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Turkey's gas imports from Russia falls by quarter in February

AA Energy Terminal, 26.04.2016



The share of Turkish natural gas imports from Russia decreased by 26 percent in February compared to the same month of 2015 while Turkey's overall imports fell by 14.5 percent, according to Turkish energy watchdog data.

Turkey's natural gas imports fell by 14.5 percent from 4.63 billion cubic meter (bcm) to 3.96 bcm in February, Turkish Energy Market Regulatory Authority, EMRA announced on Thursday in its Natural Gas Market Report for February 2016. The country imported 79 percent of its natural gas via pipelines and 21 percent through liquefied natural gas (LNG) facilities, EMRA's data shows.

Despite the 14.5 percent fall in Russian gas imports, Turkey increased its imports from Azerbaijan by 14 percent and Algeria by 26 percent. Turkish natural gas production rose from 30.92 million cubic meters (mcm) to 32.43 mcm in February 2016, the majority of which came from the north-western Tekirdag province.

The highest natural gas consumption was seen in Istanbul, Turkey's most populated city with 932 mcm in February. Turkish capital Ankara and western province of Izmir Istanbul followed in second and third place. Turkey's monthly natural gas consumption reached a historic record high at 5.78 billion cubic meters (bcm) in January 2016.

In February 2016, Turkish households consumed 1.83 bcm and electricity production facilities consumed 1.23 bcm. Turkey supplies 48 percent of its electricity demand through natural gas combined cycle plants, according to EMRA 2014 data.



Turkey's TANAP project to get \$3 billion financial loan

AA Energy Terminal, 27.04.2016



The TANAP project will receive financial loans totaling more than \$3 billion, according to the World Bank Group. The loans will come from the World Bank Group, International Bank for Reconstruction and Development, and European Investment Bank, if approved by their respective boards this summer. "The World Bank Group has been requested to support the TANAP," the bank told Anadolu Agency in a statement.

"The proposed loan has to be first approved by the Board," the bank said, pointing to the Combined Project Information Documents report on TANAP which has an estimated total cost of \$9.8 billion.

The estimated date of the World Bank's board meeting is July 7 this year, according to the document, which says "BOTAS [Turkey's state-owned crude oil and natural gas pipeline and trading company] would be the borrower of a proposed bank loan of about \$1 billion." The Southern Gas Corridor, which plans to carry Azeri gas all the way to Italy, is critical for Europe's future energy demand and to lower its dependence on Russian gas. TANAP will become the longest section of the corridor.

"Needing a total investment of some \$45 billion, the Southern Gas Corridor is one of the most complex gas value chains developed in the world. Diversified sources of gas for the region would definitely improve energy security and support sustainable growth," World Bank's statement said.

TANAP CEO Saltuk Duzyol said last week that efforts are being made to make the project operational before June 2018, and noted that \$4.5 billion-worth of tenders have been completed with their contracts signed. The project is planned to become operational in 2018 with an initial capacity to carry 16 billion cubic meters (bcm) of Azeri gas through Georgia to Turkey. While 6 bcm will be for Turkey's domestic gas consumption, the rest is destined for transfer to Greece, Albania, and Italy and further into Europe.

TANAP's total capacity is planned to increase to 23 bcm by 2023 and to 31 bcm by 2026. Azeri energy giant Socar holds 58 percent share interest, BOTAS has a 30 percent share and BP owns a 12 percent stake in TANAP.



Think tank: Russia drives Turkey into arms of EU, Ukraine

Natural Gas Europe, 25.04.2016



What is perceived as the main obstacle, Botas' dominance, is unimportant, argues former Botas expert and now director of Ankara think-tank Eppen, Dr Volkan Ozdemir. In an interview with NGE which also covered Russian pipelines and the southern gas corridor, he compared Botas' 75%-80% in Turkey with GasTerra's similarly dominant position in the Netherlands – home to the Title Transfer Facility, the continent's most liquid hub.

Private companies can import spot LNG into Turkey through a privately-owned terminal; and the gas release program means that private importers supply 10bn m³/yr. The Turkish balancing point is small; but last month a contract traded for gas for delivery over the balance of the month at the EPIAS energy exchange. EPIAS was set up as part of the Istanbul stock exchange and the government has a good reason now to encourage the development of a domestic hub, he says.

Only then will then Turkish companies be able to renegotiate pricing in their contracts away from oil products to spot market prices in Turkey. In that sense establishing a liquid market domestically would give huge bargaining power externally and would accelerate the integration of the Turkish and the European gas markets in terms of pattern of gas trade. "I think the crisis with Russia will accelerate this development and affords for diversification of supplies," he said.

The gas market law of 2001 envisaged Botas' share of the gas supply market falling from 100% to a fifth and the company being unbundled along European lines, with supply separated from transport and with privatisation.

But neither of those plans materialised, except for a partial gas release programme, and for two reasons, according to Ozemir: first, the Turkish market was not ready for liberal regulation 15 years ago; and second, in the wake of the economic crash in 2008, Turkey's EU accession process ground to a halt.envisaged by 2011. But this was never implemented beyond the gas release programme.

Even the limited auction at was not quite the privatisation that it seemed, as companies buying the gas included Bosphorus Gas, which won the right to import about a quarter of the total on offer. On its website, Bosphorus claims to be the biggest importer after Botas, with 7% of the market and says it is 71% owned by Gazprom. So it was a state-to-state disposal rather than a privatisation of gas sales. Market developments are not immune from politics, Ozdemir says, and this closeness with Russia meant that Turkey became decoupled from the EU.





While European gas importers renegotiated their contracts down, Turkey didn't. Liberalisation was slow, and only a limited amount of LNG was imported on a spot basis by the private sector. "For now, I think the best solution for Turkey is to balance its economic needs from a market perspective as an importer with its political aims from security perspective as a regional geopolitical player in energy.

Partial, not full liberalisation, is the answer. What I mean by partial liberalization is that creating more competitive market and restructuring Botaş domestically on the one hand and supporting Botas or other state energy companies externally in their mission to become big international players.

This now though needs addressing as the rift has left Turkey vulnerable to Russia, which is using gas as a stick to hit it with for the first time since their co-operation started in 1987. Turkey has started to think about this diversification, as Russia supplies 55% of the gas, which accounts for a third of Turkey's primary energy supply.

Gazprom gave the private companies a 10.25% discount but during the crisis it revoked the discount and began reducing the flow of gas to Turkey. The cuts in gas and the removal of the discount were all symptomatic of the politically poor relations and was unprecedented.

Accounts vary as to how much, if any, of the discount remains, with some saying it has been remove entirely and others that it is still cheaper than Botas' gas. Ozdemir says that it was not totally removed from the second quarter onwards, when the flow of gas returned to normal levels, while Botas and Gazprom have remained locked in arbitration since last October. Turkey has already won one dispute, with Iran, another of its suppliers which uses oil indexation.

Russia has been developing new pipeline projects such as South Stream, Turk Stream and Nord Stream 2. If one of them were to be realized then transit risk stemming from Ukraine would be severely minimized and Moscow would have important strategic leverage.

Turkish Stream, promoted at the June 2015 World Gas Conference by operator Turk Stream, was presented as the idea of the Russian president, Vladimir Putin. It was Russia's way of winning Turkey's friendship and promoting a hub on the border with Greece – although normally hubs are within networks, not at their junction, as Ozdemir points out.

Moscow is keen to market these projects even though commercial rationality dictates otherwise. So when one becomes enmired in political difficulties, it will find another plan. South Stream was dismissed because of regulatory obstacles from the EU's third energy package – which was also the first to enforce unbundling.

Then the priority shifted to Turkish Stream. That was frozen because of geopolitical tension with Turkey. Moscow pretended to support Turkey's goal of becoming a gas hub though its objective has been to use Turkey only as a corridor and a bargaining tool in its general struggle against Brussels. Ankara was suspicious about Russian intensions for this project from the beginning, which is why Turkey did not let Russia use its territory as a corridor for strategic purposes. Rather it has already opted to become an energy corridor for Azeri gas, by signing the TransAnatolian Pipeline agreement although this contradicts Ankara's general discourse of being a gas hub.



Turkish Stream would give Gazprom more bargaining power with Europe but for Ankara the project is definitely over. That led Russia to lobby more intensively for the green light for its third attempt, Nord Stream 2. But that faces insuperable difficulties, Ozdemir says: "Energy and politics cannot be disentangled." Russia wants it to diversify its markets and its routes and since Nord Stream 1 was built, only 40% of Gazprom's exports have gone through Ukraine, compared with 80% before.

But the US does not want Russia to deprive Ukraine of transit fees, even if some EU countries and companies see the benefits of trade with Russia. Some countries like France might undermine EU sanctions against Russia in order to support some energy projects in which their companies are shareholders – such as Total in Yamal LNG or Engie in Nord Stream 2 – he says.

"In my opinion, taking realistic future demand scenarios into account the EU does not need the NS2. It will benefit Germany and Austria however, as it will re-export gas to Slovakia, Ukraine and elsewhere via German hubs and Baumgarten... Turkey has now come round to the US way of thinking. One year ago it viewed Ukraine as a transit risk, now it is co-operating with it and I think there is a lot of room for that. Ukraine has offered Turkey access to its storage facilities – which are now larger than needed thanks to a shrunken economy and greater supply security from the west. "However one idea, that Odessa becomes an LNG import terminal, is unlikely to get past Turkey which already sees the Bosporus as crowded and an LNG tanker as a hazard," he says.

This is also very complicated project: there is no commercial rationale for spending \$3bn to produce and transport just 1bn m³/yr, Ozdemir says. The total investment, including the upstream and midstream, cost about \$48bn just to produce and bring 16bn m³/yr of Azeri gas to market. The only way to make it work is to make it much bigger and to feed the pipeline with 15bn m³/yr more gas. "Without more gas, such as Iran's, the southern gas corridor makes no sense," he says.

Israel's gas reserves may be ruled out for the time being owing to the Cyprus problem. Gas from the Kurdish Regional Government needs a pipeline agreement and the Kurdish Workers' party, the PKK, have claimed responsibility for numerous attacks on oil and gas pipelines. This could have negative ramifications forr European energy security in the future. That leaves open the question of supplies from Iran, now that the sanctions have been lifted.

There could also be a swap with Turkmenistan: Turkmenistan would supply gas to Iran and Iran would supply gas to Europe through Turkey. Turkish and Iranian decision-makers could reach a deal. This would be feasible, unlike a Trans-Caspian pipeline involving direct Turkmenistan-Azerbaijan flows, which has got nowhere for the last 20 years. There is also the question of Azerbaijan: although it has always been keen to treat the West and Russia evenhandedly, Russia wants a friendly government in Baku.

As the Baku government is under economic threat, with the oil price so low, there have been suggestions that the latest war in Armenian-held Azerbaijani territory of Nagorno Karabakh was fomented by Russia to allow Baku the chance to flex its muscles and play on popular feelings. Russia might expect something in return for this. "What if the state oil company Socar were to fall ultimately under Russian influence? Whose gas would flow through Tanap then?" Ozdemir asks. Within the general energy triangle between the EU, Turkey and Russia, Turkeys' is now drifting close to Brussels, posing an additional burden for Moscow in its eternal struggle in the European energy arena.



The changing realities of international gas markets – and Europe's in particular – where falling prices, the ending of oil-price indexation and new common market regulations, combined with weak demand, will provide little room for new Russian pipeline projects to be realized.

Meanwhile, in terms of energy security, the EU seems to benefit from worsening Turkish-Russian relations. Both Russian and Turkish domestic energy markets will be affected by the developments in Europe that will likely result in full liberalization of exports for Russia and the liberalization of imports for the latter. Finally, the energy triangle is in a state of flux, politically; and it remains subject to new surprises that could arise from geopolitical developments in regions that lie beyond its confines, he says.

TANAP seeks more gas shippers

Natural Gas Europe, 26.04.2016



Turkey and Azerbaijan are ready to expand the Tanap into a major gas transit route to Europe, and not one solely for Azerbaijani gas from the Caspian. Both countries are keen to recruit shippers of gas from other countries too.

The SGC and its Turkish component, the Tanap, will be useful for transporting gas not only from Shah Deniz-2, but also from Iran, Iraq, Cyprus and Israel, Azerbaijan's energy minister Natig Aliyev told. While Tanap's initial shipping capacity will be 16bn m3/yr in order to fully accommodate output from Shah Deniz 2, it is designed for further expansion.

According to Socar, it is possible to expand Tanap's capacity in the future to 23bn to 24bn m3/yr, and even as high as 31bn m3/yr, by constructing new compressor stations and other facilities. Addressing to the same conference in Baku, BP Azerbaijan's vice president Bakhtiyar Aslanbeyli said that the SGC may be attractive to Iran, Iraq and Central Asia as a transit route to Europe for their gas. He said he was expressing his personal opinion, rather than a corporate viewpoint. "The project has been designed not only for BP-operated Shah Deniz output but also for third parties' gas," he said.

He said the 10bn m3/yr from Shah Deniz 2 that is due for delivery to Europe in 2020 will mark only the start of the SGC, supported by the EU and US. "It will be waiting for interest from third parties", said Aslanbeyli, adding that Shah Deniz 2 volume will represent only 2% of Europe's gas consumption. If Iran plans to start exporting gas to Europe, it would be easier to connect to Tanap than to build their own gas pipelines, he said.

Tanap CEO Saltuk Duzyol late last week expressed similar views, saying that the pipeline would be useful for Iraq and Turkmenistan to carry their gas to Europe, according to a report in Turkey's Star newspaper.



Several natural gas fields in northern Iraq could be linked up to the pipeline, said Duzyol, adding that company has been working on the Iraq option, but adding that attracting gas from Turkmenistan was also possible.

All the major Tanap construction contracts -- apart from the short section under the Marmara sea -- have been signed, noted Duzyol: "The project has passed of no return point and is progressing quite fast. We work hard to meet our goal to finish it in June 2018." Estimated to cost \$ 9 billion project will seek a funding from international financial institution and markets.

According to Aliyev, the next meeting for attracting funding for SGC and Tanap is scheduled for April 27 although he gave no further details of who would attend. The World Bank and the European Investment Bank are set to invest \$1bn and €1bn respectively in Tanap, Turkish newspaper Hurriyet reported.

Whereas initial costs of Tanap were set at \$11.7bn, it was revised down to \$9.2bn after some costs were cut due to lower material and services costs. The funding will be used by Tanap's partner Botas to meet part of its commitment to the project which is around \$3 billion.

Tanap has to become operational in 2018 with the first gas delivery to Turkey. By 2020 its entire section, including the European part, has to be ready and connected to the Trans Adriatic Pipeline (TAP) at the Greek border. Three pipelines -- the expanded South Caucasus gas pipeline, Tanap and TAP -- will form the Southern Gas Corridor that will deliver 6bn m3/yr of Shah Deniz-2 gas to Turkey and a further 10bn m3/yr to Europe.

Erdoğan: Turkey prioritizes minimizing energy dependency

Daily Sabah, 25.04.2016



President Recep Tayyip Erdoğan delivered an opening speech during the inauguration of Tufanbeyli Thermal Power Plant built by the Enerjisa energy company. It is the largest lignite coal thermal power plant established by the private sector in Turkey so far. Erdoğan said Turkey needs to invest \$110 billion in the energy sector over the next 10 years, adding:

"We aim to satisfy the energy demand by more effectively using our own resources such as coal and water and natural resources such as solar and wind power, and minimize our external dependence.

Explaining that Turkey has rich coalfields, despite not having natural gas or oil resources, Erdoğan said he is against importing coal and attaches importance to thermal power plants. He said that such investments must continue, adding:



"More than half of our foreign trade deficit and a significant part of our current account deficit stems from the import of raw materials for energy." He said that Turkey has to use its potential power to achieve its 2023 goals.

In reference to Turkey's energy imports surging from \$11.5 billion in 2003 to \$55 billion in 2014, Erdoğan said the country managed to keep its energy imports at \$38 billion due to the fall in oil prices last year. "Our need for energy rises further as our country develops, grows and progresses in all fields from industry to trade and from service sectors to infrastructure. The rise in the level of national welfare and urbanization as well as the more effective use of energy in all fields increases the demand for energy," Erdoğan said.

In line with Erdoğan's remarks, Energy and Natural Resources Minister Berat Albayrak, speaking at the ceremony, said that Turkey will use domestically-produced coal. Albayrak recalled that throughout the rule of the Justice and Development Party (AK Party), the consumption of local energy resources has always been prioritized.

He added that the ministry has carried out the necessary drilling work in order to utilize Turkey's coal reserves efficiently. Albayrak also emphasized support given to the private sector with a view to ameliorating the investment environment and improving the working conditions in mines, adding they have been working on legal regulations specific to the coal industry to solve these issues.

Explaining that a country's welfare level is also related to its energy consumption, Erdoğan said the rise in Turkey's energy demand is highest among Organization for Economic Co-operation and Development (OECD) countries. He said that Turkey's demand for energy will continue to rise as it progresses toward achieving the government's 2023 goals.

Touching on Turkey's investments, Erdoğan asserted Western countries cannot understand Turkey by looking at terrorist incidents and called on these countries to look at investments. He extended thanks to those who contributed to the realization of the Tufanbeyli Thermal Power Plant.

Erdoğan firstly attended the opening ceremony of the Tufanbeyli Thermal Power Plant along with Sabancı Holding Chairman Güler Sabancı. He later went to the Adana Organized Industrial Site and initiated the joint openings of the facilities from here.

The Tufanbeyli Power Plant was conceptualized to bring the 246 million tons of lignite coal reserves located at the center of Yamanlı, Kayarcık and Taşpınar streets in Adana's Tufanbeyli district to the economy.

The plant will have a 450-megawatt installed power capacity and produce 2.5 billion kilowatts per hour of electricity annually by consuming 845 tons of lignite coal per hour and 5.5 million tons of coal annually. The thermal power plant cost \$1.1 billion and employed 4,500 people for its construction and 1,000 people permanently.

It was designed to consume less water with a dry-type cooling system. There are also limestone quarries that will be used in order to provide limestone for the circulating fluidized bed (CFB) boilers and flue-gas desulfurization (FGD) systems.



A flue gas treatment system enables limestone to be added to the oven and the wet FGD system was evaluated as an approved method that reflects the latest technology under the circumstances. Meeting nearly 2 percent of Turkey's energy demand and producing energy for 1.5 million households, the Tufanbeyli Thermal Power Plant is slated to operate for 30 to 35 years, depending on coal reserves.

While thermal power plants normally have a cooling tower for each unit, only one tower was built for all units of this facility. A flue gas treatment system, which holds the poisonous gas off put while burning fuel is compulsory in every thermal power plant and will be added to the Tufanbeyli Power Plant due to the above-mentioned technology implemented by EnerjiSA. The poisonous gasses will be discharged through the cooling tower. For this reason, the flues through which the poisonous gasses of the units pass will be inside the cooling tower.

In conventional systems, flue gasses are discharged into the atmosphere through specially designed flues. In this facility, flue gasses will be discharged through the center of the cooling tower. This will enable pollutants to spread into the atmosphere better and therefore the ground-level concentration values of pollutants from the facility decrease.

Fuel gasses coming out of the boilers will be carried to the cooling tower through special pipes made of solid material and will be released from the center of the cooling tower without mixing on the horizontal axis and ascend up to the atmosphere with a central gas flow. The flue gas in the cooling tower is expected to reach higher levels in the atmosphere with a push created by an ascending air mass. It has been observed that flue gasses discharged from cooling towers raises three or four times higher than gasses released into the atmosphere from conventional flue systems.

The Ductile Cast Iron Pipe Factory in the Organized Industrial Site has had 5 percent manufacturing capacity of the ductile pipe manufacturing sector around the world along with this facility in Adana following the one in Samsun. The iron pipes manufactured in this facility founded by Samsun Makine Sanayi Inc. are renowned as peak technology of the 300-year cast iron and 150-year steel pipe manufacturing technologies. They can be used to carry biogases and chemicals along with potable water and drain water. As well as its resistance to corrosion and damage from earthquakes, they do not need welding isolation on its joints.



Three US energy giants interested in investing in Turkey

Yeni Safak, 25.04.2016



Turkey continues to draw foreign investors, especially in the energy sector, as at least three energy giants in the United States expressed their interest in investing in Turkey. Turkey's Foreign Economic Relations Board (DEİK) Chairman Ömer Cihad Vardan said that American companies are very interested in investing in Turkey.

Following President Erdoğan's meeting with American investors last month, almost all companies show their positive view of trade in Turkey, he said. Three US-based energy companies First Solar, Noble Energy and Noil Energy expressed interest in investing in Turkey, DEİK head said.

Vardan said that American Dow Chemical had already finalized its investment plan in Turkey, expected to create employment for more than 1,300 people. "Westinghouse and Honeywell also announced that they will start investing in Turkey very soon", he added. There are many new companies entering Turkey's energy sector, the Turkish Foreign Economic Relations head said.

Genel courts Turkey with Kurdish gas to reduce reliance on Russia

Reuters, 28.04.2016



Genel Energy, chaired by former BP head Tony Hayward, is betting on a major deal with Turkey to jointly develop gas fields in Iraqi Kurdistan which will help Ankara reduce its reliance on Russian supplies.

The deal, if it goes through, could help London-listed Genel regain investor confidence after it steeply downgraded its oil reserves two months ago - leading to it losing a third of its market value, contributing to its biggest-ever annual loss and piling pressure on Hayward. The company, which owns most of the Bina Bawi and Miran fields, is in talks to sell a stake to TEC:



A joint venture that includes the international arm of state-owned Turkish Petroleum, according to several sources involved in the negotiations. "(TEC) want to invest in the entire value chain of the project," one source said. The sources did not disclose the size and price of the stake being discussed.

The deal would provide a new source of gas for Turkey, which has scrambled to find alternatives after relations with major supplier Russia deteriorated sharply after the Turkish airforce downed a Russian warplane late last year. Entering the partnership, which would also include the construction of a pipeline and storage facilities to connect the field to Turkey, would also reinforce ties between Ankara and Iraqi Kurdistan, two neighbours battling Islamic State.

Genel hopes to complete the negotiations with the partner by the end of the year, Chief Executive Murat Ozgul said at the company's annual general meeting in London on Wednesday. He did not name the partner. Genel, one of the main oil producers in Iraqi Kurdistan, has made no secret of plans to bring in a partner for the fields, which it operates and holds an 80 percent stake in.

Its growing focus on Turkey was underlined when Turkish renewable energy company Bilgin Enerji bought a 10.5 percent stake in the company this month to become its second largest shareholder after Turkish billionaire Mehmet Karamehmet.

Genel plans to export up to 20 billion cubic metres of natural gas per year from the fields, located some 300 km (186 miles) from Turkey and with gas reserves of around 11 trillion cubic feet. It has said it expects the fields to take around three years to develop and to start production in early 2020. Turkey currently consumes approximately 50 billion cubic metres of gas per year, of which more than half is provided by Russia, according to Genel's website.

Turkey to sell rail to Iran in exchange for oil



Transportation, Maritime Affairs and Communications Minister Binali Yıldırım announced that Turkey recently signed a deal with Iran to purchase oil worth 80 million euros in exchange for selling rail to Iran.

Daily Sabah, 27.04.2016

During an opening ceremony involving the Karabük-Zonguldak section of the Irmak-Karabük-Zonguldak Railway project, Yıldırım said Turkey's dependency on foreign resources for the construction of railways has already ended. He added that parallel to this, Iran purchases rail to support its domestic infrastructure projects through a barter trade system with Turkey.



In exchange, the Turkish Petroleum Refineries Company will receive the oil. Yıldırım also stressed that when the Justice and Development Party (AK Party) first came to power in 2002, Turkey was unable to produce Iran's rail. He added that exports of rail to Iran as well as many other countries are significant at this point.

What the deal with Iran means for Karabük, one of the leading rail producers and the capital district of the province of Karabük in the Black Sea region, is that facilities in the district will be operating at full capacity throughout the year. Approximately 12.76 percent of Turkey's oil imports came from Iran in 2015.

Only two options for Cyprus gas: Turkey or FLNG

In Cyprus, 24.04.2016



The government has received the draft gas field development plan for the Aphrodite field in Block 12 from Noble Energy and its partners, but it is now an open secret that unless Greek Cyprus clinches a deal with a potential buyer, the plan will remain on paper.

Negotiations to sell part of the estimated 4.54 tcf in Block 12 to Egypt were seriously undermined following the discovery of the Zohr supergiant gas field by Eni in Egyptian waters last August."Selling gas for domestic consumption in Egypt is not really a possibility for Cyprus, as Egypt will be able to cover its needs by 2020," Charles Ellinas told.

The gas find in Zohr is estimated at 30 tcf or 850 billion cubic metres. All of it will be allocated to cover the Egyptian domestic market. When BG Group joined as a partner of Block 12 earlier this year, the government had hoped that Cyprus could sell gas to Egypt for liquefaction and onto Europe as liquefied natural gas (LNG). BG (now bought by Shell) is a major partner in the Idku LNG plant in Egypt. However, this is now in question. "With current gas prices this is commercially challenged," Ellinas said.

Ever since Cyprus dropped its plans for an LNG terminal at Vasilikos because recoverable quantities were not enough to make it viable, the Noble consortium has been left with only two options: either the new technology of a floating LNG (FLNG) plant or a pipeline to Turkey's energy-hungry market, which in turn depends on a solution of the Cyprus problem.

The Aphrodite partners are already in talks with officials and companies in Turkey, since they are also interested in se-lling gas to Turkey from their offshore gas fields Israel. Selling the Israeli natural gas to Turkey also depends on rapprochement – between Turkey and Israel.



Earlier this week Israel's energy minister Yuval Steinitz said that most of the issues between Turkey and Israel had now been cleared up. FLNG does not have such political complications and has more marketing options.

However, Ellinas notes that it requires an investment of \$6-8 billion in a period when oil and gas companies all over the world are cutting down their expenses in order to adjust to low prices. A third but distant option of LNG depends on Eni and Total making significant discoveries during their next drilling phases.

Energy Ministry consultant cuts Leviathan gas estimate

Globes, 24.04.2016



The quantity of gas in the Leviathan reservoir is 24% lower than the quantity reported by the partners in the reservoir. That is the up-to-date estimate by the Ministry of National Infrastructures, Energy and Water Resources, based on a resources report carried out for it by Netherlands-based SGS.

Whereas the partners claim that the reservoir contains 21.9 TCF of gas, according to the new report. The Ministry of National Infrastructures, Energy and Water Resources is now carrying out a further check of the numbers through another international consultant, and the final quantity is due to be published at the end of next month.

If there is indeed less gas in the reservoir, the Ministry of National Infrastructures, Energy and Water Resources will probably reduce the quantity of gas that can be exported from it. The company that carries out seismic tests for the Leviathan partners is NSAI, and each of its checks has found a larger quantity of gas than the previous one.

When the Leviathan discovery was announced in 2010, the quantity of gas in it was estimated at 16 TCF. In May 2013, the partners reported that it was 19 TCF. In July 2014 they reported a further rise in the estimate to 21.9 TCF. The estimate of the quantity of condensates in the reservoir also rose, from 34 million barrels to 40 million.

The test results were provided to the Ministry of National Infrastructures, Energy and Water Resources, which gave them to SGS for further checking. As "Globes" reported, as early as June last year SGS arrived at substantially lower estimates. Its estimate has not been released; as mentioned, it is 16.6 TCF, or 24% below the partners' estimate.

The gap arises from a dispute between the Ministry of National Infrastructures, Energy and Water Resources and the Leviathan partners concerning the quantity of gas in the area where no drilling has been carried out.



The Leviathan reservoir has an area of 324 square kilometers (six-and-a-half times the area of Tel Aviv), and only three drillings have so far been carried out. While the partners included in their calculations the quantity of gas in the area where no drilling has taken place, the Ministry of National Infrastructures, Energy and Water Resources refused to do so. Ministry sources say that if gas is found in that area, the ministry will revise its estimate.

The gas partnerships also provided a further explanation of the gap between them and SGS, which is that SGS is not expert at estimating reserves. In any case, the contract with SGS has ended, and the Ministry of National Infrastructures, Energy and Water Resources has hired the services of another well-known international consultant, UK company RPS, which has been tasked with examining the two reports, that of NSAI and that of SGS, and submitting a professional opinion to the ministry.

The Ministry of National Infrastructures, Energy and Water Resources stated, "The ministry is carrying out all the required professional checks, and where necessary we shall be aided by experts. When the checks are finished and the figures have been finalized, the ministry will publish them and give directions for the operation of the reserve accordingly."

The Leviathan partners stated in response: "There has been no change in the estimates of natural gas in the reservoir as contained in the resources report released by the partners in the reservoir. We shall continue to deal with developing the Leviathan reservoir, which will benefit the Israeli economy and improve Israel's regional standing."

The gap between 21.9 TCF and 16.6 TCF means a NIS 100 billion reduction in revenue from gas sales and a reduction of more than NIS 50 billion in state revenues from taxation (at an average price of NIS 5.17 per mmbtu). Another, perhaps more important consequence, is that the quantity of gas that can be exported will drop substantially.

The Israeli government has decided that Israel should retain a gas reserve of 450 BCM and that the gas companies can export the rest. It also decided that the quantity of gas exportable from each reservoir will depend on its size.

For small reservoirs of up to 100 BCM, 75% of the gas will be eligible for export. For reservoirs containing over 200 BCM, such as Tamar and Leviathan, 50% will be exportable. The reason for this is that the government wished to provide incentives for developing small gas fields, and assumed that export prices would be higher than domestic prices.

If the amount of gas in the Leviathan reservoir is as the partners estimate, then they will be allowed to export 11-16 TCF of gas. This takes into account the gas in the Karish and Tanin fields, in accordance with the rules allowing exchange of export quotas between reservoirs.

The Ministry of National Infrastructures, Energy and Water Resources says that if the final estimate of the gas in Leviathan is 16.6 TCF, exports will still be possible to one large anchor customer to the liquefaction plant owned by Shell (which bought British Gas) in Egypt, or to Turkey. "The final gas quantity that the ministry publishes will mainly affect the second stage of the development of the Leviathan reservoir," says Gal Reiter, energy analyst at the Bank of Jerusalem.



Reiter explains that if there are exports in the initial stage from Leviathan to Jordan and to the liquefaction plant in Egypt, there will not be enough gas to justify building infrastructure for exports to Turkey, for example. "At the same time," she continues, "it could be that in that case Leviathan would do a swap deal with Tamar, or with other reserves discovered in Israel, such as in the Daniel or Royee licenses." There is also the possibility that the government will not reduce the quantity of gas that can be exported since in any case gas consumption in Israel is much lower than expected.

Noble Energy said in response, "Noble Energy engages world-class engineering firms to perform independent assessments of resources and reserves on our assets. We are confident in these reserve estimates, which are developed in accordance with the Society of Petroleum Engineering and US SEC reporting standards."

"Netherland, Sewell & Associates' best estimate of Leviathan's recoverable resources is 21.9 TCF. We have drilled four wells and performed a flow test on the reservoir, and we have been producing a similar reservoir at the Tamar field for three years. The compilation of our drilling information, flow test data and production data from a similar field along with the independent assessment by Netherland Sewell gives us confidence in the recoverable resources estimate at 21.9 TCF."

Russia wants share in Israeli gas

Globes, 24.04.2016



The Russian press reported at the end of last week that Russia was seeking to enter the Israeli natural gas industry, following a meeting in Russia last Thursday between Russian President Putin and Prime Minister Netanyahu.

It is believed that Putin wants to take part in the development of the Leviathan gas reservoir. This was not the first time that Russia has tried to strengthen its foothold in the Middle East through control of gas reservoirs. In February 2013, Gazprom, , signed a memorandum of understanding to buy gas produced from the Tamar reservoir through a floating liquefied natural gas facility.

Gazprom agreed to buy three million tons of LNG a year, amounting to 4.1 BCM. The project was never implemented, among other things because the Minister of National Infrastructure, Energy, and Water Resources never approved the export project.

Russia did not give up, however. Gazprom negotiated for several months to buy up to 30% of the Leviathan reservoir. The initiative to recruit a strategic partner in the rights to the reservoir originated in the realization by the current partners that they lacked the financial capability, know-how, and connections needed to realize the huge reservoir's potential as soon as possible. According to reports, other companies that expressed interest in a partnership in Leviathan included South Korean company Kogas, Chinese company CNOOC, and Australian company Woodside. Gazprom has apparently submitted the highest bid.



However, while the Israelis, led by Yitzhak Tshuva's Delek Group Ltd. (TASE: DLEKG), were enthusiastic about the possibility of the giant Russian company joining the Leviathan partnership, the US partner – Noble Energy – objected, preferring a Western partner, even on terms slightly inferior to those offered by Gazprom. Indeed, Woodside is the company with which the final negotiations took place, but it withdrew at the last minute, and no contract was ever signed.

Now that the Israeli gas industry is in its poorest position in a long time (dependent on a single reservoir, with the gas plan having stalled, a global gas glut, and plunging global oil prices), it appears that Putin is trying his luck again. Russia's oil and gas revenues account for 50% of the country's income (45% from oil and 5% from natural gas), but for Putin, a stake in an Israeli gas reservoir is a strategic-geopolitical issue, not an economic one.

Russia supplies 35% of Europe's gas and 55% of Turkey's, and both of these gas consumers are desperately seeking to diversify their sources of supply. Israeli gas flowing from Leviathan through a pipeline to Turkey, and from there to Europe through another pipeline, is one of the most feasible options.

One of Israel's main concerns is therefore that Russia's primary aim is to forestall the development of Leviathan in order to prevent competition with Russian gas, or if it is developed, to make sure the gas is not sold to Turkey or Europe. Another concern is that Russian involvement in Israel's gas reservoirs could prove the perfect excuse for the entry of Russian warships in order to "protect" the gas drilling platforms.

Of course, a partnership in Leviathan with the Russian energy giant also has advantages. Gazprom has professional capability in the development and export of gas reservoirs, the financial ability to raise its share of the financing needed to development the reservoir, and a market of customers - or the ability to ensure an off-taker customer. Either way, Israel must think twice about the consequences of such a partnership, which it is difficult to believe that the US will welcome.



Natural gas and the 'lesser' Caspians: How new players might be good for everyone

Modern Diplomacy, 27.04.2016



Energy: what was once a largely single-resource/two-state controlled industry has given way to other resources of significance. In turn, this has also given rise to other states as major players in the arena. Given the increased need for energy among states, there has been greater collaboration and cooperation among states with regards to resources.

This is well exemplified by the US' early and continued energy relationship with Saudi Arabia following World War II. Saudi Arabia may have different security and human rights priorities than the US, and yet they both have been longtime energy partners that rely on one another heavily.

Relationships of this nature have grown in frequency since then and as a result the Caspian region has emerged as a major player in energy security geopolitics. By and large oil has been, and for the most part still is, associated with energy security. So long as a nation has access to an amount of oil commensurate with its needs, it is energy secure. However, a new player in the energy resource arena has begun to emerge: natural gas.

Though natural gas has been around forever, it has taken on a position of importance in the struggle for energy security only recently. Natural gas can be used for everything from heating, cooking, and electricity generation. In fact it has many of the same applications as oil. The Caspian region is starting to exploit this resource.

The region is one of the oldest oil-producing areas in the world and, though it continues to play a significant role in oil production, the control of energy in the region has begun to shift largely as a result of natural gas. Oil production and export from the region has primarily gone through Russia (or the USSR) throughout history.

Caspian states, however, have discovered that they are home to some of the largest natural gas reserves in the world and now are looking to bypass Russia entirely to export it to the European Union (EU). This is significant for two reasons: first, it would shrink Russia's impact as a controller of energy resources worldwide, especially in the EU. Second, it would drastically raise Kazakhstan, Azerbaijan and Turkmenistan's profiles over energy resources and security.

Russia's historical dominance over the Caspian region gave it significant control over the global energy market. It is estimated that 17 percent of the world's oil comes from the Caspian (primarily Iran and Russia) and it is largely responsible for providing the EU with energy security. The shift away from Russia by other Caspian states, however, erodes Russia's stranglehold on energy resources in the region and gives way to exciting new players and geopolitics. Caspian states have already begun to break away from Russia in their bid to export natural gas to the EU.



The process has been underway since the dissolution of the USSR, with concrete realization in the late 1990's. But ultimately it was always hindered due to strong opposition, largely from Russia and Iran, which vehemently opposed the any independent Caspian projects from the other littorals.

In the mid-2000s, once the Russia-Ukraine gas dispute began in earnest, the project began to gain more traction. There was a shift in allegiance between the littoral nations and renewed interest in the project sprang back to life. Since then, massive headway has continued to be made, largely to the dismay of Russia and Iran.

The Russia-Ukraine dispute can truly be seen as the point when the lesser Caspian littorals decided to separate themselves from Russia as far as energy resource export is concerned. This is not to say they have separated themselves completely, as there is still collaboration on energy resources in the area.

However, the dispute has led to Russia and Iran being excluded from the southern gas corridor project, which is expected to become fully operational by 2020 and supply much of the EU with natural gas. This is a boon financially for the nations involved, but perhaps more importantly, it creates a major geopolitical shift for those lesser littorals in the Caspian.

States such as Turkmenistan, Azerbaijan and Kazakhstan, who have historically had decidedly smaller stakes in the energy sector, stand to gain significant traction by building and remaining in control of this corridor without major Iranian or Russian influence/interference.

This can only serve to strengthen their diplomatic ties with the EU while simultaneously weakening Russia's and elevating their status as legitimate players in energy geopolitics. Russia and Iran have opposed the pipeline repeatedly, with Russia playing a far more active and vocal role in the opposition than Iran. Throughout the last decade and a half, Russia has thrown virtually every piece of oppositional ammunition at the construction of the pipeline. Its two primary tactics have been to oppose it environmentally and by way of old treaties.

The treaty option has been the strongest oppositional tool used. Specifically, Russia has been using the treaties signed by Iran and the Soviet Union in 1921 and 1940 to threaten the other Caspian states. They have pointed out that the treaties are still in effect and that without support for the pipeline from all littoral states, any construction in the Caspian Sea would be illegal.

There is some disagreement over whether these treaties still hold any legal bearing today. Next, Russia leveraged the environment in an attempt to oppose the project. According to Russia's Natural Resources Ministry, pipelines along the Caspian Sea floor would be environmentally unacceptable. Aside from the fact that anytime a pipeline is placed in a body of water it has some environmental risk, this was clearly an attempt by Russia to try and generate international opposition to the pipeline.

This is of course somewhat ironic given Russia uses similar environmentally-concerning pipeline routes. Evidently none of these attempts have had much of an impact on the project overall as it is still well underway. There is no doubt that Russia and Iran spent such a considerable amount of time opposing the pipeline due to the fact they knew its construction set a bad precedent for their continued dominance in the local energy sector.



If former Soviet states can break away from Russia economically, then perhaps they can break away in yet other ways in the future. The more these lesser littoral Caspian states strengthen diplomatic bonds with Western-leaning nations, the less reliant they are on Russia. The further Russia is from controlling larger amounts of energy, the weaker its position in terms of geopolitics, something it considers anathema to its international security profile and agenda.

Moving forward, the lesser Caspians will gain significant respect and authority in their development and control over future energy. This alters the geopolitical arena enough that other states around the globe need to take notice, though this awareness so far has been slow. It allows the Caspian, minus Russia and Iran, to be yet another option when it comes to building diplomatic ties and securing access to energy now and in the future.

Despite the fact that the amount of natural gas they plan on moving may not radically alter the geopolitical arena overnight, there is opportunity to move enough in the future that could make a major impact. More importantly, this gives the EU a second option for energy procurement, which increases its energy security and also gives it the option to slowly cut ties with other 'problematic' providers like Russia. Perhaps the most interesting point of this entire development is Russia's complete lack of desire to do anything but threaten verbally and act diplomatically.

To date the nation has not taken any physical action to impede the pipeline and it has also continued to maintain trade and economic ties with the lesser Caspian nations it is protesting against. Despite having divergent views on the pipeline and actively attempting to impede it diplomatically, Russia seems unwilling to militarize the situation, something that deserves at least begrudging respect and acknowledgement. Perhaps this is a potential sign of building diplomacy over military solutions, which would be a global plus for the entire international community.

If Iran and Russia realize they must recognize challenges to their energy dominance with only a need to work with other Caspian nations, even though they do not completely agree with them, then a critical future region of the globe has a chance to remain stable and at peace. In this case, maybe the entrance of new players into the arena doesn't have to signal the start of a new bloodbath or new geopolitical tension.



Iran might still outwit the Saudis on oil

Bloomberg, 24.04.2016



Iran's oil exports are growing much more quickly than analysts predicted back in January when sanctions were eased. If the recovery continues at its recent pace, it could raise an interesting dilemma at OPEC's next meeting in June.

As Bloomberg reported earlier this month, Iran exported more than 2 million barrels per day of crude during the first half of April -- a figure calculated from tracking ships loading at Iranian export terminals. This compares with 1.45 million barrels a day in March. Neither figure includes the country's exports of condensate (a type of light oil recovered from gas fields).

If we add the volume of oil refined in Iran -- estimated at about 1.6 million barrels per day -- to the exports, we get a total daily crude supply of about 3.6 million barrels. Keep that number in mind. When oil producers, led by Venezuela and Russia, began to talk about an output freeze back in February, Iran made it very clear that it wouldn't participate until it restored production to presanctions levels.

It put that figure between 4 million and 4.2 million barrels per day, although a look back at its official OPEC-supplied production numbers shows it reported daily output at between 3.7 million and 3.8 million barrels before fresh sanctions were imposed in 2012.Bloomberg, and the six organizations OPEC used for its "secondary sources" estimate of its members' production, saw Iran's output falling during the first half of 2012 as buyers went elsewhere before sanctions came into force.

The official figures given to OPEC by Iran show production continuing at about 3.7 million barrels per day throughout 2012 and most of the following year. The difference probably reflects Iran's unwillingness to admit sanctions were having any impact. It's possible, though, that production didn't fall as steeply as outside observers thought, with the additional oil going into onshore storage tanks (much harder to track than oil stored on tankers).

Still, Iran doesn't have enough storage capacity to have kept that up for long.Drawing oil out of onshore tanks may explain some of the recent boost in exports. JBC Energy, a consultancy, suggests Iran may also be blending condensate into crude exports to raise the quality of the heavier oil it's pumping.Iran claims it's now producing 3.5 million barrels per day, pretty close to the 3.6 million indicated by my calculation above.

This suggests that the restoration of Iran's pre-sanctions production, which analysts said would take a year -- if it could be achieved at all -- has just about been managed within three months. That could put Saudi Arabia in a tricky spot when OPEC meets at the start of June. If Iran were willing to join the rest of OPEC in an output freeze, the Saudis would be faced with a choice. Either accept that their terms had been met and agree to freeze their own production just before it would typically start to rise to meet a seasonal surge in domestic demand; or move the goalposts again.



As I wrote last week, Saudi Arabia doesn't want oil prices to rise to a level allowing new high-cost projects before the market's rebalanced, giving it little incentive to support further price rises. That next OPEC meeting might be testing for the kingdom.

Why Saudi Arabia will not win the oil price war

surprise on Tuesday, with the

Oilprice, 27.04.2016

Crude oil prices continued to surprise on Tuesday, with the U.S. benchmark adding another 4 percent to \$44.60 a barrel. West Texas Intermediate is now up 65 percent since hitting 13-year lows below \$27 a barrel February 11. It's a performance only bettered by the globe's second most traded bulk commodity – iron ore.

But like analysts of the steelmaking raw material, many in the industry have been surprised by the extent of the rally, consistently calling the oil price lower. The blame for the cloudy outlook for crude is mostly being laid at the door of Saudi-Arabia.

After the collapse of the Doha talks to freeze production and amid a spat with the U.S. over terrorism, the world's top producer has threatened a scorched earth policy when it comes to maintaining and growing its market share. But there is an alternative view out there that argues that the U.S., more than the Saudis, will control the direction of the market and in the event of an all-out price war holds the commanding position.

That's thanks to astonishing technological improvements in the U.S. The shale revolution that drove natural gas production between 2010 and 2015, found its way into the oil field, resulting in a 57 percent jump in U.S. crude production in just three short years to peak at 9.7 million barrels per day in April 2015. And it's not just a crude story: In the last decade, the U.S. has introduced 8.3 MMBoe/d (million barrels of energy equivalent per day) into the global market when one considers production of crude, natural gas and natural gas liquids according to research by Platts Analytics.

Suzanne Minter, Manager of Oil and Gas Consulting for Platts Analytics on Tuesday testified before the U.S. Senate Energy and Natural Resources Committee about where the global oil market is heading. Minter said "the time and the rate in which this energy entered the market appears to have stressed the system in ways unimagined" making the U.S. producer "the marginal supplier and price setter into the global market":

After 14 months of persistently low prices, U.S. producers have entered 2016 with estimated capital expenditures cuts of 40 percent, more than 6,500 drilled but uncompleted wells in inventory, and find themselves operating at or near cash costs. "Drilled but uncompleted wells hold reserves that can be brought on line in a short period of time, thereby defining the concept of spare capacity.



It is plausible to believe that U.S. spare capacity may be close to rivaling OPEC's current spare capacity. However, we believe that the prices needed to incentivize the U.S. producer to complete their drilled but uncompleted wells may be much lower than global competitors believe or would like it to be.

"The near term oil recovery will be more than likely be tenuous and ebb and flow, rather than occur in a linear fashion, as all parties involved figure out how to balance supply growth. However, due to spare capacity and the unique economic environment which drives producer activity, it may very well be that the U.S. producer is best positioned to lead the recovery and bolster economic growth."

Platts Analytics research shows that Texas alone could introduce 1.25 MMB/d of oil into the global market and can do so in a short space of time – on average just 30 days. That's more oil than the Saudis have threatened to flood the market with and all very close to the world's top refining hub.

Over and above resources and technology, the U.S. has another powerful advantage: dynamic markets. The country has roughly 9,000 different entities producing energy. Saudi Arabia's oil wealth – indeed its whole economy – is now in the hands of a 30-year old prince. Minter said that "while each producer will behave differently than the next, it seems realistic pricing in the mid-\$40 – \$50 per barrel range they will bring incremental volumes back into the market place. Well, that's where we got to today.

Gazprom's export monopoly: Is it negotiable?



Natural Gas Europe, 28.04.2016

Gazprom's plans to build Nord Stream 2 have come under pressure from eastern EU member states who want Russia to continue to flow gas through Ukraine. Moreover Nord Stream 2, says the European Commission (EC), is also incompatible with EU regulations and with its Energy Union, which is aimed at diversifying away from Russia.

This means some compromises will be needed to ensure the 55bn m³/yr project under the Baltic Sea gets the green light on terms acceptable to Gazprom and its partners: Austrian OMV, German BASF and Uniper, French Engie and Anglo-Dutch major Shell.

One solution that might be welcomed by the pro-competition EC would be if Moscow ended Gazprom's export monopoly, to allow other companies to ship gas through Ukraine. This has never made sense to Russia in the past, when gas prices have been higher. Selling more gas would not bring the government as much revenue as before, as the competition would erode the price.



However with oil prices low, the difference between spot and oil indexed prices means that Russia has less to lose now, and it could be a way for Russia and the EC to both claim a victory, if it were to be one of the remedies for allowing Nord Stream 2 to be built on commercially acceptable terms.

Speaking to NGE, James Henderson of the Oxford Institute for Energy Studies said that this solution does have legs, given the low gas price, and that it was a live issue in Russia, if not at the highest political level. "It could make sense politically and strategically," he said. "There is limited downside for Gazprom in terms of volume and price."

Rosneft and Novatek have made big inroads into the domestic market and so they do not have that much spare gas for sale abroad. "They are already at the limits of their capacities," he said, so the downside is limited unless they invest heavily upstream, while it would show that Gazprom was facing up to EU realities by not acting as an export monopoly. Novatek reported Russian gas production and purchases of 17.2bn m3 in 1Q2016 – up 1bn m3 year on year – of which 12.1bn m3 was equity gas production.

Henderson pointed out that Gazprom has already made concessions to European market rules by its use of gas auctions and its adoption of spot price linkage, so conceding its export monopoly could be a loss of face. Another problem is that if Gazprom does not want to take Ukrainian transit risk, then why would any other company? "They cannot be forced to do what they do not want to do," he said.

The European Commission's probe into allegations that Gazprom has acted anti-competitively in central and eastern Europe meanwhile drags on with no signs of a settlement. Novatek's Swiss subsidiary, Novatek Gas & Power, is already trading gas in western Europe, buying and selling gas at hubs, which Gazprom also does through Gazprom Marketing & Trading. It has a long-term contract to sell 1.9bn m³/yr to German utility EnBW.



U.S. to undermine Russia's gas monopoly in Europe

Oilprice, 24.04.2016



The first U.S. LNG shipment will soon arrive in Europe, marking a new era for energy on the continent. Cheniere Energy's Sabine Pass facility on the U.S. Gulf Coast recently sent a shipment of American liquefied natural gas, which should arrive in Portugal within a few days.

"LNG coming out of the U.S. is probably the single most important thing that will transform the future LNG market," Melissa Stark, energy managing director at Accenture, told Bloomberg. "It heralds the arrival of a global market. European LNG demand is rising as domestic natural gasproduction is falling.

Europe's LNG imports climbed by 16 percent in 2015 compared to a year earlier. Cheniere's exports alone won't amount to much in the grand scheme of things, at least for now. But several more LNG export terminals are under construction along the Gulf Coast.

"U.S. LNG supply to Europe may have strong geopolitical symbolism, but its current volume impact will be negligible, until the big volumes come on stream in 2018-19, and cargoes will probably go to higher value markets in Latin America and elsewhere," Jonathan Stern of the Oxford Institute for Energy Studies, said in an email to Bloomberg.

U.S. LNG will have hard time competing with cheaper natural gas from Russia for the European market. Russia's state-owned Gazprom said a few months ago that it wants to push gas exports to Europe to record levels and the company is confident that U.S. LNG won't steal market share.

Gazprom already supplies about one-third of European gas demand, and the Russian company wants to ramp up gas flows by 2 percent in 2016, with more increases coming in the years ahead. The vision is to continue to hold onto about 30 percent of the European market through 2035, according to a budget obtained by Bloomberg earlier this year.

Gazprom argues it can undercut U.S. LNG on price. "In a five-year perspective, the cost of U.S. LNG is seen higher than forward prices at the British hub NBP," Alexander Medvedev, a top Gazprom official said in New York in January, referring to a benchmark natural gas price in the UK. "Imports of North American gas to Europe will be limited."

Not everyone agrees. Earlier this year consulting firm Wood Mackenzie issued an estimate, projecting that 55 percent of U.S. LNG volumes, or about 32 million tonnes per year (mtpa), will be sent to Europe by 2020. While Asia often sees higher LNG spot prices, making it a desirable export destination, transportation costs for U.S. LNG destined for Europe are lower.



But Gazprom could block a lot of those cargoes by stepping up export volumes and selling them at prices below what can be achieved by U.S. LNG. Gazprom can export pipeline gas to Europe for \$3.50 per million Btu (MMBtu) while American LNG would need prices of \$4 to \$5/MMbtu. Currently, Gazprom sells gas to Europe at a price of about \$5.80/MMBtu on average, but could lower the price to beat U.S. LNG.

Of course, viewed another way, the growing U.S. export capacity – the mere existence of a competing source of supply – should push down the price that Gazprom is able to charge, a victory for Europe and a blow to Gazprom. Without U.S. LNG, its proponents argue, Russia would not be forced to accept lower prices. "It's the start of the price war between U.S. LNG and pipeline gas," said Thierry Bros, an analyst at Société Générale, according to the WSJ.

Another strategy for Gazprom is to expand pipeline connections to secure more buyers for a longer period of time. The Russian gas giant, along with several international gas companies, is pushing the Nord Stream 2 pipeline, an expansion of the existing conduit that connects Russian gas to Germany via the Baltic Sea.

The proposed project has become highly controversial, with its sponsors – including E.ON, Wintershall, Shell, OMV, and Engie – arguing that the pipeline expansion is purely about business. Some governments in Eastern Europe see a more sinister plot to keep them hooked on Russian gas while depriving Ukraine its leverage as transit hub. Ukraine's state-owned gas company Naftogaz calls Nord Stream 2 a "Trojan horse."

On the other hand, if the project meets all legal requirements and the companies want to move forward, European politicians may have a tough time trying to slow it down. Speaking at an event at The Atlantic Council in early April, Friedbert Pfluger a Nonresident Senior Fellow at the Washington DC-based think tank, rejected the argument that the Nord Stream did not make commercial sense. "Who decides this? Is it government? Politicians? Are we in a planned market society? Do we teach Gazprom and the Russians that we know better as politicians than companies what the future market share and consumption in certain fields are?" Pfluger said.



Russia-GermanygaslinkEurope, EU energy chief says

Bloomberg, 20.04.2016

polarizes



A plan to expand a natural gas pipeline from Russia to Germany is driving a wedge into the European Union, with some eastern members feeling their needs are being overlooked by the richer and more energy-diversified west, the bloc's top energy official said.

The Nord Stream 2 pipeline isn't aligned with the principles of the bloc's laws and raises questions about the continent's energy security, Maros Sefcovic, the European Commission's chief for energy union, said in an interview in Bratislava. The pipeline, able to meet almost 15 percent of current EU gas demand, is key to Russia's plans to boost exports.

The planned link, which would pump Russian gas directly to Germany, has met resistance from eastern EU members including Poland, Slovakia and the Baltic States. Those nations and Ukraine, which either get income from gas transit fees or wish to diversify their energy imports beyond Russia, have called Nord Stream 2 "anti-European."

"At the beginning there was a strong voice that this is a purely commercial project, but I don't remember any commercial project that would be so intensely debated on a political level," Sefcovic said in an interview in Bratislava. "It sparked an intensive geopolitical debate on the future of Ukraine and energy security of southeastern Europe."

Russian pipeline gas export monopoly Gazprom PJSC is pursuing Nord Stream 2 with western European companies from Germany's EON AG to Paris-based Engie SA and plans to start it in 2019. Nord Stream 2 isn't subject to regulation under the EU's so-called third energy package, Gazprom Chief Executive Officer Alexey Miller said earlier this month, adding that the company expects exports to Europe to rise to a record this year.

In its current form the project doesn't comply with EU legislation and many issues still need to be solved with the German regulator, potentially putting off potential investors, Sefcovic said. "At times when not only state budgets but also those of energy companies are stretched because of low oil and gas prices, I'm convinced that each energy company will very thoughtfully analyze whether to participate in a project whose legal issues are not fully solved and which has triggered a very important political debate," he said.



Gas advocacy, and Nord Stream's chances

Natural Gas Europe, 29.04.2016



In his opening address, the executive director of the Slovak Gas and Oil Association Jan Klepac reminded delegates that gas produces 55% less CO2 and 99% less sulphur than coal in the power-generation sector.

"Our major project now is gas advocacy," he said, pointing to the support for gas from the COP21 agreement reached in Paris last year that had been ratified a few days earlier. "It is clear that today's goals are not achievable without gas. Renewables cannot cover the growth in demand. Gas is becoming the strategic partner of renewables," he said.

This point was picked up the next day in the speech by the general director of Czech pipeline operator Net4Gas, Andreas Rau. He said that low energy prices provided an opportunity to focus more on gas advocacy and push for its use in the power sector. "We all have to be gas advocates. We are fighting for the survival of the gas industry in competition with the coal industry. We should focus on gas advocacy as much as possible," he said. In that context he praised the International Gas Union, saying it was doing a "fantastic job" under its president, David Carroll and "developing into a professional organisation."

Carroll told delegates that the greater use of gas could be the foundation of pan-European economic growth and health. Germany had poured billions of dollars into renewables but carbon emissions had risen slightly. This is not sustainable if countries like Germany are serious about commitments, he said.

EU Commissioner for the energy union, Maros Sefcovic, on his home turf, said that the EU emissions trading scheme was working technically, but the parameters were too generous and a carbon price around \in 6/metric tons does not reflect the realities. So coal burn was continuing.

He also said that exchange-based pricing was the way forward, but that would need market change in the east for hubs to develop. Central and eastern European companies paid 16% more than counterparts in western Europe, or €1.3bn more for the same amount of gas, he said, arguing the need for better integration of markets and for more interconnectors. The aim is for countries in central Europe to have access to at least three different sources of gas, and the EC is helping funding this, such as the interconnector between Lithuania and Poland. He also mentioned the north-south corridor and reverse flows."These will create a liquid gas market with no more barriers to free flow of gas in Europe," he said.





Slovakia will in July assume the presidency of the European Union and its in-tray is filling up fast with a heavy agenda, he said, including the politically sensitive budget decisions and the EU emissions trading scheme. One challenge is the Ukraine-Russia conflict; another is that gas, for all its benefits over coal, remains a fossil fuel. "Ask anyone what are his first reactions when gas is mentioned and I guess most will say problems, disruptions, emissions, whatever. Our task is to challenge this. Gas should be solution not a problem," said one speaker.

However it is proving difficult to retain customers, with many being lost to other fuels. And besides, the gas industry naturally is biased towards gas. As the general director of RWE East, Martin Herrmann, said, "Because love gas, we love projects, pipelines, LNG, storage. But this comes at a price. "If we continue to build like crazy the price of distribution goes up. The strongest message to policy makers must come not from us who are biased, but from our customers. Transport fuel is the only section where we see growth and that is because customers like it."

And with so much capacity being built with no regard for neighbouring initiatives and no means of doing cost-benefit assessments, it is unclear how much prices have fallen thanks to these initiatives. As one speaker said, there are all kinds of competition – LNG, pipes, hubs, storage – but the local guy always wins.

There is no objective tender to solve a supply problem. Should we use gas from storage or pick it up at hubs? Or try demand reduction? But it is never a matter of which is the most cost-effective solution; he said he had never seen any cost-benefit analysis ex-post that found out what was the benefit of this or that capacity, or even if it had been used.

Nord Stream 2 will probably be built, just as Nord Stream 1 was, according to a panel of independent energy analysts based in the Visegrad countries Poland, Hungary and the Czech Republic.

The pipeline follows Nord Stream 1 and it is intended to bring contracted gas nominated for delivery at Baumgarten in Austria under the Baltic Sea and across Germany, rather than through Ukraine and Slovakia. It was mentioned in many presentations at the conference, and was touched on by Sefcovic, who said that the preservation of transit through Ukraine was important.

"Any project that might jeopardise transit routes, like Nord Stream 2, is a topic of debate," he said. "It was presented as purely commercial project but I have never seen a commercial project debated on such a political level."

However, as one speaker pointed out, it has the advantage over Ukraine of bringing gas to where it is needed: close to the UK and the Netherlands, where indigenous output is falling for natural or political reasons. In fact, early last decade, Gazprom and Gasunie – as the bundled Dutch gas supply and transport monopoly was then known – unveiled a map at a World Gas Conference for Gazprom's first offshore route.

It showed a dotted line extending from the German coast towards the UK sector of the North Sea, long before the Dutch government capped output from Groningen. It could have tied into the UK offshore, using offshore platforms as their operators' own fields depleted.



At the end of the conference the panel session said the chances were that Nord Stream 2 would go ahead after all, although it flies in the face of policy-makers. The EU commissioner for the energy union said it was not needed, not wanted and did not provide either a new route or a new supply of gas.

Nevertheless, as European gas production falls, especially in the UK North Sea and the Netherlands, some delegates told NGE that it may be more secure to deliver gas to that region by a subsea pipeline to Germany than pay other operators to bring it across continental Europe.

Enlarging on his reason for supposing a more than 50% probability that it would be built, Peter Kaderjak, director of Hungarian energy policy research firm Rekk and a former Hungarian energy regulator, told NGE that some of the companies involved had won good upstream concessions in Russia related to their participation in the project; and Germany had so far shown very strong political commitment. Two German firms are shareholders in the project: Uniper and BASF each have 10%.

US LNG to lower European dependency on Russian gas

AA Energy Terminal, 29.04.2016



The entry of U.S. LNG provides Europe a good opportunity to secure energy supplies and lower its natural gas dependency on Russia, European and American officials said.

"Slovakia is 100 percent dependent on energy supplies from Russia for gas," Jan Kuderjavy, director of department of Economic Diplomacy at the Ministry of Foreign and European Affairs of the Slovak Republic, said at Atlantic Council's 'U.S. LNG Exports and European Energy Security Conference' in Washington D.C. "[In the past] there were disruptions in deliveries. So, energy diversity is very dear to us, and we are trying to find solutions," he added.

And he stressed the significance of supply reliability. "We need diversification of sources, suppliers, and routes." Pal Sagvari, ambassador-at-large for energy security at the Ministry of Foreign Affairs and Trade of Hungary emphasized that gas interconnections within Europe are not enough for energy security.

"We have to integrate our markets to global ones. We are pleased to hear that among the ships that left the Sabine Pass, one of them was headed to Europe," he said, and added that U.S. LNG exports can be "an option for Europe" The Sabine Pass liquefaction facility in Louisiana is home to the U.S.' Cheniere Energy, the first American company that began exporting LNG from the lower 48 states (excluding Alaska and Hawaii) at the end of February this year.



So far, Cheniere has exported a total of six LNG cargos to different parts of the world -- South America, the Middle East, and India -- but its latest LNG shipment arrived in Portugal this week. It was the first domestically produced American gas exported to Europe, and signaled the U.S.' future presence in the European market to wean its dependency off Russian gas.

"It's not new that the U.S. has been interested in supporting European energy security," said Robin Dunnigan, deputy assistant secretary of state for energy diplomacy in the U.S. Department of State "Energy policy affects economic growth, climate goals and political stability ... and Europe's energy security is very closely tied to the U.S.' national security," she added.

Dunnigan hailed the start of U.S. LNG exports as an energy and a foreign policy achievement for which the U.S. will build on to become a reliable and market-based supplier to global markets. "That's good for the energy security for our partners and allies around the world," she said adding that she looks forward to U.S. LNG being part of the diversification solution with reliable gas sources for Europe, where many countries still face dominant supplier issues.

U.S. exports of LNG to Europe can facilitate a break in Europe's over dependency on Russia by diversifying the continent's gas suppliers. Europe is currently reliant on Russia for approximately 30 percent of its total gas consumption.

However, Dunnigan stressed that Europe needs to improve its own gas infrastructure network to enable the mobility of natural gas within the continent. "It doesn't matter how many molecules we are putting in the market once it reaches Europe if it cannot move freely in the continent," she said. "So, some of the interconnectors needs to be finished. There are also some lack of terminals where gas needs to reach, especially in central and southeastern Europe," she explained.

Vaclav Bartuska, ambassador-at-large for energy security at the Ministry of Foreign Affairs of the Czech Republic said "We need to create a unified market for half a billion people in Europe," However, he said that deficiencies with missing links in gas interconnections between French and Spain, as well as French and Italy need to be addressed.



Is oil market rebalancing likely with oil price upturn?

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The question of oil price rebalancing between crude supply and demand was brought to the fore when oil prices hit highest level. While some experts attribute the increase in prices to declining U.S. production, others say shale oil will return to the market as soon as there is a price recovery.

"The rebalancing will happen over the course of this year even without action from OPEC," Robert Campbell told. "Supply disruptions are rising with issues in Iraq, Nigeria, Venezuela and most recently the strikes in Kuwait, while supply is in decline in Latin America and Asia, and U.S. shale is gathering pace because of lower investment," he added.

Campbell stated that prices may be volatile, but are unlikely to return to their low levels seen in January, when they hit their lowest in 13 years. He added that prices "point to a good recovery by the end of this year, with the sentiment in the crude market turning increasingly positive." Meanwhile, another expert said that low to moderate levels of oil pricing are here to stay, at least for some time.

"The idea that declining non-OPEC production will stabilize prices at a higher level is illusionary," T. Homer Bonitsis, associate professor of finance at Martin Tuchman School of Management in New Jersey Institute of Technology, told Anadolu Agency. "The non-OPEC production capacity has been built and exists. Some of it may be taken offline because of low prices, but it will be put back online if prices increase," he said, and added "So, the general trend in oil prices should be around current levels with a bias downward."

Due to low oil prices, many companies around the world, especially in the U.S., had to make cuts in their capital expenditures, and lower their investments to survive in the market. U.S. oil production declined around 600,000 barrels a day on average, since peaking at almost 9.7 million barrels a day last April, according to the U.S. Energy Information Administration.

"U.S. shale is extremely resilient, but also an extremely fragmented industry. Some companies will not survive, but enough will cling on to the prospect of higher oil prices to keep going ... until it becomes economic for them to resume," Campbell said. "We expect U.S. shale production to fall year-on-year by around 500,000 barrels a day this year," he added.

On the other hand, Bonitsis highlighted an interesting perspective, by stating that the high-cost U.S. shale producers will have their assets sold at a significant discount, which he said will "result in new low-cost producers of oil." "Saudi Arabia's policy of cutting prices to 'knock-out' U.S. shale producers is misguided," he stressed.



The Saudi strategy was to let prices drop lower without making any intervention, so that high-cost producers, like the U.S.' shale, would be driven out of the market. That is why the Kingdom refused to cut its production at OPEC's last three biannual meetings.

The cartel will meet in Vienna, however the divisions within the organization are deeper than ever. Saudi Arabia refused to freeze its output at Doha oil producers' summit, criticizing Iran for not being on board. Meanwhile, Iran continues to raise its production after pledging to return its output to presanction levels. "The group will now find it even harder to build a consensus for other proposals, or to convince the market it can work collectively again," Campbell said.

He stated that there is little chance of anything concrete coming out of OPEC's next meeting. He further asserted that the bigger concern for the cartel is the political perspectives of some of its members, like the Saudis and Iran, which are hindering discussions within the organization. Bonitsis stressed the importance of global consensus for a price recovery. He maintained that disagreements among the participants at the Doha summit which hampered any meaningful output, did not bode well for crude prices. "Only very robust economic growth will change this scenario and the economic horizon does not indicate that this will occur anytime soon," he concluded.



Announcements & Reports

► Striking the Right Balance? GCC Energy Reforms in a Low Price Environment

Source	:	OIES
Weblink	:	https://www.oxfordenergy.org/publications/striking-right-balance-gcc-energy-reforms-low-price-environment/

► 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

Smart Energy Analytics 2016

Date: 04 - 05 May 2016Place: London, United KingdomWebsite: www.wplgroup.com/aci/

► Flame – Europe's Leading Natural Gas & LNG Conference

Date: 09 - 12 May 2016Place: Amsterdam, NetherlandsWebsite: www.flame-event.com

► Global Oil & Gas Turkey

Date	: 16 – 17 May 2016
Place	: Istanbul, Turkey
Website	http://www.oilgas-events.com/TUROGE-Conference



▶ 6th International Conference & Workshop REMOO 2016

Date: 18 - 20 May 2016Place: Budva, MontenegroWebsite: http://remoo.eu/html/general_information.html

Turkmenistan Gas Congress

Date: 19 – 21 May 2016Place: Turkmenbashi, TurkmenistanWebsite: http://www.oilgas-events.com/

► Pipeline Technology Conference

Date: 23 - 25 May 2016Place: Berlin, GermanyWebsite: www.pipeline-conference.com

Caspian Oil & Gas

Date: 01 - 04 June 2016Place: Baku, AzerbaijanWebsite: www.caspianoilgas.az/2016/

Yamal Oil & Gas

Date: 08 - 09 June 2016Place: Salekhard, RussiaWebsite: www.yamaloilandgas.com/en/programmerequest/

▶ 7th International Energy Forum

Date	: 10 June 2016
Place	: Istanbul, Turkey
Website	www.iicec.sabanciunic.edu

Energy Systems Conference 2016

Date: 14 - 15 June 2016Place: London, UKWebsite: www.energysystemsconference.com

World National Oil Companies Congress

Date	;	15 - 16 June 2016
Place	1	London, UK
Website	;	http://www.terrapinn.com



► Energy Trading Central and South Eastern Europe 2016

Date	: 15 – 16 June 2016
Place	: Bucharest – Romania
Website	http://www.energytradingcsee.com/

Eurasian Natural Gas Infrastructure

Date	: 22 – 23 June 2016
Place	: Athens – Greece
Website	: http://www.engi-conference.com/

ERRA Summer School: Introduction to Energy Regulation

Date	: 20 - 24 June 2016
Place	: Budapest, Hungary
Website	http://erranet.org

▶ 9th SE Europe Energy Dialogue

Date	: 29 – 30 June 2016
Place	: Thessaloniki, Greece
Website	www.iene.eu

Global Oil & Gas - Black Sea and Mediterranean

Date	: 22 - 23 September 2016
Place	: Athens, Greece

Website : www.iene.eu

► 23rd World Energy Congress

Date	;	09 -	13	October	2016
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Place: Istanbul, TurkeyWebsite: http://wec2016istanbul.org.tr/

► 15th ERRA Energy Investment & Regulation Conference

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

▶ 21st IENE National Conference "Energy and Development 2016"

Date	: 24 - 25 October 2016
Place	: Athens, Greece
Website	www.iene.eu



► European Autumn Gas Conference 2016

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

► 5th Cyprus Energy Symposium

- **Date** : 29 30 November 2016
- Place : Nicosia, Cyprus
- Website : www.iene.eu