will be opened to investors for tender in the coming month.

# Turkey needs more energy liberalization for investments

AA Energy Terminal, 30.09.2016



Turkey's energy sector, which has attracted substantial interest from investors thanks to privatization and electricity market reforms, needs to additionally liberalize energy markets to attract further investments, according to the International Energy Agency's (IEA) latest report.

“Energy Policies of IEA Countries: Turkey 2016 Review” highlighted three avenues for reform; 1. The strengthening of the independence of system operators and regulatory authorities, 2. The abolishment of market distortions in favor of market pricing, 3. Continuance of investments in a more flexible and modern gas and electricity infrastructure.

These pillars are critical for securing stable and reliable electric power supplies while safeguarding sustainable economic growth, and ensuring much needed diversification, the report said. “The country should continue down this path and reform its energy markets. During the last decade, electricity market reforms have advanced. The liberalization and privatization of electricity generation and distribution triggered a private investment boom (generating capacity doubled between 2007 and 2014) and secured energy access for its population,” according to the report.

“To attract more investments, the liberalization of the energy markets needs to progress further,” Fatih Birol, the IEA executive director was quoted in the report. Since the last IEA in-depth review in 2009, Turkey has made significant progress in reforming its energy sector. Completing the reforms will allow Turkey to tap into its renewable and energy efficiency potentials.

“With rising energy demand, increasing oil and gas imports, and an energy mix largely relying on fossil fuels, Turkey has a unique opportunity to tap into renewable energies, save energy and diversify its fuel mix,” the report underlined.

In the report, the IEA called on the government to swiftly adopt an energy efficiency program and create a one-stop-shop for the deployment of renewable energy in the country. “Turkey has a unique geographical location and is an important energy player in its region.

The country's regional integration is advancing, thanks to the construction of the Trans Anatolian Natural Gas Pipeline (TANAP) and the connection to the European electricity grid (ENTSO-E) with the Turkish Transmission System Operator for Electricity (TE A ) becoming an observer of ENTSO-E.

“Turkey's contribution is vital for regional and European energy security,” Birol said in the report. The report also highlighted that the drop in gas prices and the rise in global LNG trade will create opportunities for Turkey to reform its natural gas market.

Natural gas accounts for around 40 percent of Turkey's electricity generation while gas demand has more than doubled in one decade. The IEA's review also emphasized the need for competition, diversification and investments in the gas infrastructure, given Turkey's proximity to major resources and private sector interest.

The report indicated that carbon dioxide emissions more than doubled since 1990, and in response Turkey has for the first time set an emissions reduction goal. However, the plan to double coal-fired electricity supply by 2019 will require further investment in clean coal technologies and the swift refurbishment of old plants to reduce greenhouse gas emissions and curb air pollution in Turkey, the IEA said.

"With more energy efficiency and renewable energy, cleaner coal and nuclear can be part of a secure and low carbon mix, but the legal framework must be put in place to ensure high standards of environmental performance and safety," Birol was quoted as saying.

The IEA said in the report that Turkey needs to build on the Vision 2023 and set out a longer term energy policy agenda up to 2030 to guide private energy investments. "Clear and long-term targets for renewables and energy efficiency, faster permitting procedures and enhanced grid integration rules can ensure long-term sustainable economic growth in Turkey," the report concluded.

## Could Turkey become a new energy trade hub in South East Europe?

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The summer of 2016 will probably be remembered as a crucial turning point in Turkey's long stumbling foreign policy implementation.

First of all, the six-year stalemate with Israel has finally been overcome. Not surprisingly, there were voices of dissent in both who criticized the announcement of an agreement, but those who welcome the development outnumber those oppose to it. Turkey and Israel have entered a phase in bilateral relations which will require determination and diplomacy if they are to return to the level of cooperation which existed before the "Mavi Marmara tragedy."

It will not be easy, and it will not happen rapidly. Nevertheless, both sides understand all too well the importance of mutually beneficial cooperation and will spare no effort to achieve it. Another equally important development took place in Turkey's relationship with Russia.



The downing of a Russian fighter jet on 24 November 2015 by the Turkish Air Force essentially froze Turkish-Russian bilateral relations for almost nine months. “Turkey has the potential to enhance its role in the global energy game through the Eastern Mediterranean and through the Black Sea.” Both countries felt the adverse effects of such a break.

Turkey’s tourism industry has been seriously affected and will not recover any time soon, probably falling further in 2017, too. Russia boycotted Turkish goods and looked for new supply sources whereas Turkey’s agricultural exports experienced significant losses in the Russian market. President Recep Tayyip Erdoğan’s letter to President Vladimir Putin sent in June 2016 was interpreted as a gesture to meet the condition of apology demanded by the Kremlin.

This overture provided Putin with the opportunity to welcome his counterpart in St. Petersburg to launch the process of normalizing bilateral relations. Putin has made it clear that normalization will happen in a “step by step” approach, signaling a prudent foreign policy approach with a view to warming up relations gradually. Turkish-Russian relations will, like Turkish-Israeli relations, also develop through careful diplomatic effort.

Incidentally, both normalization processes have one important factor in common, namely, energy. Turkey has the potential to enhance its role in the global energy game through the Eastern Mediterranean and through the Black Sea.

In the south, Egypt, Cyprus, and Israel offer significant potential to become a new natural gas basin whose exports could become a new factor enhancing Europe’s energy security by diversifying supply.

Domestic political difficulties prevented Lebanon from participating in this equation for a while, but it seems that new momentum is already in the making to transform this cooperation into a quadrilateral one.

In the north, Russia is keen to develop new routes of supply to Europe, and Turkish Stream became Putin’s new pet project when he declared the cancellation of the South Stream Project in December 2014.

“Turkey imports 99 percent of its domestic gas consumption.” Berat Albayrak, Turkey’s new Minister of Energy and Natural Resources, who also happens to be Erdoğan’s son-in-law, said in December 2015, that “diplomatic relations between Turkey and Israel had to be normalized in order to transport natural gas from the Leviathan field to Europe through Turkey.”

Now that such normalization has started, there may be a new chapter of cooperation between the two countries in the Eastern Mediterranean. In fact, Prime Minister Benjamin Netanyahu is believed to view Turkey as a very convenient route for the export of gas from Israel’s Tamar and Leviathan offshore fields.



Meanwhile, Turkish-Russian normalization also allows Putin to revisit the “Turkish Stream” project, which has been frozen since November 2015. Immediately after the long-awaited meeting between Putin and Erdoğan in St. Petersburg on 9 August 2016, Russian Energy Minister Alexander Novak said that the first line of the Turkish Stream gas pipeline project would be completed by December 2019.

Erdoğan also confirmed that “the Turkish Stream project with Russia will be realized swiftly following a thorough review.” Russia supplies around 55 percent of Turkey’s domestic gas consumption. Approximately 16 percent is supplied by Iran and around 13 percent comes from Azerbaijan. These three countries are the major suppliers of Turkey’s natural gas imports, with the rest supplied through LNG imports from Algeria, Nigeria, and Qatar. Turkey imports 99 percent of its domestic gas consumption.

Although Turkey’s relations with Russia have been strained for the last nine months, Turkey did not suffer from any shortages due to gas imports from Russia. Nevertheless, those who argue Turkey needs to diversify its supply line now feel even stronger because they believe that “relying heavily on one supplier may entail risks” and cannot be neglected. Turkey, therefore, should try to explore options for expanding its energy cooperation with Israel.

Ironically, normalization with Israel and Russia at the same time raises the question of whether a deal with Russia through Turkish Stream could undermine a potential Turkish deal with Israel. Such a question requires a closer look at Turkey’s opportunities both in the Eastern Mediterranean and in the Black Sea, as well as the benefits that other partners will see due to cooperation with Turkey.

“Turkey is not a major global energy actor given its share of both production and consumption, but Turkey is a significant client for natural gas.” The Turkish economy is dependent on fossil fuel imports. Coal, oil, and natural gas are the main denominators of Turkish energy production. Among these, only coal is available in significant amounts domestically. Turkey acquired 93.4 percent of its oil and oil products, as well as 98.2 percent of its gas supply in 2011 through imports.

Turkey’s share in global oil, gas, and coal production as well as its consumption of those fossil fuels is marginal. Moreover, Turkey’s energy imports do not account for a large share of the global energy trade; it is the eighth largest natural gas importer in the world. Therefore, it is fair to say that Turkey is not a major global energy actor given its share of both production and consumption, but it is a significant client for natural gas.

Turkey is located close to more than 75 percent of the world’s proven hydrocarbon reserves, which presents Turkey with a unique opportunity to become a major energy transit country between the East-West and the South-North axes.

The Turkish Ministry of Energy and Natural Resources outlines the vision for Turkey becoming an energy trade hub. It might be wiser, however, to separate the differences in Turkey’s role in the oil and natural gas sectors.



With regard to oil, two major pipelines cross Turkey, namely the Baku-Tbilisi-Ceyhan crude oil pipeline carrying Caspian oil from Azerbaijan, and the Kirkuk-Ceyhan pipeline transporting Iraqi oil. The full capacity of these two pipelines is 2.8 thousand barrels of oil per day (mb/d). There is an additional transit route through Turkey for oil transport and this is the Turkish Straits.

In 2010, 2.9 mb/d of crude oil and oil products flowed through the Bosphorus and the Dardanelles. The same year, 1.1 mb/d was carried through the two oil pipelines. This total of 4 mb/d of crude oil and oil products represented around six percent of the daily global oil trade.

If the existing two pipelines could be used to full capacity, it would allow the transport of some 6 mb/d, which would represent a significant total of around eight to 10 percent of the daily global oil trade. In oil, therefore, Turkey serves as an important transit country due to the Straits and these two major oil pipelines. "Israeli and Cypriot gas in the Eastern Mediterranean would not only enhance the SGC, but also diversify the EU's supply and ensure its energy security." In natural gas, however, Turkey cannot be considered a significant transit country yet.

The finalization of the Southern Gas Corridor (SGC), which consists of the South Caucasus Pipeline (SCP), the Baku-Tbilisi-Erzurum natural gas pipeline (BTE), the Trans-Anatolian Natural Gas Pipeline (TANAP), the Turkey-Greece Interconnector (ITG), and the Trans-Adriatic Pipeline (TAP) is critical for the EU.

The SGC is essentially the sum of several East-West gas pipeline projects which are designed to transport gas from the Caspian basin and the Middle East to Europe. Turkey, with its 1,850-kilometer contribution in the form of TANAP, forms the backbone of the SGC. TANAP will become operational and will transport Caspian gas to Turkey in mid-2018, and to Europe in 2020. The natural gas that flows through TANAP will be produced by the Shah Deniz Phase II project, with initially six billion cubic meters (bcm) going to Turkey and a further 10 bcm to Europe.

In order for the SGC to become fully operational, all its component parts – namely Shah Deniz Phase II, TANAP, and TAP – have to be finalized simultaneously. The groundbreaking ceremony for the TAP project, which will connect with TANAP at the Greek-Turkish border, was held in Thessaloniki, Greece on 17 May 2016.

Turkey's geographical location, in addition to its role in the SGC, is important to the realization of two other projects, namely Eastern Mediterranean gas and the Turkish Stream. The question is whether these two projects will be perceived as competitors to TANAP or not.

In the Eastern Mediterranean, although Egypt appears to have the largest offshore capacity in the region in Zohr field, Israel and Cyprus have better prospects for cooperation and coordination with Turkey. Egypt's Zohr gas, which is believed to be around 900 bcm, will probably be exploited and commercialized in the form of LNG. Its primary target is supposed to be the domestic Egyptian market with some export potential.

The offshore resources in Israel and Cyprus might be more feasible for a pipeline project which could perhaps bolster Europe's supply diversification and enhance its energy security. In Cyprus, Aphrodite has a relatively small offshore capacity of between 110 to 200 bcm. In Israel, Tamar holds around 303 bcm and Leviathan has reserves of 620 bcm.



These three offshore resources offer a sum of over 1,000 bcm, which makes the idea of a pipeline project more attractive than commercialization through LNG. Although some experts underestimate Aphrodite's physical potential, a joint project between Israel and Turkey would only be possible with the participation of Cyprus. "Turkey needs to adapt its Natural Gas market laws in compliance with the new rules of the game based on free market competition and liberal pricing policies."

In case of cooperation with Turkey, Israel would be able to bring its offshore gas to Cyprus; then with the additional capacity of Aphrodite, a pipeline connection between Cyprus and Turkey would join the TANAP system, and be transported to Europe via TAP. Nobody disagrees with the viability, cost-benefit advantages, and feasibility of such a project.

Unresolved political disputes in the Eastern Mediterranean, however, appear to be the main obstacles facing such a project. Turkey's relations with Israel have now entered a new process of normalization. In Cyprus, the leaders of the Turkish and Greek communities have declared several times that they are close to a resolution of their dispute before the end of 2016.

If it happens, Israeli and Cypriot gas in the Eastern Mediterranean would not only enhance the SGC, but also diversify the EU's supply and ensure its energy security. Lebanon's potential will further strengthen the viability of the Eastern Mediterranean natural gas basin.

Russia's Turkish Stream project is a modified version of a previous project called South Stream, which was initiated in 2007 by Gazprom and intended to carry a capacity of 63 bcm/year under the Black Sea crossing through Turkey's territorial waters and linking Russia directly to Bulgaria. This project was meant to bypass Ukraine and did not entail any supply diversification for Europe.

However, from Bulgaria onwards, this gas would have to connect to a new pipeline to be constructed through Bulgaria and Serbia, which would also require compliance with the EU's Third Party Access regulations. Moreover, this new infrastructure construction would augment the costs of the South Stream project enormously. Although there was skepticism that the South Stream project would increase Europe's dependence on Russian gas, some argued that European importers, particularly in Central Europe, would benefit from the diversification of transit routes.

Such views also claimed that South Stream and the SGC were not rival projects at all and that South Stream would increase Turkey's power by bypassing Ukraine and enhance its transit role in the East-West gas trade.

When Putin replaced the South Stream project with Turkish Stream, it was obvious that Russia had problems with the EU regulations and that it had to revise its plans. The EU's adoption of the Third Energy Package was the main discouraging reason for Russia because it stopped monopolistic companies, such as Gazprom, from disrupting the markets. Nevertheless, Turkish Stream also envisaged the transport of 63 bcm of Russian gas, this time, however, not to Bulgaria, but to Turkish Thrace.



The same arguments suggesting that it would become a major rival and hinder the development of SGC were expressed this time against Turkish Stream. It is important to underline, however, that Turkish Stream could meet the requirements of the EU's Third Energy Package although it did not entirely change the basic problem of diversifying the supply to Europe. Moreover, the Turkish energy bureaucracy did not view the Turkish Stream project as a plan to make Turkey an energy hub, but rather enhanced its role further as a transit country.

Russian authorities are apparently going back to their Turkish Stream project again since the beginning of normalization of relations with Turkey and have started to mention that it now envisages only two lines, instead of four, with a potential of 31.5 bcm instead of 63 bcm.

Given the potential that Turkey may play in natural gas transport between the East and West, Turkey's energy strategy should primarily focus on the role that the country could play in the global energy trade. If the choice is to transform this role from a transit country into a trade hub, then Turkey should develop its infrastructure strategy, planning, and investment policies accordingly.

Turkey can design a strategy of transforming Eastern Thrace into a South East European Gas Hub. Turkey's advantage over all of its regional neighbors is the fact that it has created its natural gas distribution infrastructure through the private sector.

Therefore, it has a strong sense of interoperability with the EU and so could be in a better position to comply with EU rules and regulations. Most of the forecasts by major energy companies as well as the projections of the International Energy Agency (IEA) suggest that fossil fuels will continue to remain the essential source of energy generation in the 21st century. In 2015, Turkey imported 51 bcm of natural gas. With its consumption of 48 bcm, Turkey has become the fourth largest natural gas consumer in Europe in 2015.

As a major component of the SGC, TANAP will initially have a capacity of 16 bcm in 2020 and will easily increase this to 31 bcm in the mid-term. TANAP could also transport Turkmen natural gas if the bilateral differences of opinion between Azerbaijan and Turkmenistan are resolved.

Moreover, natural gas from the Kurdistan Regional Government (KRG) in Iraq as well as the gas from Eastern Mediterranean, will also be potential contributors to TANAP in the not-so-distant future. Such additions could easily boost Turkey's annual capacity to 80-100 bcm, which would easily transform Turkey into a regional natural gas trade hub.

The potential envisaged by Turkish Stream could enhance such a role more substantially. However, there are a few issues that will have to be pursued carefully. First, Turkey needs to adapt its natural gas market laws in compliance with the new rules of the game based on free market competition and liberal pricing policies. Although the existing law has helped liberalize the market since 2001, BOTA still maintains its dominant role as the sole actor in the market. A new law would create the necessary and sufficient conditions for natural gas infrastructure investments as well as competitive free market pricing policies.



Second, Turkey needs to upgrade its storage and LNG terminal capacity. Turkey has already developed a high pressure infrastructure network of 13,000 kilometers. Yet, Turkey has only two LNG import terminals. These two terminals have an annual capacity of 12.2 bcm which is quite low for a country planning to become a natural gas trade hub. Turkey's limited storage capacity of 2.8 bcm at Silivri also needs to be upgraded to at least 20 percent of Turkey's annual consumption.

Third, Turkey has to increase the number of its gas import and export terminals. Currently, Turkey has four natural gas import terminals in the form of Bulgaria, Blue Stream, Iran, and BTE, and its sole export terminal is the ITG. As Turkey plans to diversify its natural gas supplies in the future, presumably through the KRG in northern Iraq and the Eastern Mediterranean, it has to formulate a strategy that increases both import and export terminals, with reverse flow capability in the latter as well.

Turkish Stream would become a new input in Turkey's natural gas transport infrastructure. It is important to emphasize, however, that a logical way forward would be to build the Interconnector facility between Turkey and Bulgaria with a view to connecting it to Turkish Stream.

This is particularly important because Turkish Stream can become a viable partnership between Turkey and Russia only if it does not present a challenge to the SGC, hence to Europe's strategy of supply diversification and its energy supply strategy. The Turkish-Bulgarian Interconnector could, in that respect, further enhance new infrastructure opportunities in the Balkans. Foreign policy in the 21st century has become a multi-disciplinary endeavor. Many argue that foreign policy makers should approach conflict resolution through a holistic and visionary perspective.

Turkey has failed to do so in the first 15 years of this new century. Normalization of bilateral relations with Israel and Russia may become important game changers in Turkey's new foreign policy strategy.

Both Israel and Russia open up new horizons for upgrading Turkey's role in this region. Notwithstanding the many multifaceted aspects of Turkey's foreign policy implementation in its immediate neighborhood, energy, may also become a new tool in this new environment. Turkey can assume a more responsible role in East-West energy trade as well as in assuring Europe's energy security.

Turkey, by itself, is not a significant actor that affects global energy strategies. Yet, its geographical location and its need for energy imports, particularly in the field of natural gas, make Turkey a key partner. This partnership should be transformed into an active strategy by transforming Turkey into a trade hub rather than a passive strategy that limit its potential to a transit country.

Turkish Stream on the north and Eastern Mediterranean natural gas basin in the south have the potential to make Turkey a trade hub. This role can only be realized if Turkey's new energy strategy prioritizes such an essential objective and prepares the country for this strategic transformation through determined and intelligent infrastructure investment policies. This approach will also enhance Turkey's flexibility vis-à-vis global energy strategies.

## Rapid developments in East Med gas

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The key gas producers in the Eastern Mediterranean are Egypt, Israel, and Cyprus. Lebanon has potential but political instabilities have thus far prevented it from exploring its hydrocarbon prospects. Egypt is by far the biggest producer in the region, with close to three tcm of proven reserves.

Israel and Cyprus have made sizeable gas discoveries, but need to be able to export gas if they are to justify the considerable investment required to develop the Leviathan (620bcm) and Aphrodite (128bcm) gas fields and monetize their assets. This requires access to export markets.

None of these projects will be realized unless they are commercially viable and low risk, which means the focus must be on local and regional markets in view of current low gas prices in both the Asian and European gas markets and the increasing possibility that such low prices will prevail for the foreseeable future. Turkey offers a market where gas prices are relatively high and is thus highly attractive for nearby Eastern Mediterranean producers.

However, the region is also characterized by uncertain economic and political conditions that can make exploration and exploitation of gas fields challenging. In Egypt, by far the largest current and prospective producer in the region, the focus is currently on servicing high levels of domestic demand.

Recent discoveries and moves toward liberalization of gas prices are changing this, enabling Egypt to become self-sufficient and potentially resume LNG exports. Current demand in 2016 for natural gas in Egypt is 52 billion cubic meters per year (bcm/y) and may reach 65-70 bcm/y over the coming 10 years.

A combination of a switch to renewables, reduction of subsidies, higher gas prices, and an awareness campaign by the Egyptian government on ways to rationalize energy consumption should help stem the rampant increase in demand. But even with these efforts, the gas deficit of seven bcm/y in 2015 will continue to grow unless new gas is brought online. The problem is that gas production had already declined at the start of this year to 42 bcm/y due to the misguided policies of the previous government, forcing Egypt to utilize expensive LNG imports.

If this decline continues unchecked, gas production may go down to 15 bcm/y in 10 years, as most of Egypt's existing gas wells are either at maturity or beginning to decline in yield. The oil minister said recently that Egypt is expected to spend an estimated eight billion dollars on LNG imports this fiscal year – a drain on the country's finances. Without new gas production, the situation will only get worse.



“Provided security and the fiscal situation improve, there is the potential for significant growth for oil and gas companies operating in Egypt.” Egypt has revamped its energy sector strategy and is striving to increase gas production. It is signing new exploration contracts, and has renegotiated new and higher gas prices, between four and 5.88 dollars per mmBTU, which has prompted gas companies to speed up project development.

Spurred by the new gas prices, Zohr and a number of new gas field developments are coming to the rescue, with BP and ENI leading the way. By mid-2016, it already looks as if the decline in gas production is now being reversed. BP, ENI, and other oil and gas companies operating in Egypt stand to gain from this new pricing regime, which is a major incentive to develop new projects, and with a gas-hungry domestic market, they do not have to look far or hard to find consumers.

Through its unused LNG plants, Egypt also has the capability to export excess production. Provided security and the fiscal situation improve, there is the potential for significant growth for oil and gas companies operating in Egypt.

Last year, ENI announced the discovery of a giant 100-sq-km gas field named Zohr, about 190 km offshore and close to Egypt’s EEZ border with Cyprus.[4] It is estimated to hold about 850 bcm of gas. This was confirmed in early 2016 by the first appraisal well, which showed there may even be an upside. Zohr was discovered in a carbonate formation with excellent reservoir characteristics.

ENI is drilling another three appraisal wells this year and a dedicated well to test the prospects of a deeper gas reservoir. Based on the evaluation of seismic data, ENI indicated that this may hold another 280 bcm of gas. Motivated by the attractive gas price of 5.88 dollars per mmBTU, ENI and the Egyptian government agreed to a fast-track development plan that will bring Zohr online by the end of 2017 with initial production of 10 bcm/y, to reach a plateau of 27 bcm/y when full production is achieved by 2019. ENI’s CEO Claudio Descalzi said Zohr gas will be “mainly sold on the Egyptian market.” But he noted that Egypt’s two LNG export terminals have enough spare capacity to enable some Zohr gas to be liquefied for export.

“Together with its partners, BP currently produces 30 percent of Egypt’s gas and expects to more than double this over the next four years.” The 12 billion dollar West Nile Delta (WND) Project involves the development of gas fields located offshore from Alexandria.[5] BP has started work on phase-I to produce over 140 bcm of gas. First production is expected to start in 2017, with peak production expected to reach 12.5 bcm/y of gas, which is approximately 30 percent of Egypt’s current gas production.

WND also includes other discoveries that will be explored and developed in later phases. These are expected to produce another 140 bcm-200 bcm of gas, potentially adding another 12 bcm/y-16 bcm/y to the Egyptian gas grid.

With a market for its gas assured at attractive prices, BP plans to also step up investment in its existing operations, and to move forward with its exploration program in the Nile Delta. Together with its partners, BP currently produces 30 percent of Egypt’s gas and expects to more than double this over the next four years.



Encouraged by the attractive gas prices, BP, ENI, Apache, Shell, and Dana are also developing a number of other smaller gas fields that will start producing much needed gas from 2017 onwards. The discovery of Zohr is encouraging oil and gas companies to look more carefully at carbonate formations in the Eastern Mediterranean. The region has produced some significant discoveries in recent years, and it is believed that there are still massive hydrocarbon deposits to be discovered in the Mediterranean. Initial indications from 3D seismic surveys completed by Edison in the North Thekah block, adjacent to Zohr, are reportedly good.

BG, now part of Shell, has three offshore concessions, where two discoveries with an estimated 170 bcm of gas were made. It remains to be seen how Shell will develop these. Having awarded four offshore licenses last year, and a total of 56 concessions between 2014-2015, Egypt plans to announce a new international tender in 2016 for 11 new exploration blocks in the Mediterranean and Nile Delta.

For Egypt, an issue of pressing concern is its ability to pay its debts to oil and gas companies, including its LNG suppliers. If this problem goes unchecked, it will affect Egypt's financial credibility. Combined with persistent terrorist threats, this could affect future investments. In terms of energy and gas, Egypt is going through a rapid transformation that will see it go from being an importer of LNG to a net exporter by 2021-22. This is driven by three key factors:

President Al-Sisi has made energy self-sufficiency a cornerstone of his presidency and has pulled out all the stops to promote exploitation of gas field prospects. The Egyptian energy market is hungry for gas, and it is ready to absorb anything that its gas fields can produce; as a result, sellers do not have to go far to sell. Gas prices recently negotiated between the government and the gas companies are high; assured high profits encourage investment and field development.

Based on the new discoveries and developments already in progress, Egypt can expect to more than double its current gas production by 2019-2020, by bringing another 50-60 bcm of gas online. Not only is this enough to achieve self-sufficiency – and do away with the need for expensive LNG imports – but there should also be excess gas available for exports. Egypt is also in a good position to continue the expansion of its gas production well into the next decade.

The outcome of all these developments is a dramatic reversal of fortunes for Egypt from gas shortages to self-sufficiency and exports. This impacts the hopes of its neighbors Israel and Cyprus, and their plans to export gas to Egypt. Not only is this commercially challenging, but the markets for it may no longer be available.

“In terms of energy and gas, Egypt is going through a rapid transformation that will see it go from being an importer of LNG to a net exporter by 2021-22.” The world has entered an era of plenty at a time when global primary energy demand may be peaking.

Technology developed for shale oil and gas is unlocking the development of more resources at lower costs. In addition to potentially vast shale oil and gas resources, the development of renewables is increasing exponentially and becoming cost competitive.



Energy efficiency is also on the rise, while energy intensity is going down. As a result, the world now has abundant energy supplies. In addition, with the link between world economic growth and energy use broken, global primary energy consumption is expected to peak by 2025 to 2030. The outcome of plentiful supplies and peaking demand is that oil and gas prices are low and are expected to stay low for the foreseeable future.

European and global spot gas prices range from four to five dollars per mmBTU (mid-2016) and are expected to stay low well beyond the end of this decade. The main reasons for this are:

An LNG glut, expected to persist well into the next decade, with more and more already committed LNG plants coming online. Massive increases in shale gas production in the US are keeping gas prices in the US low, around 2.50 dollars per mmBTU in 2016, and fueling LNG exports, adding to the global glut.

In Europe and Asia, the price of coal is at an all-time low, about half the price of gas. In 2016, Russian gas piped to Europe is down to four dollars per mmBTU. Plans for export of gas from Israel and Cyprus to be liquefied at Egypt's two idle LNG plants at Idku and Damietta, for export to Europe, cannot compete with these prices.

Noble is selling gas in Israel at over five dollars per mmBTU and would expect a similar price for gas at Leviathan or Aphrodite for export to Egypt. By the time the cost of pipelines to take the gas to Egypt, and the costs of liquefaction and then transport and regasification in Europe are added, the price of gas delivered to Europe will be well in excess of European (and global) gas prices.

European gas demand is well-supplied by gas piped from Russia and Norway at prices other gas suppliers find difficult to compete with. US LNG is also making inroads in Europe providing additional flexibility and complementing Russian and Norwegian gas rather than competing with them. Gas from Israel or Cyprus cannot compete under these conditions.

Statoil's CFO confirmed recently that the European natural gas market is well supplied by pipeline gas from Norway and Russia and expects only limited impact from US LNG. If US LNG with a gas cost of about 2.50 dollars per mmBTU cannot compete with Russian or Norwegian gas, how can Israel and Cyprus with a gas cost of five dollars per mmBTU expect to do so? Commercial challenges remain formidable for the foreseeable future.

Gas is changing Israel's national security and foreign policy perceptions. Eastern Mediterranean policy, in particular, is being driven by energy considerations, both in terms of field development and export markets.

Not only do the aforementioned commercial challenges make Israeli gas exports to Egypt challenging, but this is exacerbated by the uncertainties introduced by the recent regulatory problems and the rift between Egypt and Israel caused by the ICC arbitration decision.

The regulatory problem has now been resolved, but the ICC arbitration decision is still an issue. In December last year, ICC awarded 1.76 billion dollars to Israel's Electric Corporation against Egypt's EGAS as compensation for halting gas supplies in 2012.



Egypt promptly launched an appeal and stopped all gas import negotiations with Israel. There are informal contacts, but the process is in a state of deadlock. In April, the US State Department made attempts to broker a solution by apparently pushing Israel to drop the case, but there was no clear outcome. In any case, the prospect of Egypt achieving self-sufficiency and resuming LNG exports has removed the incentive and urgency from such negotiations, even if politically the two countries are now closer together.

“The loss of the Egyptian market leaves Israel with increasingly limited options to export its gas.” The loss of the Egyptian market leaves Israel with increasingly limited options to export its gas. Exports to Turkey would be a good option, and the restoration of diplomatic relations between Israel and Turkey is opening the way. This can be assisted by solving the Cyprus problem, which is making progress.

The development of the Leviathan gas field is strategically important for Israel. At present, 60 percent of its electricity is generated by one gas field, Tamar (280 bcm), one platform, and one pipeline. This poses a threat to Israel’s energy security, requiring the development of Leviathan as a matter of urgency. But for this to happen, Noble and its partners need to secure exports to make such a project commercially viable. This is where Turkey comes in as an option, but this decision does not need to be made until next year.

FCNG or FLNG would offer export flexibility as these would be under the full control of the exporting country, i.e. Israel, but FLNG is capital-intensive and Noble is cash-strapped. Leviathan could be developed in two phases:

Phase 1: Domestic market + FCNG exports to regional markets – could be achieved by 2019.  
Phase 2: Exports to Turkey, or as FLNG, with no time constraints. Of course there is also the option of accepting a Russian request to bring Gazprom into the development and export of Leviathan gas, but that poses its own geopolitical challenges.

The commercial challenges described in this article also affect gas exports from Cyprus to Egypt. Even though negotiations at both country and company level have been ongoing since 2014, it is unlikely that they will be completed successfully. Price issues are just too challenging. Cyprus’ export options are also limited without Egypt. Turkey would be an option, but only after resolution of the Cyprus problem. Exports to regional markets using FCNG or FLNG would be another option, but so far it has not received serious attention.

It is hoped that Total will be successful with its planned exploratory drilling in block 11 early next year. But even if it is successful, this will not change the current situation. Gas exports from Cyprus will have to wait for global gas prices to recover and for a resolution of the Cyprus problem. However, additional gas finds will re-open the option of an LNG plant at Vasilikos as a longer term option, possibly in over 10 years, if and when LNG prices pick up and make it commercially viable.

But Cyprus’ successful third offshore licensing round may be opening up new opportunities.[11] Participation is good, with major companies such as ExxonMobil, Total, ENI, Statoil, and QP submitting offers. Prospects are also good for discovering major new gas fields, but only drilling can tell. Certainly this has created a lot of optimism on the island, which will hopefully spur negotiations for a settlement between Greek and Turkish Cypriots.



There is a need for pragmatism and realism throughout the Eastern Mediterranean. If it is to secure export markets, then the development of Eastern Mediterranean gas, whether in Egypt, Israel, or Cyprus, will have to be competitive in a global and European low gas price environment. An era of plenty is upon us and coupled with peaking global energy demand – low prices are here to stay.

The hotbed of activity in the Eastern Mediterranean is Egypt. It is currently suffering from self-inflicted energy shortages, but it has revamped its energy sector strategy and is on a successful drive to increase oil and gas production.

The outcome of all these developments is a dramatic reversal of fortunes for Egypt from gas shortages to self-sufficiency and exports. Israel and Cyprus have missed opportunities, but may have new options, following recent developments in both countries and regionally, and will hopefully take them when they come.

The Eastern Mediterranean is volatile, and it is a region fraught with complex geopolitics. There is benefit to building upon ongoing regional discussions and accords between current and prospective producers, notably Egypt, Israel, and Cyprus, and prospective transit or consumer states such as Greece and southeast Europe, to develop regional cooperation mechanisms that Turkey can subsequently join. Restoration of diplomatic relations between Israel and Turkey, and talks between the two Cypriot communities, demonstrate that this journey may have already begun.

US and European diplomacy should continue to push toward a cooperative regional development framework that takes into account commercial realities and regional sensitivities, based on realistic longer-term plans and policies to support exploration and commercial field development, while managing expectations.

The Eastern Mediterranean region is fraught with risk, and energy solutions that might seem justifiable and appropriate today may not be tomorrow. The key problem is instability. But ultimately the economics and geopolitics of gas and energy are transforming the wider region. There are opportunities, mostly regional, but these need to be implemented and managed timely through wider regional cooperation.

# Jordanians fuming over gas deal with Israel

Al Monitor, 05.10.2016



Not since the popular demonstrations of the Arab Spring in 2011, when protesters demanded political reforms, have Jordanians come together behind a common cause. This time, they rallied to denounce the signing of an agreement between Jordan's National Electric Power Co. (NEPCO) and a US firm, Noble Energy, which is responsible for developing Israel's largest offshore gas field.

The \$10 billion, 15-year deal was announced Sept. 26, almost a week after the kingdom held national legislative elections on Sept. 20 and more than a month before the new parliament is scheduled to convene.

The agreement to supply NEPCO with 300 million cubic feet of natural gas per day — almost 3 billion cubic feet annually— will go into effect in 2019. This figure represents 40% of NEPCO's liquefied natural gas needs. The company supplies the gas to local electricity companies, which generate 85% of the kingdom's power. Details regarding responsibility for building the pipeline between Jordan and Israel and its cost have not been disclosed.

The Jordanian branch of the boycott, divestment and sanctions campaign against Israel released a statement Sept. 28 expressing outrage and opposition to the deal. It reminded the government that Lower House deputies had voted overwhelmingly in December 2014 to reject the deal and cancel a memorandum of understanding between the two sides.

It now appears that the agreement was renegotiated in secret in spite of the Lower House's objections. The announcement came as a surprise, as the issue has not been discussed publicly since 2014.

The public reaction was immediate. Political parties, professional unions, civil society organizations and individuals denounced the deal and expressed outrage at what they saw as a move toward normalization with the "Zionist entity" and a "robbery of Palestinian natural resources," according to head of the Anti-Normalization Committee of the Union of Professional Associations Ahmad al-Armouti. Jordan signed a peace treaty with Israel in 1994, but the majority of Jordanians continue to oppose it.

The Islamic Action Front, the Muslim Brotherhood's political arm, issued a statement Sept. 28 rejecting the agreement, saying that it represents "reliance on the Zionist enemy" and "support for occupation."



The general coordinator for the National Campaign to Nullify the Gas Deal with the Zionist Entity, a nongovernmental popular movement supported by professional unions and civil society organizations, told local journalists Sept. 27, "There is suspicion of corruption [in the deal] and that the government should have invested the \$10 billion on alternative energy sources." Hisham Bustani, whose national campaign is being run under the slogan "The Enemy's Gas is Occupation," claimed that the cost of the "stolen" natural gas coming from Israel is higher than international prices.

On Sept. 30, thousands of Jordanians joined demonstrations all over the kingdom following Friday prayers. Marches took place in downtown Amman and in cities such as Irbid in the north and Kerak in the south. Demonstrators called on the government to cancel the deal, which they labeled as a form of normalization with "the Zionist occupation." In the Bekaa Palestinian refugee camp, north of Amman, protesters clashed with riot police. Similar clashes were reported elsewhere.

The government took some time to respond to the criticism. On Oct. 3, government spokesman Mohammad al-Momani told Jordan state television, "The gas agreement with Israel is based on Jordan's strategic decision to diversify energy sources and does not create dependency on Israel." He added, "It is superficial to say that by signing the deal we are supporting Israeli occupation. Our positions that reject occupation are clear."

Momani said Jordan had lost \$6 billion when Egyptian gas supplies were cut off in 2014, when extremists blew up the pipeline linking Sinai to Aqaba, and that the deal with Israel will save the treasury around \$600 million annually. He accused critics of politicizing the issue.

But strategic analyst and director of the Middle East Center for Policies and Media Amer Al Sabaileh disagreed. He told Al-Monitor that while the deal is purely commercial in nature, it limits Jordan's energy choices and that "such reliance [on Israel] could turn into a political weapon in the future." He added that popular rejection will turn into pressure on the government and may lead to public disobedience. "This is an example of how decisions are made in closed rooms and without transparency. Jordanians found out about the deal from Israeli news sources."

But the government's position has been defended by some economists and politicians. Salameh Darawai, economic analyst and editor of the website Maqar, supports the deal as a purely commercial venture "in light of very limited government options." He told Al-Monitor, "The deal will undoubtedly provide the kingdom with a cheap source of energy and this will lead to a decrease in citizens' electric bills, especially considering that the country's energy costs have increased by 170% in recent years."

Jordan, which imports about 96% of its energy needs, has been working on a strategy to diversify its energy resources. It includes building a nuclear reactor in the eastern desert and investing in renewable energy sources such as wind and solar. Chairman of the Jordan Atomic Energy Commission Khaled Toukan told Al-Monitor that the 2,000-megawatt Russian reactor will come online in 2024 and that it will meet 40% of the kingdom's energy needs then.

In addition, the country has an estimated shale oil reserve of 70 billion tons and a number of studies have been carried out to evaluate its commercial viability. In March, the government approved an agreement between the National Petroleum Co. and an Egyptian consortium to increase the annual output of al-Risha gas field, near the Iraqi border, to 50 million cubic feet within a year.

But public rejection of the gas deal with Israel is unlikely to ebb soon. Already a number of newly elected deputies have threatened to resign in protest of the deal and vowed to confront the government once the Lower House convenes Nov. 7. They criticized the government's signing of the agreement when parliament was not in session. While the government is not expected to back down, the deputies' reactions could keep the issue alive in the public eye for many more weeks.

## Iran oil exports hit pre-sanctions high on run-up in condensate shipments

Reuters, 03.10.2016



Iran's total crude oil and condensate sales likely reached around 2.8 million bpd, two sources with knowledge of the matter said, nearly matching a 2011 peak in shipments before sanctions were imposed on the OPEC producer.

The run-up from shipments of around 2.5 million bpd comes mainly from condensate, a light oil excluded from OPEC supply quotas that is often produced with natural gas and can be used to make naphtha for petrochemical production. Iran sold 600,000 bpd of condensate for September, including about 100,000 bpd shipped from storage, to meet robust demand in Asia, the two sources said.

September crude exports increased slightly from the previous month to about 2.2 million bpd, they said. Iran, along with Libya and Nigeria, is allowed to produce "at maximum levels that make sense" as part of any output limits in a surprise deal reached last week by the Organization of the Petroleum Exporting Countries (OPEC).

Still, the Middle Eastern producer has surprised the market by ramping up its oil output faster than expected, to 3.63 million bpd in August, according to OPEC, up a quarter from end-2015 since sanctions were lifted in January. "Iran cannot produce much more than the present, so around 3.7 million bpd may be the max," said Fereidun Fesharaki, chairman of consultancy FGE.

Even if Iran's output hit 3.8 million bpd - as an oil official said it had in September - it would not be able to sustain that volume as decline rates at its oilfields are about 400,000 bpd each year, Fesharaki said. National Iranian Oil Co (NIOC) officials did not immediately respond to an emailed request for comment. Iran has said it plans to raise its output to 4 million bpd, although other analysts agreed production has probably peaked for now because investments to pump out more oil are lagging.

Condensate instead of crude oil will drive Iran's export growth for the remainder of 2016, thanks to developments at its giant South Pars gas field, the sources said. NIOC drew on condensate stocks from floating storage and onshore tanks in September to help meet growth in demand from China, South Korea, Japan and India.

Iranian ports loaded 2.153 million barrels of crude and 486,000 bpd of condensate in September, according to Thomson Reuters Supply Chain and Commodities Research. That put the month's total at 2.639 million bpd - excluding the condensate loaded out of storage - up from 2.472 million bpd in August, the Reuters data showed.

Condensate sales could reach 800,000 bpd in October, in excess of production at about 550,000 bpd, one of the sources said, suggesting further draws from floating tankers. "Korea was the main demand driver for the growth. Japanese and Indian plants were also raising imports," said one of the two sources with knowledge of the matter from Beijing, adding that China's Sinopec has also boosted its offtake of condensate since August.

Iran will sell another 2 million barrels, or about 66,000 bpd, of South Pars condensate each month to Hyundai Chemical in Daesan between October and December, the two sources said. Iranian condensate will meet about 70 percent of the feedstock demand at a new Hyundai Chemical splitter jointly operated by Hyundai Oilbank Co [INPTVH.UL] and Lotte Chemical.

A Hyundai Oilbank spokesman declined to comment. According to trade flow data on the Thomson Reuters Eikon terminal for Iran condensate that discharged in September, about one-third went to South Korea, with the rest going to the United Arab Emirates, India, China and Japan. Iran's South Pars condensate is usually sold at small premiums to Dubai quotes, free-on-board, much lower than Qatari condensate, which sells at premiums of \$2-\$3 a barrel, trade sources said.

## Saudis risk more pain from OPEC reversal as oil rivals ramp up

Bloomberg, 05.10.2016



For OPEC's production deal to work, it was always clear that Saudi Arabia would need to make sacrifices. The world's oil exporter faces the risk the costs will keep getting bigger.

To bring daily output to the top end of the 32.5 million to 33 million-barrel range agreed to by the Organization of Petroleum Exporting Countries, the Saudis would only need to make the typical end-of-summer reductions as local demand tapers off, according to Citigroup Inc. If Nigeria and Libya restore production, the kingdom may need to cut twice as much, Petromatrix GmbH estimates. U.S. shale drillers also stand ready to fill any supply gap.



“At this point, the Saudis have shown willingness to cut by an amount that’s equal to their seasonal swing in production,” Petromatrix Managing Director Olivier Jakob said by phone from Zug, Switzerland. “If Libya and Nigeria are out, it’s relatively easy to live by the commitment they made. If Nigeria and Libya don’t falter, it’s going to be extremely difficult.”

OPEC’s pledge to reduce production could help speed up the re-balancing of global oil markets, which face a fourth year of oversupply that’s capping prices at \$50 a barrel, half the level two years ago and too low for most members to balance their budgets. Yet efforts to rein in the glut by some members, primarily Gulf Arab states, risk being undone by others who consider themselves exempt as they recover from output disruptions.

Saudi Arabia, as OPEC’s biggest member, has typically borne the bulk of production cuts in the past. With the organization pumping just over 33.5 million barrels a day in August, reducing volumes to the upper end of the range set in Algiers would involve a daily reduction of just 500,000 barrels.

The Saudis will probably make that adjustment over the next few months regardless of the accord as they lower output once local power demand for air-conditioning fades, said Ed Morse, head of commodities research at Citigroup. Still, that pullback could be eclipsed by Nigeria and Libya, which have signaled they’re excluded from any OPEC constraints and together could add a million barrels a day, according to Morse.

Saudi Arabia will likely shoulder the bulk of the production cuts with a reduction of 500,000 barrels a day, while other Gulf states may trim output by 300,000 barrels a day, Neil Beveridge, a Hong Kong-based analyst at Sanford C. Bernstein & Co., wrote in a report Thursday.

Meanwhile, Iran argues it should be allowed to restore production to the level of about 4 million barrels a day achieved before international sanctions curbed shipments. Its output rose by 10,000 barrels a day last month to 3.63 million a day, according to a Bloomberg survey of analysts, oil companies and ship-tracking data.

The survey shows that OPEC’s total output climbed to 33.75 million barrels a day, driven largely by gains in Nigeria and Libya. Nigeria has restored production to 1.7 million barrels a day, up 500,000 from two months ago as it negotiates with militants who have attacked oil facilities, according to Minister of State for Petroleum Resources Emmanuel Kachikwu. The West African country aims to reach 2 million a day by the end of the year, Kachikwu said in an interview on Sept. 27. Production was near the lowest in almost three decades in August.

Libya has revived output to 500,000 barrels a day after striking a deal with armed factions controlling export terminals, and plans to reach 600,000 by the end of October, the country’s National Oil Corp. said Oct. 3. Production slumped to an 18-month low of 260,000 barrels a day in August, according to data compiled by Bloomberg.

Those two nations are pushing OPEC output toward 34 million daily barrels, which would require the organization to cut by 1 million barrels to achieve the Algiers target. That may be a bigger sacrifice than Saudi Arabia is prepared to make as the kingdom refuses to cede market share, according to Petromatrix. “For all the talk about the new policy, it needs to be proven,” Petromatrix’s Jakob said.



“Based on what I’ve seen, I don’t see a full change of policy or commitment.” The risk that Saudi reductions would have to deepen to counter increases elsewhere had long concerned former Oil Minister Ali Al-Naimi, the architect of OPEC’s pump-at-will policy adopted in late 2014. He retired in May. His successor Khalid Al-Falih initially supported the policy but his desire to repair Saudi relations with OPEC members, particularly with Iran, as well as his country’s increasing economic pressures, spurred a change of stance.

“Saudi Arabia has overturned its hands-off approach and is now ready to restrain supply in pursuit of higher oil prices,” said Bill Farren-Price, chief executive officer at consultant Petroleum Policy Intelligence. If the pact agreed in Algiers doesn’t support prices, “we expect OPEC to cut further.”

While the details of the OPEC accord and the distribution of cuts among members won’t be resolved until the group’s next meeting in November, the immediate price gains from the deal are benefiting competitors in the U.S., according to consultants Wood Mackenzie Ltd. West Texas Intermediate crude is up about 11 percent since OPEC reached its supply agreement and the grade traded little changed at \$49.79 a barrel at 10:37 a.m. in London.

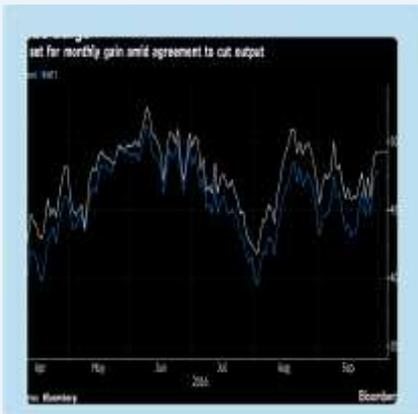
“U.S. producers can invest with more certainty going forward,” WoodMac Research Director R.T. Dukes said in a Bloomberg Television interview. Shale drillers are hedging their price risk for next year, according to banks. OPEC effectively threw a “lifeline” to shale producers, according to BNP Paribas SA, while Morgan Stanley said hedging may be at the highest so far this year.

While the Energy Information Administration estimates U.S. crude output has fallen by 752,000 barrels a day so far in 2016, recent data show drilling has picked up in response to stabilizing prices. Rigs targeting crude in the U.S. rose for a fifth week to the highest since February, Baker Hughes Inc. said Sept. 30.

Saudi Arabia, despite formally signing up to last week’s accord, may be assuming it won’t have to contend with much more additional supply by the time OPEC next gathers in November, according to Barclays Plc. “Their hope is: we don’t have incremental supply from Libya or Nigeria,” said Barclays commodities analyst Michael Cohen. “If there is a situation where Libya or Nigeria production is back up,” the Saudis will have to make “difficult decisions.”

# Russia questions OPEC deal, keeps budget bet on oil at \$40

Bloomberg, 30.09.2016



Russia is sticking with an assumption that oil will average \$40 a barrel in the next three years and won't take a bait by revising its budget outlook after a preliminary agreement by OPEC on its first production cut in eight years, according to Finance Minister Anton Siluanov.

While crude is trading near \$50 after Wednesday's announcement, heading for the first September increase since 2010, "we know prices are adjusted after such statements," Siluanov told. The price of Russia's main export blend Urals used to calculate the country's budget "was and remains" at \$40 a barrel, he said.

"You think it's stabilized?" Siluanov said. "We need to see how realistically the decisions will be implemented." Although the world's biggest energy exporter has signaled it's willing to join efforts with OPEC to control global supply, it's on course to pump oil at a post-Soviet record in September, adding as much as 400,000 barrels a day to the country's output.

The surprise deal, which will see the Organization of Petroleum Exporting Countries reduce production to a range of 32.5 million to 33 million barrels a day, sent oil surging more than 5 percent.

The market was caught by surprise after Saudi Arabia and Iran had signaled before the meeting that an accord was unlikely. OPEC now faces the challenge of implementing the cuts, with Goldman Sachs Group Inc. and Morgan Stanley expressing skepticism that it can be completed. Prices may struggle to hold above \$40 a barrel unless OPEC acts, Citigroup Inc. predicts.

Already running its widest deficit since 2010 this year after oil's collapse, Russia is preparing its budget for the next three years. The Finance Ministry has proposed a fiscal gap of 3.2 percent of gross domestic product in 2017. It then plans to reduce the shortfall by one percentage point each year to balance the budget by 2020. The deficit will be wider this year than earlier forecast and may increase to as much as 3.7 percent of GDP, beyond the earlier estimate of 3.2 percent, according to Siluanov.

Should oil trade above \$40, "we'll spend less from reserves -- that's our approach," Siluanov said. "On the other hand, output limits aren't the only factor that affects the price of oil. There's also the issue of global demand, how the world economy will develop -- that will also affect pricing."

Another question is how the U.S. shale industry will react, according to Siluanov. "That's also a large supply volume, because shale projects very quickly get turned around," he said. "Which is why we can see additional supply on the oil market."

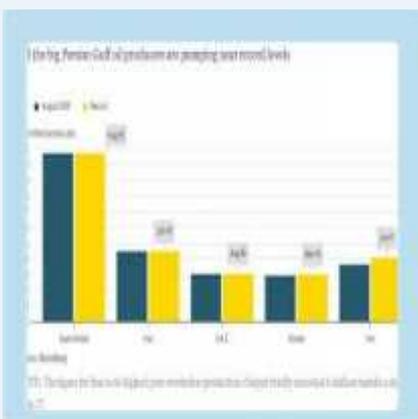
Brent crude, which is used to price Urals, dropped 17 cents to \$49.07 a barrel in London. The price of oil in rubles is at 3,078, compared with the level of 3,165 which Russia used as a basis for this year's budget. Oil will need to hold above \$50 a barrel for months before U.S. companies commit to more spending, according to analysts at firms including S&P Global Platts and Oppenheimer & Co. The number of rigs targeting oil in the U.S. climbed to 418 in the week ended Sept. 23, the highest level since February, according to data from Baker Hughes Inc.

While keeping its fiscal policy tight, Russia has also been revisiting a mechanism suspended this year that capped spending based on a backward-looking average for oil. The so-called budget rule, which would prevent the government from spending surplus revenue above a pre-set oil price, aims to insulate the economy from the ups and downs in crude and shield the exchange rate by withdrawing all additional income into reserves.

Siluanov said last week that the price of oil for the policy should also be set at \$40 a barrel. Russia's budget projects inflation at 4 percent in 2017-2019 and assumes the ruble will average 67.5 against the dollar next year, weakening to 68.7 in 2018 and 71.1 in 2019, according to Siluanov. The ruble traded 0.4 percent stronger at 62.86 to the U.S. currency as of 8:20 p.m. in Moscow on Friday. "At higher oil prices, we'll see a stronger exchange rate," Siluanov said. "We shouldn't make the budget dependent on external conditions and risks linked to them."

## European OTC gas trading up by a third in Gas Year 2015

ICIS, 04.10.2016



Combined over-the-counter (OTC) trading across 11 of Europe's major hubs rose by a third in Gas Year 2015 to a total of 28,948TWh, according to trade data collated by ICIS.

Surging traded volume at the TTF was the main driver behind the trend and the Dutch hub accounted for just over half of all OTC trade in Europe. Most other European hubs are just a fraction of the size of the TTF, but many nevertheless posted impressive rates of growth themselves in the past 12 months. The PSV in Italy is a notable example. OTC trading at the hub increased by 75% in Gas Year 2015 and is now closing the gap on GASPOOL in Germany.

The ZTP in Belgium posted the biggest proportional increase in Gas Year 2015, but remains by far the smallest established hub, with only the day-ahead contract recording regular trade. Belgium's primary market, the physical Zeebrugge Beach hub, was the only trading venue to lose ground in Gas Year 2015. The hub continues to suffer from its sterling denomination, with many euro-backed companies opting to trade at the increasingly liquid and euro-denominated TTF hub which is just next door.

# US oil advances above \$50 a barrel for first time since June

Reuters, 29.09.2016



Oil climbed above \$50 a barrel in New York for the first time since June as declines in U.S. crude inventories and OPEC's pledge to reduce supply lifted hopes global glut may clear.

Futures increased 1.2 percent. U.S. crude stockpiles shrank below 500 million barrels for the first time, government data show. OPEC pledged in Algiers to reduce the group's output to 32.5 million to 33 million barrels a day in a bid to shrink the world's bloated oil supplies and boost prices. The market is set to remain oversupplied in 2017 and prices will stall at \$55 a barrel as shale drillers get back to work, Goldman Sachs Group Inc.'s Head of Commodities Research Jeff Currie said.

"The main issue is the big decline in North American storage," said Tim Pickering, founder and chief investment officer of Auspice Capital Advisors Ltd. in Calgary. "The OPEC agreement is just spin to help support the market."

Oil has advanced 13 percent since the Organization of Petroleum Exporting Countries agreed to the first production cut in eight years. Some analysts have expressed doubt that individual output quotas -- to be determined at a meeting of the group in Vienna on Nov. 30 -- will be sufficient to erode the market surplus as several countries boost production to restore disrupted supplies.

West Texas Intermediate for November delivery rose 61 cents to \$50.44 a barrel on the New York Mercantile Exchange. It's the highest close since June 9. Total volume traded was 14 percent above the 100-day average at 2:48 p.m.

Open interest in WTI, or the number of contracts outstanding, rose to 1.91 million as of Wednesday, the most in three years, according to CME Group Inc. data compiled by Bloomberg. Brent for December settlement rose 65 cents, or 1.3 percent, to \$52.51 a barrel on the London-based ICE Futures Europe exchange. It's the highest close since June 8. The global benchmark crude ended the session at a \$1.53 premium to WTI for December delivery.

U.S. crude stockpiles dropped by 2.98 million barrels for a fifth weekly decline, the Energy Information Administration reported Wednesday. A Bloomberg survey had forecast a supply gain. Crude production declined for a second week to 8.5 million barrels a day. "Crude inventories dropped by more than 25 million barrels in September," said Bill O'Grady, chief market strategist at Confluence Investment Management in St. Louis, which oversees \$5.2 billion. "You should see prices rally after such a big number." Start your day with what's moving markets. OPEC members will meet next week for talks on implementing an output-cut deal, with Russia joining to discuss how producers from outside the group can participate in the plan, Venezuelan Oil Minister Eulogio Del Pino said in a government statement late Wednesday.



Ministers from Saudi Arabia, Algeria, Gabon, Qatar and the United Arab Emirates will attend a meeting in Istanbul, along with Alexander Novak from non-OPEC member Russia, he said. "The drop in crude inventories over the last several weeks is seen by some as a sign that the market's rebalancing," said John Kilduff, a partner at Again Capital LLC, a New York hedge fund focused on energy. "It has a lot to do with an increase in crude-oil exports. The local glut is easing but that's not helping the global glut."

Hurricane Matthew is heading for Southeast U.S. and may disrupt East Coast fuel shipments. Matthew's top winds have grown to 140 miles (220 kilometers) per hour, up from 125 mph just hours ago as it churns in the Atlantic 125 miles east-southeast of West Palm Beach, according to the National Hurricane Center.

Diesel futures for November delivery climbed 0.9 percent to \$1.5958 a gallon, the highest close since Oct. 8, 2015. November gasoline advanced 0.3 percent to \$1.4978 a gallon. The crude rally is threatened by the strengthening dollar, O'Grady said.

The U.S currency climbed against most of its peers as better-than-forecast jobless claims data boosted speculation that the Federal Reserve will increase interest rates this year. A stronger greenback reduces the appeal of commodities as an investment. Precious and industrial metals declined Thursday.



# Announcements & Reports

## *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

## *23<sup>rd</sup> World Energy Congress*

**Date** : 09 - 13 October 2016  
**Place** : Istanbul, Turkey  
**Website** : <http://wec2016istanbul.org.tr/>

## *International Conference on Oil Reserves & Production*

**Date** : 17 - 18 October 2016  
**Place** : London, UK  
**Website** : [www.waset.org/conference/2016/10/london/ICORP](http://www.waset.org/conference/2016/10/london/ICORP)

## *15<sup>th</sup> ERRA Energy Investment & Regulation Conference*

**Date** : 17 - 18 October 2016  
**Place** : Budapest, Hungary  
**Website** : <http://erranet.org/InvestmentConferences/2016>

## *The 8th Saudi Arabia International Oil & Gas Exhibition (SAOGE)*

**Date** : 17 - 19 October 2016  
**Place** : Dammam, Saudi Arabia  
**Website** : [www.saoge.org](http://www.saoge.org)

## *21<sup>st</sup> IENE National Conference "Energy and Development 2016"*

**Date** : 24 - 25 October 2016  
**Place** : Athens, Greece  
**Website** : [www.iene.eu](http://www.iene.eu)



## *SPE Russian Petroleum Technology Conference & Exhibition*

**Date** : 24 - 26 October 2016  
**Place** : Moscow, Russia  
**Website** : [www.spe.org/events/rpc/2016/](http://www.spe.org/events/rpc/2016/)

## *Asia Pacific Oil & Gas Conference & Exhibition (APOGCE)*

**Date** : 25 - 27 October 2016  
**Place** : Perth, Australia  
**Website** : [www.spe.org/events/apogce/2016/](http://www.spe.org/events/apogce/2016/)

## *International Conference & Expo on Oil & Gas*

**Date** : 27 - 28 October 2016  
**Place** : Rome, Italy  
**Website** : [www.oil-gas.conferenceseries.com/](http://www.oil-gas.conferenceseries.com/)

## *4th Iran Europe Oil & Gas Summit*

**Date** : 01 – 03 November 2016  
**Place** : Berlin, Germany  
**Website** : [www.iransummit.com/](http://www.iransummit.com/)

## *2nd International Conference & Expo on Oil & Gas*

**Date** : 02 – 03 November 2016  
**Place** : Istanbul, Turkey  
**Website** : [www.oil-gas.omicsgroup.com/](http://www.oil-gas.omicsgroup.com/)

## *European Autumn Gas Conference 2016*

**Date** : 15 – 17 November 2016  
**Place** : Hague, Netherlands  
**Website** : <http://www.theeagc.com/>

## *21st Annual Oil & Gas of Turkmenistan (OGT) Conference 2016*

**Date** : 16 – 17 November 2016  
**Place** : Ashgabat, Turkmenistan  
**Website** : <http://www.ogt.theenergyexchange.co.uk/>

## *Project Financing in Oil & Gas*

**Date** : 21 – 22 November 2016  
**Place** : London, UK  
**Website** : [www.smi-online.co.uk/energy/uk/conference/Project-Financing-in-Oil-and-Gas](http://www.smi-online.co.uk/energy/uk/conference/Project-Financing-in-Oil-and-Gas)



## *5<sup>th</sup> Greek Cyprus Energy Symposium*

**Date** : 29 - 30 November 2016  
**Place** : Nicosia, Greek Cyprus  
**Website** : [www.iene.eu](http://www.iene.eu)