

Ankara says Turkish Stream talks with Russia now frozen

Sofia News Agency, 12.09.2015



Turkey and Russia have frozen their talks over the proposed Turkish Stream gas pipeline project due to disagreement over a gas price discount, a Turkish government official has said. “The parties have not ended the talks, but frozen them,” Turkish news daily Hurriyet quoted Energy Ministry Deputy Undersecretary Sefa Sadık Aytekin as saying. “We can’t move forward in the negotiations at the moment.”

While Moscow insisted that talks on the discount to the price of deliveries of Russian natural gas to Turkey should be a prerequisite for the Turkish Stream project, Ankara only saw the talks as a starting point, according to the Turkish official.

Aytekin also said that Turkey had increased the gas price discount sought from Russia to 10.25% from its initial level of some 6%. Turkey’s Interim Energy Minister Ali Rıza Alaboyun said that it seems unlikely for the two sides to move their negotiations forward until a new elected government takes over in Ankara after the snap parliamentary elections scheduled for November 1. Turkish Stream was proposed by Russia in December 2014 as a substitute to South Stream, a project which was designed to carry Russian gas to Central Europe beneath the Black Sea and via Bulgaria and other Eastern European states.

Turkish shale gas search stalled amid security woes

Today’s Zaman, 12.09.2015



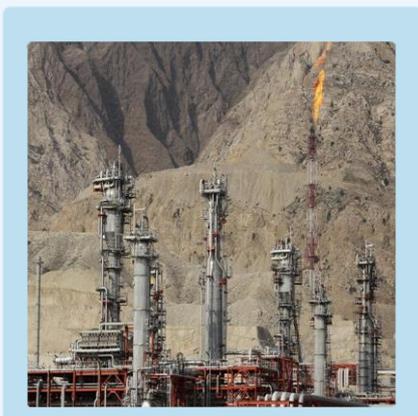
Fracking operations on a shale gas field in the southeastern province of Diyarbakır have been stalled due to rising violence in the region, International Association for Energy Economics (IAEE) President-elect Gürkan Kumbaroğlu told Today’s Zaman.

Turkey’s most important shale gas field, Sarıbuğday-1, is estimated to hold natural gas reserves that could meet the country’s demand for seven years, but fracking operations necessary to access the gas can only be continued once the violence has ended, according to International Association for Energy Economics (IAEE) President-elect Kumbaroğlu.

Every year, Turkey imports upwards of \$20 billion worth of natural gas to satisfy its domestic demand, while the Sarıbuğday-1 reserves have been calculated to hold \$140 billion in shale gas, a natural gas found in shale rock formations. Kumbaroğlu also stressed the importance of developing a deeper trade relationship with Iran, a country that possesses the world's second-largest natural gas reserves."Turkish companies could go to South Pars [the world's largest gas field]. Turkish companies are warming to the idea of investments in Iran. If we are not proactive, we'll become subcontractors." "The Turkish Petroleum Corporation (TPAO) and the state-owned Turkish Pipeline Corporation (BOTAŞ) could search for gas on these fields. We are organizing an energy summit in Antalya that Iran will attend. Iran's participation will be important. This as an important indicator for Turkish companies and their investments," Kumaroğlu concluded.

Azerbaijan, Georgia, Turkey to discuss energy co-op with Germany

Trend News Agency, 12.09.2015



Azerbaijan, Georgia and Turkey will discuss with Germany the possibility of participation of German entrepreneurs in the future energy and infrastructure projects, said the message of Azerbaijani ministry of energy published on its website.

A quadrilateral energy conference with the participation of Azerbaijan, Georgia, Turkey and Germany, organized by the Eastern Committee of German Economy will be held with this purpose in late 2015. "Azerbaijani ministry of energy highly appreciates the role of this conference in development of energy cooperation, aimed at ensuring energy security of Europe by Azerbaijan, including Germany," said message.

"We believe that such events provide an opportunity not only for strengthening of cooperation in the energy sector, but also for regional development and cooperation." The conference will bring together senior representatives of Germany, Turkey and Georgia, according to the message. On December 17, 2013, a final investment decision was made on the Stage 2 of the Shah Deniz offshore gas and condensate field's development. The gas produced at this field will first go to the European market (10 billion cubic meters). Around six billion cubic meters will be annually supplied to Turkey.

The contract for development of the Shah Deniz offshore field was signed on June 4, 1996. The field's proven reserve is estimated at 1.2 trillion cubic meters of gas and 240 million metric tons of condensate. As part of the Stage 2 of the field's development, gas will be exported to Turkey and European markets by expanding the South Caucasus Pipeline and construction of Trans-Anatolian Natural Gas Pipeline (TANAP) and the Trans-Adriatic Pipeline (TAP).

Iranian gas to Europe: Years down the road

Natural Gas Europe, 17.09.2015



Iranian gas reserves are the second largest in the world, but thus far they have not made an impact in international markets. Now that the nuclear deal with Iran looks to be implemented and international sanctions likely lifted, there has been much talk of Europe capitalizing upon this potential new source to diversify its sources of natural gas.

But, at an Atlantic Council panel discussion on the future of Iranian energy, Dr. Brenda Shaffer, Visiting Researcher and Adjunct Professor at Georgetown University, said the prospect of Iranian gas supplying Europe might take “years and years.”

She observed, “We’re seeing a lot of hype, seeing Iran as an alternative to Russian gas, in the form of Europe’s new LNG strategy.” Reiterating that Iranian gas going to Europe could take a long time, if anyone might block impede that process it that would be Russia. She explained, “Iran’s normalization of relations creates policy challenges for Russia who’s on the opposing side of Iran on various challenges.” Dr. Shaffer predicted that while much energy diplomacy is likely to be seen between Europe and Iran, there is no doubt that the country becoming a major supplier to the old continent is a long way down the road.

Asked what other export markets Iran may be interested in, she offered that countries in the Persian Gulf that are moving towards using more gas could be potential customers; however, she cited Qatar’s difficulties in being able to send its LNG to some of its neighbors. “Such issues will definitely limit Iran’s exports,” she explained, adding that new gas flows could unleash underlying tensions in a gas deprived region like the Gulf. Reuters’ Yeganeh Torbati pointed out that once sanctions are lifted on Iran, domestic demand for gas could very likely go up.

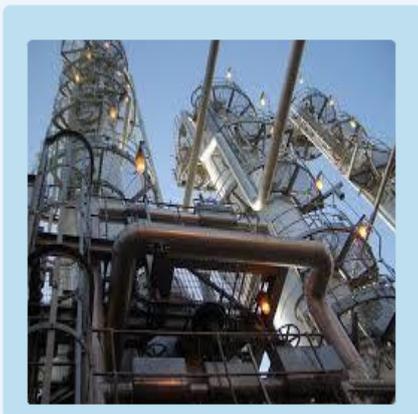
Dr. Sara Vakhshouri, President of SVB Energy International, opined that the production of Iran’s South Pars gas field is very likely to double by 2018. While she says most of the country’s focus will be on developing gas, production of gas condensate is also likely to increase significantly. Concerning gas, she explains that one of Iran’s objectives is to increase the added value of its resources inside of the country, exporting final products rather than raw materials. “This way, Iran could not only create jobs and a better economy, but also get more resistance toward any sanctions or further political problems,” said Dr. Vakshouri, who adds that one objective is to produce electricity for export.

She says that, for example, Turkish consumers of electricity would be more affected by a shut-off in the wake of sanctions than they would from a gas shut-off. “However, the exporting of natural gas, which creates longer strategic gas with between the suppliers and receivers of natural gas, is also important for Iran.” She said that Iran exporting natural gas to Europe has traditionally been part of the discussion. Dr. Vakshouri reported that Spain has recently said it is interested in developing an LNG in Iran in order to deliver the gas to Europe, or exporting to Oman and then exporting via that country’s LNG facilities, as well as using existing pipelines like from Azerbaijan.

However, she adds that Iranian gas is not likely to be able to compete with Russian sources of gas according to price, despite Europe’s keenness on a new source of supply. She explained that this was contingent upon two factors: price and trust. In connection with price, she said, “At the current moment, Iran doesn’t have the export capacity, but by 2019-2020 the country should have greater capacity.” According to Barbara Slavin, Washington Correspondent for Al-Monitor, as part of the JCPOA agreement Iran will once again be able to access international banks, get insurance, attract investment, sell petroleum and have access to US currency. She said, “I don’t foresee the US congress being to reimpose the sanctions. Only a massive violation by Iran would cause sanctions to return, but the country needs to sell oil and gas and get reentry onto the markets.”

Uncertainty surrounding Israel’s natural gas market

Natural Gas Europe, 14.09.2015



Israel’s Knesset approved a framework deal that will allow the partners in its largest offshore gas fields to move forward in the development of the Leviathan. Under the framework deal, Texan Noble Energy will have to bring down its share in Israel’s Tamar field to 25% within a period of 6 years. Israel’s effective development of its offshore resources had been delayed by legislative hurdles.

The partners in the 10 Tcf Tamar field and the 21 Tcf Leviathan field have been accused by the country’s competition regulator of constituting a cartel that would distort competition in the market.

The framework deal approved also caps the price of the natural gas sold by Noble Energy to the Israeli consumer. Once the framework deal is implemented, Noble Energy and its Israeli partners Delek drilling and Avner Oil Exploration expect to be ready to enter gas sales contract negotiations and to complete the development of the Leviathan in three to four years time. The frequent regulatory disputes in Israel have triggered fears that delays in the production of the Leviathan field could cost Israel to lose regional opportunities. Israel has been engaged in talks to sell gas to its immediate neighbours Jordan and Egypt, both undergoing severe energy crises and in desperate need for Israeli natural gas.

Israel's late entry into the market could indeed be harmful to the newly natural gas producing Eastern Mediterranean country. Egypt has launched efforts to develop its indigenous resources. Early this month, ENI announced a giant gas discovery off Egypt's shore: the Zohr field, located at a depth of 1,450 meters in the Shorouk Block within Egypt's Exclusive Economic Zone, is estimated to hold up to 30 Tcf of natural gas - more than Israel's 21 Tcf Leviathan. This is a significant discovery: if the estimates are confirmed, Egypt would have more natural gas than Norway. The impact on Israel goes beyond losing Egypt as a customer for Israeli gas: Israel was eyeing Egypt's LNG terminals at Idku and Damietta to reach export markets but if Egypt allocates some of its gas for exports, it is uncertain that the terminals would have the remaining capacity to welcome Israeli gas.

Despite Egypt's statements that it will still import Israeli gas, experts believe that Israel ought to look for an alternative way to export its offshore resources. A possible alternative would be to export the gas via Turkey to Europe. The ongoing peace talks to solve the Cypriot problem may lead to a settlement of the dispute that would allow Israel and Cyprus to reach the European market via Turkey. Cyprus too has yet to find a way to monetize its Aphrodite field, estimated at 4.54 Tcf and located in Block 12 of its maritime zone. The new find in Cyprus may revitalize Israel and Cyprus' energy partnership towards finding a common way to sell their offshore riches.

Bulgaria working to achieve energy security for EU

Natural Gas Europe, *12.09.2015*



Bulgaria is actively working to support the energy security of the EU community. Speaking at the XII International Conference on Security in Southeast Europe in Sofia Friday, Bulgarian Minister of Energy Temenuzhka Petkova said that the Balkan nation is “ actively working on the realisation of the goals of EU's Energy Union – security of the deliveries, competitiveness and stability in the sector.”

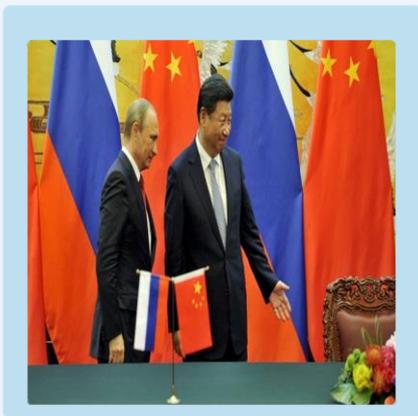
“It is not easy to work in this situation in Bulgaria. You know that as a whole the country is actively dependent on one energy source, which requires diversification both of the sources and of the routes of the natural gas deliveries.

This is a highly important issue and it is not by chance that this is one of the major priorities of the Bulgarian government,” Minister Petkova remarked. In minister's words, to realise the diversification there is a need to establish the needed infrastructure among all EU member states. According to Petkova, the lack of the needed infrastructure does not allow us to speak about real diversification, energy and national security.

“Our major priority is the intersystem connectivity with our neighbouring countries – Greece, Turkey, Romania and Serbia,” Temenuzhka Petkova said. “The accent in our work is put on the construction of an interconnector between Bulgaria and Greece”, Ms Petkova said. “This will give us a real chance to minimise the risk of violations of our energy security, as well as the energy security of the community,” The minister explained that there was a need to adopt a final investment decisions in order to launch this project.

Pivot east lets Russia down

Natural Gas Europe, 07.09.2015



After a year of intense flirtation, the Chinese-Russian relationship is beginning to look like a one-sided love affair. Increasingly cut off from Western markets after the sanctions, Russian leaders initially pinned their economic hopes on a pivot eastward. Russians thought Beijing would jump at the chance to buy deposits, flood Russia with cheap financing, hand over essential technologies.

However, Moscow’s expectations of greater engagement with Beijing have gone unfulfilled: The volume of trade, investment has dwindled as a result of falling prices, sanctions, ruble volatility, and the Russian economic crisis.

In 2011, then presidents Dmitry Medvedev and Hu Jintao announced goals of achieving \$100 billion in bilateral trade by 2015 and \$200 billion by 2020; initially, these targets seemed attainable. According to a memo based on data from Chinese customs agencies released by Russia’s Economic Development Ministry, between 2003 and 2012, trade between the two countries grew at an average of 26.4 percent per year. Over the first six months of 2015, however, Russia’s trade with China dropped by a whopping 31.4 percent, to \$31 billion.

One obvious reason for the plunge in trade is the downturn in natural resource prices, particularly oil. Fossil fuels account for 61.4 percent of Russian exports to China. However, natural resource price dynamics are not the only factor in Russia’s decreasing stake in the Chinese economy. The overall downturn in the Russian economy is taking a toll. The Economic Development Ministry forecasts a gross domestic product drop of 3.3 percent in 2015, which helps explain why Russia imported 36.2 percent fewer Chinese goods in the first half of the year.

When Medvedev and Hu announced their bilateral trade goals, Russian hydrocarbons were expected to fuel most of the growth. The Chinese economy was racing ahead with double-digit GDP growth, oil prices were soaring, and the Skovorodino-Mohe spur to the Eastern Siberia-Pacific Ocean oil pipeline was complete, so these goals seemed achievable. Agreements reached by Gazprom and China’s CNPC on the construction of the Power of Siberia pipeline — which was projected to be worth \$400 billion — seemed like the logical next step. Next on the agenda were the Altai pipeline; a new above-ground pipeline from Khabarovsk or Vladivostok; and Novatek’s Yamal LNG project, in which CNPC planned to increase its stake from 20 to 30 percent.

But collapsed hydrocarbon prices, decreased Chinese demand, and sanctions have pulled the rug out from under these projects: talks on the Altai pipeline have been suspended; Chinese investment in Yamal LNG may not come to fruition; and in February 2015, CNPC scaled back its forecast for Chinese demand for gas in 2020 from 400 billion cubic meters to 310 billion cubic meters. The recovery and growth of Russian-Chinese trade will depend above all on the price of Brent crude, as the overall state of the Russian economy and the ruble exchange rate are both closely tied to oil prices. The willingness of Russian officials to substantially improve the investment climate and to create stable conditions for Chinese investment will also affect trade. Finally, the cancellation or relaxation of sanctions would affect bilateral trade, though there is no reason to expect this anytime soon.

In the current climate, Moscow and Beijing will likely focus on strategic projects. One promising sphere is military-technical cooperation: Several Russian experts, including Vasily Kashin from the Center for Analysis of Strategies and Technologies, believe that Russia currently has a “window of opportunity” to sell certain systems that China will probably learn to produce on its own in a few years. Another field of interest is infrastructure on Russian territory as part of the countries’ mega-project to link the Eurasian Economic Union with the Silk Road Economic Belt. So far, Moscow and Beijing have discussed several infrastructure projects, including a high-speed railroad between Moscow and Kazan, and a highway from Kazakhstan to Europe. However, these projects will not deliver quick results, and will first require extensive negotiations over their terms.

PM Yatsenyuk: Nord Stream expansion to Europe will leave Ukraine in \$2bn hole

RT, 11.09.2015



The construction of the Nord Stream-2 gas pipeline means the exclusion of Ukraine from gas transits to the EU, said the Ukrainian PM Arseny Yatsenyuk. Nord Stream is an offshore gas pipeline that goes from Vyborg in Russia to Griefswald in Germany under the Baltic Sea bypassing Ukraine.

“What does the construction of Nord Stream-2 mean for EU? This means that EU loses the possibility of direct gas supplies through Ukraine via the shortest route. The amount of such a loss is 140 bcm of gas that could go through the Ukrainian gas transportation system” said Yatsenyuk, adding that Ukraine would lose \$2 billion in transit fees.

“This means that the construction of the Nord Stream 2 jeopardizes the security and continuity of gas supplies to the countries of South-Eastern Europe,” said the Prime Minister. Moscow has repeatedly expressed concerns over the reliability of gas transit via Ukraine. Gazprom switched Ukraine to a gas prepayment scheme last June due to Kiev’s failure to pay its gas bills. In 2019, the Russia-Ukraine gas transit contract expires and negotiations on its extension are now in a deadlock.

Gazprom signed a deal to launch a joint company to construct the new pipeline. The new project will include two pipes that will deliver 55 billion cubic meters of gas annually from Russia to Germany via the Baltic Sea. Among the shareholders in the project company named New European Pipeline AG will be Gazprom, E.On, Shell, OMV, BASF/Wintershall and Engie (former GdF Suez). Gazprom will hold a 51 percent stake, E.On, Shell, OMV and BASF/Wintershall will have 10 percent each, while Engie will take 9 percent. The project's route is expected to follow the 1,224 kilometers of Nord Stream which opened in 2010. Nord Stream targets markets in Germany, France and the UK, and other EU countries. Gazprom CEO Aleksey Miller, Russian Energy Minister Aleksandr Novak and European Commission Vice President for Energy Union Maros Sefcovic are holding talks on the winter period, the transit of gas through Ukraine, and relations with it as a whole. Nord Stream-2 will also be discussed.

Prime Minister Fico on Nord Stream: “They’re making fools of us.”

The Slovak Spectator, 11.09.2015



The announced expansion of the transport capacity of the Nord Stream gas pipeline is an anti-Ukrainian and anti-European project, Ukrainian PM Arseniy Yatsenyuk said after talks with his Slovak counterpart Robert Fico in Bratislava.

The two PMs were reacting to a preliminary agreement between Russian giant Gazprom and Western energy concerns including BASF, E.ON, ENGIE, OMV and Shell on doubling the transport capacity of Nord Stream. The gas pipeline worth €7.4 billion goes from Russia to Germany along via the bed of the Baltic Sea avoiding Slovakia and Ukraine which use the Eustream gas pipeline.

The first Nord Stream branch was introduced in November 2011 and the second one in 2012. “They’re making fools of us,” said Fico. “It isn’t possible to talk on a political level about the need to stabilise Ukraine and at the same time to adopt a decision that places not only Ukraine, but also Slovakia in an unenviable position, as this affects the transit of huge amounts of gas through both Ukraine and Slovakia.” It may cost Ukraine billions and Slovakia hundreds millions of euros each year, according to Fico who rejected the notion that the deal between Gazprom and European energy companies is only a matter of business. He believes that these concerns operating in EU countries have “betrayed” Slovakia as an EU member country. This is at odds with political agreements made at the European Council, Fico said adding that he will raise the issue at next month’s EU summit.

Yatsenyuk pointed out that Ukraine will lose €1.5 billion per year in income from gas transit due to the construction of Nord Stream, while the move has not brought any additional energy independence for the EU. In addition, the route through Ukraine is the shortest, he stressed. Slovakia's annual loss may amount to \$800 million, while the price of gas for Western Europe will also be increased due to the Nord Stream, noted Yatsenyuk.

Russian controlled gas pipelines bad for Europe energy security, according to Ukraine

Forbes, 11.09.2015



Ukraine state-owned energy giant, Naftogaz, warned Friday that the Gazprom -led natural gas pipelines currently connecting Europe to Russian gas fields is more bad news than good.

“Russia’s Nord Stream-2 and the new Turkish Stream pipelines provide additional choice, and more choice is a great thing. However, it is a great thing not for the European consumers but for their Russian supplier,” said Andriy Kobolyev, the CEO of Naftogaz. “It will be Russia that decides where, to whom and on which political conditions it is going to supply its gas in Europe,” he said.

The Nord Stream-2 gas pipeline project puts Gazprom with Germany’s E.ON , BASF /Wintershall and Royal Dutch Shell in Europe. Recent sanctions against Russian oil and gas companies are focused on technology transfers, joint ventures and funding of oil and gas drilling projects. New pipeline deals are not sanctioned. Naftogaz said Nord Stream undermined the interests of Ukraine and Slovakia as transit points for Russian gas into the E.U. Kobolyev called it “yet another redundant pipeline controlled by Gazprom” designed to increase the European Union’s dependence on Russia.

Naftogaz and Gazprom have been going through a bitter divorce for the past year and a half. International courts in Stockholm have been intermediaries in creating viable payment systems between the two partners-turned-arch rivals. Gazprom is important to Ukraine’s economy because it pays billions in transit fees. But with the Kyiv and Moscow at odds since 2013, Gazprom has been diversifying its transit routes away from Ukraine. “This is not business, this is geopolitics,” Kobolyev said during the Yalta European Strategy meeting in Kyiv. “Our European partners told us not to make Gazprom mad, to work with them. And then they went behind our back to do Nord Stream to connect E.U. further into Russia.”

Gas business as usual? The new agreements between Gazprom and EU energy companies

Natural Gas Europe, 16.09.2015



On 4 September 2015 at the Economic Forum in Vladivostok, Gazprom signed two agreements with Western companies: an agreement to extend the Nord Stream pipeline, and an agreement on exchanging assets with corporations from Germany and Austria.

The agreement concerning Nord Stream-2 represents a success for Russia; it accomplishes the strategic goals of Russian gas policy in Europe despite the difficult political relations with the EU, the Western sanctions regime, and Brussels' declaration that it will diversify the EU's sources of supply and reduce its dependence on Russian gas.

It indicates the consent of Berlin and other Western European capitals to reviving cooperation with Russia in the gas sector. Finally, it also testifies to the growing differences of interests within the EU concerning the shape of gas cooperation with Russia, and represents an attempt to reduce the role of the European Commission (EC) in shaping energy policy. The chance of constructing the new legs of Nord Stream seems good; however, the ultimate success of the project will depend on both financial (the access to external financing by the consortium) and legal factors (the compatibility of the use of Nord Stream-2's land infrastructure with EU law).

The shareholders' agreement concerning the construction of two new Nord Stream legs was signed by Gazprom and five major European companies: Germany's BASF, Austria's ÖMV, Germany's E.ON, the Dutch-British Shell and France's Engie (formerly GDF Suez). The draft envisages the construction of a gas pipeline with a total capacity of 55 bcm running from Russia to Germany (a memorandum to this effect was signed in June 2015 at the Economic Forum in St. Petersburg). The cost of construction is estimated at €9.9 billion, and the pipelines are to be completed by the end of 2019. The funding structure has not yet been determined, but according to Gazprom representatives it should be developed by January 2016. The project is to be undertaken by the New European Pipeline AG design company (registered in Zug, Switzerland), in which Gazprom will have a 51% stake, BASF/Wintershall, ÖMV, E.ON and Shell 10% each, and Engie 9%.



A Russian-German agreement was also signed, under which a subsidiary of BASF/Wintershall is expected to receive a 25-percent stake in two blocks on the Urengoy deposit in Western Siberia (production of which is expected to start in 2018, and is estimated to produce 8 bcm of gas annually). In return, Gazprom is to receive the other half of the shares in Wingas and Wintershall Erdgas Handelshaus Berlin (dealing with gas sales), companies previously controlled by BASF; as well as the gas reservoirs in Rehden and Jemgum and their operator, the Astora company. In addition, Gazprom will receive a 50-percent stake in Wintershall Noordzee, which deals with gas extraction in the North Sea (off the coasts of Denmark, the Netherlands and the UK).

The agreement to construct the third and fourth legs of the Nord Stream gas pipeline is further confirmation that Russia is firmly committed to implementing its strategic political objective, namely building up infrastructure so it can cease using Ukraine as a transit country for Russian gas exports. Taking into account the current demand for Russian gas among its European customers (138.8 bcm in 2012; 161.5 bcm in 2013, 146.6 bcm in 2014), even with a possible increase in demand, the existing infrastructure is fully sufficient to meet Russia's export obligations: 55 bcm via the existing Nord Stream legs; around 33 bcm via the Yamal-Europe pipeline; theoretically 179 bcm along the Ukrainian route (around 142 bcm in real terms, due to the network's current technical state); and 16 bcm via Blue Stream. Although Moscow is aware that a complete shutdown of the Ukrainian transit route will not be possible before January 2020 (when the Russian-Ukrainian transit contract in force since 2009 expires), new strings of Nord Stream would allow Gazprom to significantly reduce the amount it now transmits via Ukraine.

Assuming the maintenance of transit through Ukraine at the 2014 level (around 58.9 bcm), the new strings of Nord Stream (even if only half its capacity is used, due to constraints arising from the so-called Third Energy Package) would allow a reduction in transit through Ukraine to around 30 bcm of gas per year. The effect of this would be not only a reduction in Ukraine's transit income, but also and most importantly it would become unprofitable for Kiev to maintain the Ukrainian pipeline network (according to estimates, the lower limit of profitability is the transit of at least 35-37 bcm of gas annually). The new Nord Stream pipelines would strengthen Moscow's bargaining position in its talks with Kiev on a new, essential short-term transit contract, as well as other issues of both economic and political importance.

Russia also hopes that the alliance between Gazprom and influential European energy companies to build new Nord Stream branches will result in an increase in Russia's lobbying capabilities within the EU, particularly Germany. Strengthening Russian-German gas cooperation, even at the cost of economic concessions by Russia (the heavier burden of the project's costs will be borne by the Russian side, and possibly more favourable price conditions from the supply of Russian gas will be offered to Germany) would give Russia the chance of gaining a significant political advantage. It would then be likely that interest in trilateral cooperation between Russia, Ukraine and the EU would decrease. It is also possible that intensified Russian-German gas cooperation would increase Moscow's lobbying possibilities in EU institutions (for example, in the context of demands for exemption from the so-called Third Energy Package for both existing and new Russian infrastructure projects).



On the other hand, implementing the agreement to exchange assets between BASF/Wintershall and Gazprom will lead to Russia obtaining control over the German gas storage facilities, which constitute a quarter of the estimated 24 bcm gas storage capacity in Germany. The underground gas storages which Gazprom will acquire can meet 5.5% of Germany's annual demand for gas, which will increase Gazprom's room for manoeuvre on the European market (which will be especially important when it stops storing gas in Ukraine), depending on changes in prices and demand.

Both the agreement on the new strings of Nord Stream and the return to implementing the agreement on the asset swap between Gazprom and BASF/Wintershall provide further confirmation that – regardless of its stated 'return to the East' – Gazprom still sees Europe as a key market in its external gas strategy. The share of gas in the German economy after 2009 fell by 5%, despite fairly high economic growth in Germany. This was the result of high gas prices, the rapid development of strongly-subsidised renewable energy, and significant investment in the thermal insulation of buildings. Despite these negative market trends, in 2013-2014 the share of gas imported from Russia rose to 38% from 33% in previous years.

In analysing the consequences of these new agreements for Germany, we may expect an increase in the importance of Russia in German imports, although the expansion of Nord Stream will not lead to any dramatic increase in the share of Russian gas consumed in Germany. Berlin favours leaving the gas agreements in the hands of the corporations, but is likely to oppose any radical increase in its degree of dependence on gas from Moscow. It is also unlikely that Russia will be able to offer such attractive prices that it can push imports from the Netherlands and Norway out of its market completely, especially as these countries will not readily give up their extremely lucrative German markets. Nevertheless, Russia's share could gradually grow together with an increase in gas consumption in Germany. One opportunity to raise the amount of gas sold from Russia to Germany is offered by the slow decline of gas production in Germany, which covers 10% of the country's demand and is gradually falling (in 2007-2013 the amount of gas extracted dropped by 40%), as well as the slow fall in the Netherlands' resources.

However, the German energy companies and the federal government will definitely want Germany to obtain a position as a major gas hub. German companies in the energy sector, such as E.ON and RWE, are experiencing significant problems in adapting to the rapid expansion of renewables on the German energy market, and in recent years their financial results have been worsening noticeably. BASF, in turn, has its own financial problems related to the drop in oil and gas prices on the global market. A significant consequence of the agreements between the German energy companies and Gazprom may be a limit to Germany's support for EC action aimed at diversifying gas supplies to the EU. No major German politician has commented on reports of the conclusion of these agreements, which proves that the government has no objections to the expansion of Nord Stream. Chancellor Angela Merkel has not initiated any projects to diversify gas supplies to Europe in recent years, despite having repeatedly declared her support for such initiatives. There is a risk that Berlin will be willing to give more robust support to German companies in implementing new energy projects with Russia, irrespective of the European Commission's plans to diversify gas supplies to Europe, as well as the interests of Central and Eastern Europe. This could therefore undermine the principles of the Third Energy Package.



The agreement on Nord Stream-2, the renewal of the agreement on the Gazprom/BASF exchange of assets, and the talks about a similar agreement with ÖMV, all fit into the intensification of the cooperation (which has been apparent for several months) between some major Western European gas companies (BASF, E.ON, Engie, Shell, ÖMV) and Gazprom. This indicates – despite Russia's abandonment of the South Stream pipeline, the problems connected to the Turkish Stream project and the plans to build gas pipelines to China, and regardless of whether the new lines of Nord Stream are ever actually constructed – that a large part of European gas business, mainly in Northwest Europe, wants to strengthen its strategic cooperation with Gazprom and boost the role of gas on the European market. These agreements also serve the interests of Germany, France, Austria and the Netherlands linked to the shape of the European gas market, and – despite the lack of any official confirmation – they must have been consulted with the governments of these countries. However, the construction of Nord Stream-2 goes against the interests of most countries in Central Europe, because by increasing the availability of Russian gas from the West, it will reduce the profitability of gas imports from alternative sources and of the new projects of diversification.

The contracts signed by the European companies and Gazprom also go against the aims of the EU's policy over the last year on diversifying gas supplies, increasing energy security in Central and South-Eastern Europe, and gas cooperation with Ukraine, including the provisions of the European Commission's strategic documents, such as a document about the Energy Union and the European Strategy for Energy Security (one of goals of this last document was to reduce dependence on Russian gas). The binding agreement for Nord Stream-2 is thus a sign of the European companies' distrust of current EU policy (both its line and its effectiveness), and represents an attempt to co-shape that policy in a way which suits them. At the same time, it points to the wide variety of opinions and interests within the EU related to the shape of gas cooperation with Russia. The lack of a uniform response from the European Commission itself to the signed agreement is symptomatic of this. While Maroš Šefčovič, the Vice-President of the European Commission and Energy Commissioner, adopted a critical stance, pointing to the problems that the construction of Nord Stream-2 would create for the EU's gas policy, Miguel A. Cañete, the Commissioner for Energy and Climate, stated that the draft would not give rise to any problems as long as it is compatible with EU law.

The Nord Stream-2 project, although very similar to the already constructed Nord Stream-1, will be implemented in a fundamentally different market context. Since 2008, the European market has shown decreasing demand for gas; last year it fell by 12% to levels not seen since the mid-90s (BP data). Thus, the forecast is for lower increases in gas imports to the EU than previously expected. There is also a greater availability of gas on global markets; this is a result of the shale gas revolution in North America, as well as changes on the global LNG market. Finally, one should note an increasing degree of liberalisation on the EU market; more and more gas is being sold on gas exchanges, and the traditional suppliers (including Gazprom) are progressively adjusting their contracts to the changing realities (showing greater flexibility with respect to the use of take-or-pay clauses, taking market prices into account in contractual pricing formulas, et al.).

The position of Gazprom itself is also weakening, due to its continuing financial problems (caused by both the declining current demand for gas in the EU, and the low oil prices, which reduce the price of Russian gas when sold for export), as well as challenges on the domestic (growing competition from the so-called independent gas producers) and the EU markets (including the ongoing antitrust proceedings and the implementation of the so-called Third Energy Package). All this shows that if the Nord Stream-2 project does become reality, the gas it transmits can be sold to customers in the EU on different principles than before (not necessarily only through long-term contracts, but also to a greater extent on gas exchanges), and Gazprom's partners will play an important role in the gas trade. The agreement to construct new pipelines via the Baltic Sea is so far the only concrete agreement Gazprom has concluded with European partners since withdrawing from the South Stream project. The European energy companies' consent to sign such a serious agreement – despite the sectoral anti-Russian sanctions introduced by the EU, and in a context of serious political tensions in relations between the EU and Russia – suggests that the chances for the project appear to be considerable. Thus, the Nord Stream-2 pipeline is now becoming the most promising of all the European infrastructure projects which Russia has announced in recent years.

However, its implementation will depend on two main factors. Firstly, there are currently no established sources of funding for the project: neither the exact shares of the capital contributions by the partners nor the expected external financing. In the light of the current political climate in Russia's relations with the West, it is difficult to assess how likely international financial institutions or the EU banks will be to grant the loans. Gazprom, due to its own difficult financial situation, will not be able to cover all the project's costs itself. Secondly, although the Commission does not have any formal powers to block the construction of an undersea section of the new Nord Stream strings if the consortium does obtain the necessary permits from the coastal states (as in the case of the first and second strings of Nord Stream), problems may appear in the case of the land infrastructure. Implementing the project will require the expansion of connections on German territory, which will be evaluated for their compliance with EU energy law regulations (in particular, restrictions on the possibility of using the full capacity of the expanded infrastructure, based on the principle of third-party access).

EU extends restrictive measures against Russia

Natural Gas Europe, 14.09.2015



While European authorities are working on their diplomatic missions in Eastern Europe, the Council of the European Union extended by 6 months the application of EU restrictive measures targeting Russians.

‘The asset freeze and travel bans against 149 persons and 37 entities have been extended until 15 March 2016’ reads a note, arguing that the restrictive measures ‘target actions against Ukraine’s territorial integrity, sovereignty and independence.’ The legal acts will be available in the EU Official Journal of 15 September 2015. Ukraine asked its “Western partners” to help sending defensive weapons.

“We do understand that there is no military solution to this conflict. But this is no solution without military in this conflict. So we need to have strong army to deter Russia-led terrorists,” Prime Minister of Ukraine Arseniy Yatsenyuk said. Meanwhile, Vice-President Maroš Šefčovič will go to Bulgaria. ‘During his visit to Sofia, the Vice-President will meet with representatives of the Bulgarian government and parliament as well as prominent stakeholders to discuss the benefits of the Energy Union for Bulgaria as well as to listen to national concerns’ the European Commission wrote.

At the same time, as published on the Serbian Government’s website, Serbia’s Prime Minister Aleksandar Vucic will go to the US to meet with senior officials and representatives of international organisations. Speaking about the Eastern Mediterranean, Westerner media are reporting that Russia wants to establish its first military air base in the region. The United Kingdom is trying to understand the situation and reinforce its ties in the region. Prime Minister David Cameron was in Lebanon, where he extensively spoke about the crisis in Syria.

How the game is played: The life and death of South Stream

Natural Gas Europe, 17.09.2015



Stratfor monitors the ebbs and flows of world energy. Aside from production, the transportation of crude oil, natural gas and petroleum products is of paramount concern for oil-producing nations. For energy consumers, transit routes are lifelines. A huge amount of the world's energy is transited through pipelines, across Eurasian landmass in particular.

In this periodic series we will examine some of the most geopolitically significant pipelines running through Europe and Asia. In this installment, Stratfor examines the political machinations behind South Stream, the precursor to TurkStream, and how the game of pipelines is played.

Russia once again finds itself locked in a battle with Europe over a new proposal for a natural gas pipeline. Like the push for and ultimate failure of South Stream, the fight for TurkStream — a project that would bring Russian natural gas to Europe by way of Greece and Turkey — is riddled with potential roadblocks, including heavy political resistance from European consumers. But this time, the competition may end in Russia's favor. Having learned from its past missteps, and with few options left for circumventing Ukraine, Moscow is determined to keep TurkStream from sharing South Stream's fate.

The South Stream pipeline project arose during a series of natural gas disputes between Ukraine and Russia's state-controlled natural gas monopoly, Gazprom, in the mid-2000s. Russia, seeking the payment of debts owed by Ukraine's Naftogaz, cut off Ukraine's natural gas supplies in the hope of pressuring Kiev to pay out. Ukraine, the most important transit state for Russian natural gas heading to Europe at the time, responded by simply diverting supplies that were meant for consumers on the Continent. Gazprom eventually shut off all the natural gas flowing through Ukraine, albeit for a limited time, which by default halted flows to Europe as well.

Gazprom's decision forced the company to consider the impact that similar disputes with Ukraine might have on its European customers in the future. The fallout from the disagreement gave both Russia and Europe an incentive to look for ways to diversify away from pipeline routes passing through Ukraine. As a result, two options emerged: South Stream, a route that would bypass Ukraine to the south, and Nord Stream, a pre-existing proposal that would bypass Ukraine to the north, via Germany. Several factors ultimately led to Nord Stream's success and South Stream's failure. At the inception of the South Stream proposal, tensions between Europe and Russia over Gazprom's anti-competitive practices still simmered beneath the surface; they had not yet boiled over into the highly publicized legal dispute they would eventually become. In addition, the European Union had not yet designed its Third Energy Package, meaning Bulgaria — the newly added EU member that was slated to become a key transit state along the South Stream route — was not subject to heavy European regulations.



Even with the Third Energy Package's adoption in 2009, Russia held out hope that Nord Stream and South Stream would be able to at least partially avoid the new restrictions. And it was right, to some extent: Nord Stream, a project that grew out of bilateral relations between Russia and Germany, managed to secure its status as part of the Trans-European Networks (TEN). This exempted Nord Stream and its associated projects from several Third Energy Package stipulations, including requirements for guaranteeing third-party access and unbundling ownership from supplies, enabling Gazprom to reserve pipeline capacity for itself that it otherwise would have had to auction off to other companies.

South Stream, on the other hand, was not so lucky. Despite Russia's attempts to obtain the same exemptions for the southern pipeline route, Europe refused to grant it TEN status. With the Ukrainian natural gas cutoffs still fresh in the minds of European consumers, Brussels wanted to diversify its supplies away from Russia. On top of that, South Stream had pitted itself directly against Europe's Southern Gas Corridor projects, which aimed to bring natural gas to the Continent from the Caspian and Middle East. Europe therefore gave TEN status to South Stream's primary competitor, Nabucco, and a third-party exemption to the Trans-Adriatic Pipeline, another competitor. South Stream received neither. Brussels' move reflected its larger Southern Gas Corridor strategy of facilitating the construction of non-Russian pipelines by offering incentives and exemptions to Russia's competitors — a strategy it is likely still pursuing today.

Despite these initial obstacles, Russia chose to move forward with the South Stream segments that lay within its borders so that it could transport more natural gas to the Black Sea while it waited for the pipeline politics to shake out, as they had for Nord Stream. And until late 2013, Russian officials were optimistic about South Stream's future; Moscow had secured the funding and partnerships needed for the project, and it had already begun awarding contracts to lay the first two legs of underwater construction. Meanwhile, Bulgaria had started building South Stream's onshore segment.

The outbreak of the Ukraine crisis in November 2013 marked the beginning of the end for the South Stream project. Western countries responded to Russia's annexation of Crimea in early 2014 with a series of sanctions that targeted a number of Russian officials. The subsequent crash of Malaysia Airlines Flight MH17 after being shot down over Ukraine in July 2014 led to the sanctions' expansion, this time against the Russian banks that were financing South Stream. The sanctions limited Gazprom's ability to raise dollars to build the expensive pipeline project.

At the same time, the European Commission had begun to formally investigate Gazprom's monopolistic practices and threatened to take action against Bulgaria over South Stream's construction. The commission argued that the construction contracts had not been awarded according to rules set forth in EU legislation. Facing stiff pressure from the European Union and the United States, Bulgaria halted construction in summer 2014, leaving the future of the entire South Stream project uncertain.

With no guarantee that the legal dispute would be ruled in its favor — and consequently, no guarantee that it would ever be able to make use of the pipeline — Gazprom was forced to abandon the project. Relations between Russia and the West had hit an all-time low, and it would likely be years before they thawed enough to revive South Stream's viability.

While Gazprom could have started over and revamped the project to bring it in line with its new regulatory realities, it would have taken years to complete, and Gazprom had already spent about 20-40 percent of its budget for the first half of the South Stream project. And so, Gazprom was faced with yet another tough decision: Build a pipeline whose future was questionable at best, or find an alternative route. Given the financial pressure sanctions were putting on the company, as well as the lasting tension between Russia and the West, Gazprom's decision to shutter South Stream was hardly surprising. Nor is it a surprise that the alternative route Gazprom has now turned to is Turkey, the only path to Europe left that does not rely on EU transit states. Gazprom's contract with Naftogaz is set to expire at the end of 2018, and Russia is eager to prove to Europe that it will no longer use Ukraine as a transit state once it does. As Gazprom races against the clock to bring the TurkStream alternative online, it will bear in mind the lessons it learned from South Stream's untimely demise.

Ukraine ready to pay European price for Russian gas without transit fees

Sputnik News, 15.09.2015



Kiev is willing to pay an average European price for Russian natural gas deliveries, but it should not include transit fees, Ukrainian Energy Minister Volodymyr Demchyshyn said.

Ukrainian Energy Minister Volodymyr Demchyshyn said that the proposed price of \$250 per 1,000 cubic meters was "unfair." "We believe that \$250 is not a market price," the minister told reporters in Kiev. "We are willing to pay the European market price, but it cannot include transit, because you [Russia] must pay us for the transit to the western borders instead," Ukrainian Energy Minister Volodymyr stressed.

Demchyshyn said he anticipated another round of trilateral talks on Russian gas supplies to Ukraine with the European Commission, adding that he expected a decision on the winter package to be made. Russian Energy Minister Alexander Novak and European Commission Vice President on Energy Union Maros Sefcovic met in Vienna late last week. The sides agreed on a series of key conditions for winter package deliveries to Ukraine, including a discount for two consecutive quarters.

Polish industry: Coal key to competitiveness

Natural Gas Europe, 14.09.2015



Coal is definitely important for Poland, and its dominance as a fuel for power generation does not look to diminish, according to speakers at the 25th Economic Forum in Krynica-Zdroj, Poland.

In a session at the 25th Economic Forum entitled “European Industrial Policy – A Global Challenge”, a representative of Poland’s coal industry, Mr. Jerzy Podsiado, President of the Board, Weglokoks S.A., said that while in 20-30 years the energy sector may be completely different than it is today, it is no doubt that coal will still be used as a source of energy production.

He offered, “Today, the best way to reduce CO2 emissions is to replace the old power plants with new ones which generate many fewer greenhouse gasses per energy unit – this is the best way to decrease those levels and maintain the competitive advantage of the European Union’s industry.” According to him, this was one of Poland’s main arguments at a climate summit in 2014: “We said ‘let’s go for the coal, but with new technologies - new, more efficient facilities; let’s generate energy from coal, but let’s produce it in a clean way.’” How, Mr. Podsiado asked, can coal be replaced by any other material in places like China or India? “If we want to fight against CO2 emissions – because we have to – we have to change our approach completely, our philosophy of how the global economy operates,” he opined. One problem, he pointed out, is the planned obsolescence of things like white goods, which now are no longer produced to run for 20 years instead of five. “The whole philosophy of our activities has to be changed in order to actually combat CO2 emissions,” said Mr. Podsiado.

The fundamental issue is the balance between industrial policy, climate and energy policies, according to Ms. Grazyna Henclewska, Undersecretary of State, Ministry of Economy, Poland. “We talk about synergy and not about the superiority of one policy over others. We truly have a program prepared for low emission industry in Poland, but we are saying that we cannot make it happen at the cost of competitiveness of the whole economy; we will reduce emissions and we are doing it already. We’ve reduced energy consumption, material consumption to good effect, but we want to follow a tempo that will not disrupt the economic growth of Poland,” she said, adding that it and other member states will need to develop greater competitiveness levels in preparation for the Transatlantic Trade and Investment Partnership (TTIP), a trade agreement to be negotiated between the European Union and the United States.

Mr. Grzegorz Kinelski, Vice-President of the Management Board for Commercial Affairs, ENEA S.A. Poland. The company, he explained, is now building an energy facility in Kozienice, Poland – a huge investment. Mr. Kinelski was asked if the energy produced there would be competitive on the market, considering the innovative technologies to be used there in the burning of coal.



Mr. Kinelski said, "It's 1,150 megawatts of power, so it's a huge brown coal-burning unit whose efficiency will be 75% with far less emission of CO₂ – 30% less. It meets the stricter requirements of the future European Union regulations." This, he added, not only considered lesser CO₂ emissions, but also other gasses and metals, like chlorine emissions in water. There is a basis, said Mr. Kineski, for energy resources based on coal, who explained that ENEA is developing wind power, but it wasn't sufficient.

"When we talk about re-industrialization, to give a chance for industry to rebound, industry is really the stable base of the economy and allows for far better momentum to weather economic crisis; an economy based just on services is not capable of that." Industry, he added, needs a continuous supply of traditional energy. The session moderator queried Alan Riley, Professor of Law, City University London, how much the British public supports a cleaner climate and lower CO₂ emissions given the potential higher cost of such measures. "Does the society agree to pay higher bills for electricity?" Meanwhile, a nuclear plant is being built and some coal-fired plants are still in operation in the UK.

Prof. Riley explained that there is an understanding in the UK that engaging in renewables development is valuable, despite subsidies, and that there's enormous potential. Citing a paper by Citibank called "The Energy Revolution Will Not be Televised," he said that, for example, solar has begun to transform into a freestanding, subsidy-free energy source that will likely play an enormous role in the southern hemisphere – an example of how renewables are changing. The bigger problem, he cited, is that policymakers obviously have a huge problem with the broader population seeing higher energy bills, as well as the competitiveness issue in the context of energy costs. "The UK is unlike France and Germany; industry gets hit very hard with energy costs as well as consumers, whereas in France and Germany they protect their industrial base."

Prof. Riley recalled that when European climate change policy was formulated in 2006, there were a number of assumptions, like the ever-increasing oil price. "No one expected the shale revolution to happen, or the oil prices to be where they are today." The Energy Union, he said, will bring about a transformation of the European energy and climate change policies: "Not the objective, but how we get there. We will see a greater focus on value for money from subsidy; a greater focus on putting money into R&D rather than into existing renewables; and a greater promotion of CO₂ reduction in existing fossil fuels. So I think we're going to see a change in the way we approach it over the next few years to reflect the economic changes going on globally in the global energy markets." In that context, Prof. Riley said he sees an opportunity for the coal industry in Poland to explore carbon capture and storage (CCS).

"The fundamental difficulty for coal is that, frankly, it has a short future unless we deal with CCS." While he conceded that CCS is expensive, he said that extra CO₂ produced from CCS could be used for enhanced oil recovery, so that by creating a tax regime that gives credits to coal-fired power power stations, those facilities would essentially receive a subsidy for performing CCS. The cost of that, he explained, is covered by the increased royalties from the additional royalties from the oil or gas fields using the CO₂. "Once you get to a stage where can create something which economically works and you have a number of CCS power stations around Europe, what you can do then is drive down the cost of CCS and make it economically worthwhile."

Prof. Riley suggested that Poland should discuss such strategies with the UK, which has offshore oilfields that could use that CO2. Mr. Podsiado dismissed that proposal for CCS, calling it “science fiction in Polish conditions” because of price and the ground “being like Swiss cheese.” Meanwhile, he was quick to point out that only recently had the US started addressing climate change, while others are hampering European Union policy and have much higher capita emissions per capita. “We believe we are the voice of reason here,” he said. “Let’s lower the CO2 emissions, but do it in a reasonable, sound and well-planned way – let’s not be hysterical about it, because the results of of such policy can be different than we planned.”

Europe doubles down on Russian gas

Foreign Policy, 11.09.2015



Europe has spent years trying to wriggle free from its dependence on Russian energy and the whims of its mercurial president, Vladimir Putin. So why is the continent signing up for a new gas pipeline that will keep Europe hostage to Russian energy shenanigans and outright blackmail for decades to come?

Russia’s multibillion-dollar plans to expand the capacity of Nord Stream pipeline across the Baltic Sea to Germany, announced, are taking shape faster than most observers expected and stand in stark contrast to the bevy of other stillborn energy projects Russia keeps announcing.

Top-flight Western firms such as Shell, E.On, BASF, and Engie (formerly GDF Suez) have banded together with Russia’s Gazprom to double the capacity of Nord Stream, with hopes it will be operational by late 2019. If completed, the 10 billion euro project would enable Russia to finally bypass Ukraine as a transit country. That might be good for Russia, which hates Ukraine being in a position to meddle with its gas exports, but would increase Kiev’s vulnerability to heavy-handed Russian tactics. It could also leave other Eastern European countries in the lurch because they’ve been getting gas shipped directly west from Russia through Kiev.

The new and improved Nord Stream makes two things clear. First, for all of Russia’s talk of a pivot to Asia, including huge amounts of energy exports, Europe is and will remain the overwhelming priority for Gazprom. Second, for all of Europe’s talk about the need to find new suppliers and reduce reliance on Russia, especially in the wake of the invasion of Ukraine, much of the continent’s energy policy is ultimately in the hands of companies, not countries. That complicates efforts by the European Union and its member states, all constantly prodded by U.S. officials, to find alternatives to further reliance on Russian energy. “What Nord Stream does is confirm the centrality of Europe in Russian gas thinking. The whole pivot to the East, the idea of the East being built up as an alternative to Europe, it’s going down the tubes,” said John Roberts, a pipeline expert at Methinks Ltd., an energy consultancy, and a nonresident fellow at the Atlantic Council.



The fact that big Western firms are rushing to ink deals with Gazprom to bring additional amounts of Russian gas into the heart of Europe also underscores the way commercial considerations — not grand strategy — underpin Europe’s approach to meeting its energy needs despite years of hand-wringing in Brussels over Europe’s huge and growing dependence on imported fuels. “You have to separate companies from governments. The whole European diversification effort has largely been a matter for governments,” Roberts said. In contrast, he said, “the only companies who even mention diversification in terms of energy security are those for whom it is naturally good because they have a resource that they want to exploit.” The companies piling into Nord Stream see it as a “purely commercial decision,” Roberts said, divorced from any wider considerations of Europe’s energy security.

The decision to double Nord Stream’s capacity, announced in June, came as somewhat of a shock. The notion had been on the table practically since the original pipeline, which can carry 55 billion cubic meters of gas a year, came online in 2011. In 2012 and 2013, Gazprom talked up the option of doubling Nord Stream and serving countries as far away as Britain. But then, as tensions between Europe and Russia peaked early this year, Nord Stream’s expansion seemed to become a casualty of diplomatic and economic sparring. “There are no plans to expand Nord Stream for now,” a Gazprom spokesman told Bloomberg in January. Those plans reappeared in a hurry. In June, the Russian energy giant and its Western partners announced they would be doubling Nord Stream after all. But coming amidst a flurry of failed and flailing Russian pipeline projects — two in China, one in Turkey, and one scrapped project in the Black Sea — most observers viewed the Nord Stream announcement skeptically. The existing Nord Stream isn’t even fully utilized. And Europe doesn’t need additional volumes of natural gas right now. What it does need, it can still get from Russia via Ukraine. All that seemed to make the notion of an expanded Nord Stream another of Putin’s pipe dreams.

Yet the expansion now seems very real. In early September, Gazprom and the Western firms signed the shareholder agreement that puts the project on solid footing. Gazprom boss Alexei Miller underscored that participation by Western energy titans burnishes the prospects of what otherwise could have been just another Russian dream. Now that the project is apparently going ahead, many leaders across Europe are going ballistic. Polish President Andrzej Duda said Tuesday it raised questions about European unity. Slovakia’s prime minister called the pipeline a “betrayal,” while Ukrainian Prime Minister Arseniy Yatsenyuk described it as “an anti-European and anti-Ukrainian project.” He urged the European Union to block the project.

Maros Sefcovic, Europe’s point man for the Energy Union, meant to give the 28-nation bloc a common voice on energy issues, criticized the proposed pipeline Monday, saying that it could unhinge the whole energy balance in the region. After the new deal was announced, the European Commission, the EU’s executive body, pointedly reiterated that finding gas suppliers other than Russia remains a priority for Brussels and that Ukraine should remain part of the transit network to Europe. The commission vowed to “assess any such new pipeline rigorously against the application of EU law.” The top U.S. energy diplomat, Amos Hochstein, also expressed concern about the impact of Nord Stream’s expansion, telling Reuters last week that the project could allow Russia to cut off Ukraine and jeopardize European security. But if the project is so at odds with Europe’s strategic goals and seems to have unhinged leaders across the continent, why on earth are European firms supporting it?



One explanation, offered by the Nord Stream companies themselves, is that the additional capacity will be needed to bring in more Russian gas just as Europe's own reserves start to run empty. Norway, for instance, a big supplier of natural gas to the rest of Europe, expects to see its exports start to dwindle right about the time Nord Stream would be expanded. Gas production in the Netherlands, too, is under pressure. And once tantalizing alternatives, whether natural gas from the United States or from the eastern Mediterranean, have yet to materialize.

But there's one multibillion-dollar reason that European (and American) energy companies have continued to court Russian business even after a wave of Ukraine-related sanctions meant to kneecap Russia's access to Western capital and technology: the size of the potential prize. It was no coincidence that on the same day the shareholders in Nord Stream inked their deal, the heads of Shell, BASF, and Austria's OMV all met with Putin to discuss other juicy business opportunities. There are political tensions between Europe and Russia right now, in other words, but for an energy business that thinks in decade-long timescales, a narrow point of view can be self-defeating for corporate survival.

To be sure, the Nord Stream expansion, like all of Putin's projects, still faces several hurdles. Any energy project landing in the EU, like the Nord Stream expansion, has to comply with a full suite of European Union regulation. Russia's inability or unwillingness to comply with EU law ultimately scuttled one of Putin's other grandiose ideas, the so-called "South Stream" pipeline that would have crossed the Black Sea and fed Europe via Bulgaria. And there are still questions about how much access Gazprom can get to smaller pipelines inside Europe needed to ultimately distribute that gas to all the different countries. Overshadowing all of Gazprom's plans is the ongoing EU antitrust investigation into the firm's alleged price gouging and anti-competitive behavior.

There's also the question of just how much Russia and Gazprom will ultimately need a bigger and better Nord Stream. Russia has long sought to stop shipping gas through Ukraine, which it sees as a troublesome and unreliable neighbor. That quest for a bypass underpinned all sorts of projects, from the now-defunct South Stream, to the sputtering Turkish Stream line across the Black Sea to Turkey and on to Europe, to Nord Stream itself. But Gazprom hinted this summer that Russia may have given up on the idea of bypassing Ukraine altogether, which could make Nord Stream or Turkish Stream — or both — unnecessary.

Still, given the strong corporate backing for Nord Stream, a successful track record building the original pipeline, and the relatively modest price tag, the Baltic Sea pipe seems poised at this point to be Russia's leading option for maintaining its hold over Europe's energy supplies. "In finding a successful way to deliver to Central Europe without using Ukraine, Nord Stream comes in as the best bet," Roberts said.

Fracked oil, Natgas wells less water intensive than other energy extraction, say Duke Researchers

NGI, 16.09.2015



Energy companies drilling in 10 onshore basins across the country used nearly 250 billion gallons of water over a 10-year period to extract unconventional natural gas and oil, but still less than 1% of the total amount of industrial water used nationwide, a Duke University study has found. During the period, fractured wells drilled in 10 basins studied also generated an estimated 210 billion gallons of wastewater.

“Water use and wastewater production are two of the chief environmental concerns voiced about hydraulic fracturing,” said Duke’s Avner Vengosh, professor of geochemistry/water quality at the Nicholas School of the Environment.

“Yet until now, we’ve had only a fragmented and incomplete understanding of how much water is actually being used, and how much wastewater is being produced.” Vengosh and Duke doctoral candidate Andrew Kondash published their peer-reviewed “The Water Footprint of Hydraulic Fracturing” in the journal *Environmental Science & Technology Letters*. Funding was provided by a National Science Foundation grant and the Duke University Energy Initiative. Unconventional drilling requires more water use than conventional drilling, but compared to other energy extraction methods, fracking wells is less water-intensive overall. According to Duke, underground coal and uranium mining, along with enhanced oil recovery “use between two and a half to 13 times more water per unit of energy produced.” Fracked oil wells were found to generate about one-half of a barrel of wastewater for every 1 bbl of oil, while conventional oil wells drilled on land generated more than three wastewater barrels for every 1 bbl of oil. The integrated data used “multiple government and industry sources” offering what Vengosh said was “the first comprehensive assessment” of the total water footprint for fracking, both nationally and for each of 10 major U.S. shale gas or tight oil basins.

“While hydraulic fracturing consumes only a small fraction of the water used in other extraction methods, our analysis highlights the fact that it can still pose serious risks to local water supplies, especially in drought-prone regions such as the Barnett formation in Texas, where exploration and development is rapidly intensifying,” Kondash said. “Drilling a single well can require between 3-6 million gallons of water, and thousands of wells are fracked each year. Local water shortages could limit future production.” Finding ways to treat and dispose/recycle chemical-laden flowback water and brine-laden wastewater produced over the lifetime of an unconventional well poses challenges.

“Given the high levels of contaminants these waters contain, it’s startling that the amount of wastewater being produced from hydraulic fracturing in the United States is nearly on the same level as the amount of water used to frack the wells in the first place,” Vengosh said. “Yet the quality of the water that comes out is very much different from the water the goes in.” Duke’s study indicated that water usage has been low in fracked wells, but the amount of water required to frack wells has been increasing dramatically every year, according to a report issued this summer by the U.S. Geological Survey (USGS) (see Shale Daily, July 1). Within watersheds across the United States, the average amount of water used for fracking in the seven major basins ranged from as little as 2,600 gallons/well to as much as 9.7 million gallons/well. The USGS compilation, the first nationwide map of usage, relied on IHS Inc. data on 81,000 wells across the country in the big seven shales: Eagle Ford, Haynesville/Bossier, Barnett, Fayetteville, Woodford, Tuscaloosa Marine and Marcellus/Utica.

Separately, the Environmental Protection Agency in April said Texas, the country’s largest producer, also is No. 1 in the amount of water producers use to produce oil and gas, followed by Pennsylvania, based on the FracFocus Chemical Disclosure Registry by operators in 20 states (see Shale Daily, April 7). Kondash and Vengosh said they culled numbers for their report using data from the Energy Information Administration, state agencies, industry reports, FracFocus and DrillingInfo.com. Although the Duke paper looks only at U.S. data, its methodology and findings could be used to project future water use and wastewater volume from fracking in other energy basins worldwide, the researchers said.

Vow to fight Leeds fracking plans

The Yorkshire Evening Post, *11.09.2015*



A row has erupted over a campaign opposing the issuing of the first fracking exploration licence for Leeds. The Government has awarded energy companies licences to explore land for fracking suitability in 27 areas of the country, including land in Allerton Bywater and Kippax in the Kippax and Methley ward.

Elmet and Rothwell Labour Party has launched a petition calling on the Government to withhold the licences. Coun James Lewis (Labour/ Kippax and Methley), said: “There are far too many concerns about the environmental impact and the health impact.

The exploration licences issued by the Government should be withheld until these concerns are addressed.”Conservative MP Alec Shelbrooke has accused Labour councillors of “scaremongering” over the issue. Mr Shelbrooke said: “No site in my constituency has been earmarked for fracking, licences have been granted for exploratory purposes only to assess where shale seams might exist.

“At a time when the frontrunner in the Labour leadership is calling for the reopening of former coal mines such as Allerton Bywater, I’m sure my constituents would like to know what alternatives exist to ensure our energy security and lower energy costs for hardworking families.” Mr Shelbrooke added: “Any future application for shale gas extraction would be determined by Leeds City Council and local councillors should use the powers granted to them to air their concerns instead of scaremongering for short-term political opportunities.”

Statoil works to increase efficiency for Åsgard, Johan Sverdrup

The Guardian, 11.09.2015



Statoil intends to maintain its centrality in Europe, putting the first subsea gas compression facility on line at Åsgard in the Norwegian Sea, and awarding an EPC contract for subsea equipment for the Johan Sverdrup project. ‘Subsea compression will add some 306 million barrels of oil equivalent to total output over the field’s life’ reads a note.

The subsea technology, the company said it is a game changer in deep waters. “Thanks to the new compressor solution we will achieve increased recovery rates at Midgard and Mikkel, extending the reservoirs’ productive lives until 2032,” Siri Kindem, senior vice president, commented.

A few hours later, Statoil awarded an EPC contract for subsea equipment for the Johan Sverdrup project to FMC Kongsberg Subsea. ‘The contract has an estimated value of NOK 1.3 billion, and includes deliveries of 13 Subsea trees and well heads, in addition to three subsea templates and control systems’ Statoil wrote on its website.

Is a fracking revolution the way to cut UK carbon emissions?

The Guardian, 11.09.2015



Labour shadow energy minister and environmentalist Bryony Worthington dismayed green groups by backing fracking as a way to reduce carbon emissions.

Following a speech on the Energy Bill in the House of Lords, Baroness Worthington told the Today Programme: “There are legitimate concerns, absolutely correct, that we need to do this safely, but we shouldn’t take an in-principle objection to the technology and nor should we do that for any other of the low carbon technologies. Because [climate change] is the big challenge we face.” She said that the “common enemy” is very cheap coal which entails much higher carbon emissions.

Her former Friends of the Earth colleague, now the organisation’s CEO, Craig Bennett who was also a guest on Today said: “No one thinks it’s low carbon. It’s equivalent to saying if you’re addicted to cigarettes, shall we move from high tar, to medium tar. We actually have to kick the habit. We have to end the addiction. The problem with shale gas is that it binds us into yet more fossil fuel infrastructure for decades to come.”Worthington’s enthusiasm for a well-managed, home-grown shale gas industry – as opposed to other sources of gas – is due to the extra emissions generated by the process of compressing and transporting liquefied natural gas (LNG) from the Middle East. The MacKay report, published by the UK government in 2013, found that from its extraction to its use shale gas generated 200 to 253g CO₂ equivalent for every unit of energy. LNG (which accounts for roughly a quarter of UK gas supply today) emissions range from 233 - 270g.

These estimates include what are known as fugitive emissions – methane that escapes during the extraction process. Although some uncertainty surrounds the industry’s ability to control these leaks in practice. “[We] still don’t know how big or if this will be an issue,” said Worthington, because the government had stymied Labour’s efforts to monitor emissions. Environmental groups also argue that other impacts, such as seismic tremors and contaminated water sources, will be impossible to guard against in a full-scale dash for shale gas. But energy experts told the Guardian that the dismissal of fracking on this basis would be a mistake and a properly regulated industry could deliver cost and carbon savings.

“I think her stance is perfectly sensible,” said Bob Ward, policy and communications director for the Centre for Climate Change Economics and Policy at the London School of Economics and oftentimes fierce critic of the fossil fuel industry. “As long as you manage the local environmental risks – which are serious – then there’s no objection. And indeed as Bryony said if you are looking at it from a climate change point of view it produces far more emissions if you have to go through the process of compressing gas and then transporting it all the way from Qatar.”



Jim Watson, director of the UK Energy Research Centre, was more cautious about the potential carbon savings of using shale instead of LNG. “Those differences are at the margin,” he said. “I think the debate is about what role gas plays rather than starting to talk about particular sources of gas. We shouldn’t worry about that too much unless there’s really strong evidence that that carbon footprint is really high.”

However he agreed that there was no reason to rule out a well-regulated fracking industry “a priori”, especially as conventional gas production in Britain’s North Sea fields is expected to decline rapidly in coming years. Worthington said the necessity to switch off coal power stations as soon as possible meant that building new gas power stations, which generate roughly half the emissions of coal plants, represented the best available option for a quick transition of the electricity sector. Gas would also be important for home heating and transport for decades to come, she said. Ward said Britain’s best decarbonisation pathway was to phase out coal power “as soon as possible” and replace the power stations with new gas plants. “The sooner we do that the better,” he said, because gas generators built now can deliver 15 years return on investment before 2030. This date is important as the government has powers under the Energy Act to set a decarbonisation target for the power sector. By that time any fossil fuel power station may have to be fitted with a carbon capture and storage system, which remains an uncertain technological prospect.

“Without shale gas, the price for consumers is likely to be almost entirely dependent on imports, which could be a lot more expensive than today,” he said. Although he said claims from the industry that shale gas would make the price of energy lower than today were unlikely to be correct. Estimates of just when the shale industry might be contributing meaningful amounts of gas to the economy range between five and 15 years, depending on whether you ask the industry or environmentalists. In its most shale friendly scenario, the National Grid predicts that by 2025 shale could be supplying 15-20% of the UK’s gas.

One thing is clear, using shale instead of LNG will be no extra help for meeting the UK’s own carbon targets. That is because these targets regulate emissions generated within the country. Under the international climate regime, carbon generated at a compression facility in Qatar is that country’s own business. The bulk of the extra emissions from LNG are generated by the tankers that bring it to the UK – these and all other shipping emissions remain the responsibility of no one in particular. Carbon Brief editor Leo Hickman pointed out that those who use the MacKay report as justification for fracking forget that it concludes that shale gas’s contribution to the climate fight depends on it keeping British coal in the ground.

The report concluded that without a global emissions deal the coal displaced by shale gas in the UK will simply be burnt elsewhere. This has happened in the US, which remains one of the world’s biggest exporters of coal despite the crunching decline of its domestic coal power industry. UN negotiations continue to provide weak assurance that such a deal will be achieved in Paris in December. Worthington’s position is commensurate with Labour’s current, cautious support for the industry. However two of Labour’s leadership candidates, including frontrunner Jeremy Corbyn, have said they would follow Scotland and Wales and ban fracking.

The winner of that contest will be announced. Worthington's characterisation of gas as "low carbon" echoes similar comments by Conservative energy secretary Amber Rudd. Ward and Watson said this was misguided as gas remained a significant producer of greenhouse gases. "[It] did raise my eyebrows slightly. I don't think I'd normally class it as that," said Watson. "I think that was a mistake," said Ward. "It's not low carbon. It's a high carbon source of energy." Worthington told the Guardian that it was not a slip of the tongue. "I think terms like renewables are outdated. [I] prefer high, low and zero carbon.

Gas is low carbon especially when used for heating." Watson said the argument expounded by environmental groups and renewable advocates that the country should bypass gas and skip straight to a dramatically expanded renewable energy sector ignored the technological gaps in transport and home heating and the need for some flexible power generation to balance out the fluctuations of renewable sources. "I think we probably do both at the same time," said Watson. "Gas is going to be around for some time to come, our analysis shows at least a few decades yet."

EC sees in storage, Eni valuable additions to energy security

Natural Gas Europe, 16.09.2015



The European Commission is trying to come up with a gas strategy, turning the spotlight on Italy's Eni and on storage capacity.

The European Commissioner for Energy and Climate Action, Cañete, met Eni's CEO, Claudio Descalzi, to discuss the role of the East Mediterranean for Europe's energy security. 'Mr Descalzi and Mr Cañete underlined that Eni's giant gas discovery offshore Egypt, will allow the East Mediterranean gas hub to contribute significantly to European energy security, enhance the liquidity of the gas market and improve the competitiveness of gas vis-à-vis coal' reads by Eni.

A few hours before, on Tuesday, the European Commission published the report 'The role of gas storage in internal market and in ensuring security of supply', saying that gas storage sector in Europe has been growing faster than gas consumption. 'Between 2006 and 2012, storage Working Gas capacity has grown at a pace of 5% per year, with lower rates in negotiated and higher in regulated regimes. Only after 2012 the growth rate has fallen to about 2% and seems to be the consequence of earlier investment decisions, which have now substantially halted' reads the analysis.

According to the European Commission, the intention of companies to exploit market fluctuations has triggered investments in faster storage facilities, like salt caverns and LNG tanks. 'Therefore, the average deliverability rate has increased even more than working gas capacity, and the industry' flexibility performance has definitely improved.'

On the other hand, the Commission explains that the decline in the gas prices seasonal spread might decrease the attractiveness of investments in storage capacity. 'Moreover, the role of alternative flexibility tools may be boosted by the more open trading that occurs in increasingly organized, interconnected and transparent gas hubs. The new European regulation, notably the implementation of the Balancing Network Code, could further strengthen such competition.'

All in all, it seems that the storage utilisation has not been significantly affected by this increased competition in the market for flexibility for three main reasons: i. the insurance value of storages against unexpected events, ii. mandatory storage obligations, iii. obligations stemming from long-term contracts

Poland is one of Lithuania's key partners in energy area

Baltic Course, 11.09.2015



Lithuania's Minister of Energy Rokas Masiulis in Poland made a speech on energy security at the 25th Economic Forum in Krynica, and he is taking part in meetings with representatives from Polish government and energy companies, reports LETA/ELTA.

“Poland is one of Lithuania's key strategic partners in field of energy. The joint energy projects that are currently being implemented—construction of LitPol Link interconnection and the GIPL, synchronisation of Lithuanian system with Continental European grids— are example of how active cooperation is possible when there are shared interests.

Lithuania and Poland also consistently hold the same positions in EU institutions when talking about the importance of an external energy policy: support for Ukraine and the idea of joint gas purchasing. I think that we definitely have the potential to cooperate in implementing other energy projects as well,” said Lithuania's minister of energy. During one of the discussions at the 25th Economic Forum, the minister spoke about the heightened significance of energy security.

“Today, energy security is becoming an integral part of geopolitical security in the broader sense. This is particularly evident in Central and Eastern Europe, where many countries are dependent on expensive energy imports from third countries. Just a year ago, Lithuania was also importing 100 percent of its oil and gas from Russia and 63 percent of its electricity from third countries.

These circumstances had a negative impact on both national security and energy security. Now the situation is completely different – after completion of the liquefied natural gas (LNG) terminal, the energy sector in our country is more diversified, more sustainable and more secure,” said Minister Masiulis. According to the Lithuanian minister of energy, it becomes clear that the more terminals appear in the region, the better – LNG facilities contribute directly to the security of supply. Lithuania fully supports regional LNG projects. Successful construction of the terminal in Poland would allow strengthening the North-South gas corridor, encompassing the crucial area of East-Central Europe from Croatia to Finland. While in Poland, Minister Masiulis also met with gas transmission system operator Gaz-System CEO Jan Chadam and discussed opportunities to speed up implementation of the GIPL project.

During a meeting with Janusz Piechocinski, Polish deputy prime minister and minister of economy, the officials discussed further bilateral cooperation. The minister also has a meeting planned with Mariusz Zawisza, CEO of the Polish oil and natural gas company PGNiG. Political and economic leaders from Central and Eastern Europe are meeting for what is already the twenty-fifth time at the Economic Forum in the town of Krynica-Zdroj. This forum is one of the region’s most important events dedicated to economic issues.

Low prices to take toll on drillers, worst yet to come, says Moody’s

Natural Gas Europe, 15.09.2015



Difficulties for the oil and gas industry are set to remain at least for other two years, Moody’s said, adding that drillers could be the first to suffer the low oil price environment and the decrease in day rates.

‘A persistent oversupply of rigs combined with low oil prices will prolong the downturn in offshore contract drilling industry, weakening credit quality of offshore drillers through 2017,’ Moody’s Investors Service said. In its “The Worst Is Yet To Come For Offshore Drillers” report, it expects oil prices to remain low through 2017 because of a combination of strong US dollar and slowing growth in China.

According to the rating agency, if the oil prices remain near today’s \$40-\$50/barrel range, dayrates will fall further, approaching the cash break-even cost levels in some markets. The rig industry’s overcapacity problem could last for several years. Older rigs will not retire easily and new rigs will keep coming with any positive development in the market” Sajjad Alam, Moody’s Assistant Vice President and Analyst, commented. Despite the recent hype over deepwater activities, deepwater/ultra-deepwater rig markets could encounter challenges on both the supply and demand fronts.



'Low oil prices will restrain drilling activities in those high cost markets, while the supply of new rigs will continue at a high level through 2017. Shallow water markets, on the other hand, will not experience as much demand erosion, but will face similar supply pressures.' According to Moody's, these market conditions will have a significant impact on companies unable to reduce debt.

"Companies that can reduce debt, minimize capital spending and maintain conservative financial policies are more likely to avoid ratings downgrades during this down-cycle," Alam concluded. It comes as no surprise that companies are taking important decisions in this direction. New World Oil and Gas relinquished its Danica Jutland Licences 1/09 and 2/09 and Danica Resources Licence 1/08 in Denmark following the expiry of the Licences. "Despite a comprehensive analysis of the licences confirming valid prospectivity, in the current oil price environment and in light of the early stage of development we believe it is the right decision to relinquish the Danish licences" New World's non-executive Chairman Chris Einchcomb commented in a note. In general, as explained in January, low oil prices are laying the ground for higher margins in the future, but only for more solid and large players.



Announcements & Reports

▶ *The Political and Commercial Dynamics of Russia's Gas Export Strategy*

Source : OIES

Weblink : <http://www.oxfordenergy.org/wpcms/wp-content/uploads/2015/09/NG-102.pdf>

▶ *Short-Term Energy Outlook*

Source : EIA

Weblink : <http://www.eia.gov/forecasts/steo/report/natgas.cfm>

▶ *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/>

▶ *MOMR September 2015*

Source : OPEC

Weblink : http://www.opec.org/opec_web/en/publications/338.htm

Upcoming Events

▶ *3rd East Mediterranean Gas Conference*

Date : 22 – 23 September 2015

Place : Paphos – Greek Cyprus

Website : <http://www.oilgas-events.com/East-Med-Oil-Gas>

▶ *LNG Global Congress*

Date : 23 - 24 September 2015

Place : London - UK

Website : <http://www.lngc.com/?xtssot=0>



► *The 3rd Azerbaijan and Caspian Sea Oil & Gas Week 2015*

Date : 28 – 29 - 30 September 2015
Place : Baku - Azerbaijan
Website : <http://www.azerbaijansummit.com/>

► *Shaklin Oil and Gas*

Date : 28 – 30 September 2015
Place : Yuzhno – Sakhalinsk - Russia
Website : <http://www.sakhalin-oil-gas.com/?xtssot=0>

► *23rd Kazakhstan International Oil & Gas Exhibition and Conference*

Date : 06 – 09 October 2015
Place : Almaty – Kazakhstan
Website : <http://www.kioge.kz/en/conference/about-conference>

► *Shale Gas Environmental Summit*

Date : 26 - 27 October 2015
Place : London - UK
Website : <http://www.smi-online.co.uk/energy/uk/shale-gas-environmental-summit>

► *Gastech*

Date : 27 - 30 October 2015
Place : Singapore
Website : <http://www.gastechsingapore.com/>

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► *Abu Dhabi International Petroleum Exhibition & Conference*

Date : 09 - 12 November 2015
Place : Abu Dhabi - United Arab Emirates
Website : <http://www.adipec.com/>



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Exhibition & Conference

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► *CIS Oil and Gas Transportation Congress (in Turkey)*

Date : 11 – 12 November 2015
Place : Istanbul - Turkey
Website : <http://www.theenergyexchange.co.uk/event/cis-oil-and-gas-transportation-congress-2014/attend>



17th Annual
**CIS OIL AND GAS
TRANSPORTATION
CONGRESS**



► *20th Turkmenistan Oil and Gas Conference*

Date : 17 - 19 November 2015
Place : Ashgabat – Turkmenistan
Website : <http://www.oilgasturkmenistan.com/>

► *Israel's 2nd Annual International Oil & Gas Conference*

Date : 17 - 19 November 2015
Place : Tel Aviv - Israel
Website : <http://www.universaloilgas.com/>

► *European Autumn Gas Conference*

Date : 17 - 19 November 2015
Place : Geneva - Switzerland
Website : <http://www.theeagc.com/>

► *Project Financing in Oil and Gas Conference*

Date : 23 - 24 November 2015
Place : London - UK
Website : <http://www.smi-online.co.uk/>