Oil & Gas Bulletin

► 28.11.2014

Turkey's gas deals insufficient to cover rising demand

Anadolu Agency, *24.11.2014*

Current gas contracts are insufficient to cover Turkey's natural gas demand by 2025 when it will reach 65-75 billion cubic meters, said head of a Turkey-based association of oil and gas companies. Turkey currently consumes around 45 bcm of natural gas annually and almost all of it is exported from Russia, Iran and Azerbaijan via pipelines.

"Turkey needs to develop its natural gas resources in Iraq and in the East Mediterranean in order to keep up with the demand," Aytac Eren, the president of the Petroleum Platform Association, said at the 7th International Energy Congress and Fair in Turkish capital, Ankara.

By 2035, the global energy sector will receive around $40 trillion worth of investment in which more than half will be spent on oil and natural gas. Turkey is trying to diversify its energy sources with renewable resources and nuclear power as it relies heavily on foreign imports.The imports of natural gas and oil, which make up almost half of Turkey's electricity production, costs up to $60 billion a year. Turkey is second in the world after China in terms of rising demand for electricity. Demand in Turkey almost doubled in the past decade and is expected to double again by 2023. In order to match the rate of increase, Turkey aims to invest more than $120 billion in the energy sector alone.

Turkey should be energy hub to prevent gas shortages

Anadolu Agency, *27.11.2014*

Decline in Russia's West Line natural gas output to Turkey may constrain the country in the coming winter, according to an industry official.

Turkey's Minister of Energy and Natural Resources Taner Yildiz said Russia's daily natural gas delivery to Turkey decreased from 42 million cubic meters, mcm, to 26 mcm. "Turkey's daily natural gas consumption during winter reaches 190 mcm. The decline in Russian gas is equivalent to 8.5 percent of Turkey's daily consumption. There is no short-term solution to overcome the possible natural gas shortage," said Aytac Eren, the president of the PETFORM.

Eren said that all the legal and commercial obstacles which prevent a free natural gas market in Turkey should be removed. “There won’t be a natural gas shortage in Turkey if we obtain a free market where all the players can compete with each other in terms of natural gas,” Eren said. According to Eren, a colder winter will increase the shortage gap. He added that trade will always fill the gap and that gas is imported only when there is competition, and this relies on having a free market.

More liberal gas law underway in Turkey, experts

Anadolu Agency, *25.11.2014*

Turkey’s natural gas law, which is currently under revision for liberalization, was debated at the seventh International Energy Congress and Fair. Experts called for a more liberal and flexible law to facilitate imports during the session chaired by Anadolu Agency’s Director General Kemal Ozturk.

Arif Akturk, gas group leader of the Petroleum Platform Association said the Turkish natural gas market is divided between Turkey’s national oil pipeline company BOTAS and Russia’s Gazprom, with Russia the main gas supplier. Akturk, who drew attention to the need for Turkey to diversify its energy sources to guarantee supply security.

Akturk, who drew attention to the need for Turkey to diversify its energy sources to guarantee supply security, also spoke about the deficiencies of Turkey’s natural gas sector. “The new natural gas law should only require one single import license, instead of many” he said. Currently separate licenses are needed by importing firms for each type of gas including pipeline gas, liquefied natural gas and compressed natural gas. The new natural gas law is yet to be approved in the Turkish assembly. Akturk also said Turkey should find ways to integrate with European gas markets, and added that gas from other countries like Slovenia can flow into Turkey,

The Anadolu Agency’s Director General Kemal Ozturk stated that the new law will be the most comprehensive energy law so far. He added that objections to the new law from the private sector and associations will be addressed in court. On a separate issue, Ozturk announced that the Anadolu Agency has launched the Anadolu Agency Energy News Terminal which will closely follow national and international markets to provide readers with up-to-the-minute data which also includes specialist analysis from experts. “The terminal with its wide catchment area provides users with special analysis reports obtained from important names in the energy sector from Turkey as well as the U.S., Europe, the Middle East and Asia,” he added.

The Energy News Terminal is able to reach both international investors interested in Turkey and local investors and entrepreneurs who wish to learn about the global energy sector because of its ideal speed, content and quality of news stories and analysis reports which are published in English.

Another first by the Energy News Terminal is the “Energy Desk.” Similar to the “Finance Desk,” the energy desk will begin shortly and will hold periodical meetings where important guests, sector professionals, influential names and people from the energy business sector will attend. The meetings will be held live and will be provided to sector professionals instantly via the Anadolu Agency Energy Terminal. “Our energy correspondents, trained in the Anadolu Agency News.

Academy work at the production level of the English Energy News Terminal,” he added. Our goal is to have a world-wide energy news broadcast by utilizing Turkey’s geopolitical position at the center of the world’s energy politics. Ozturk announced that a lunch event on December 11 is planned to introduce the terminal to sector representatives, and by January 2015 the terminal, which is currently free of charge, will be open to subscription.

Turkey’s gas consumption on “knife’s edge”

Anadolu Agency, *26.11.2014*

Turkey’s natural gas consumption in the winter is already on a “knife’s edge” and the country cannot tolerate any foreign gas supply interruptions, former head of Turkey’s Petroleum Pipeline Corporation said Wednesday. Last week, Turkey’s Minister of Energy and Natural Resources Taner Yildiz said Russian natural gas volumes from the West Line to Turkey had fallen by 40 percent.

“Turkey did not ‘face any problems yet’ due to this decrease because of the mild weather,” Gokhan Yardim, former head of BOTAS and current head of gas company AngoraGaz, told The Anadolu Agency in an exclusive interview.

“However if the decreased supplies do not return to normal levels in the coming days, Turkey will probably suffer from domestic gas shortages,” he added. Turkey imports some 14 billion cubic meters of Russian gas annually from the West Line which travels through Ukraine. “BOTAS has made some preparations this summer, in anticipation of possible supply problems arising from the situation in Ukraine,” Yardim said. He added that there is not much Turkey can do because the country’s gas supplies have reached dangerously low levels which will not be able to withstand any shortages as consumption increases. Yardim pointed out that Turkey could only cut consumption in its power plants which run on gas to reduce the amount of gas needed.

Turkey should invest $100-120 billion to meet target, says SOCAR

Natural Gas Asia, *25.11.2014*

About USD $100-120 billion should be invested in the energy sector to reach Turkey's aims for 2023, SOCAR said referring to the TANAP project and to the Turkish energy sector. "Investment amount of TANAP makes USD $10-12 billion. Thus, the only TANAP will make 10 percent of the needed investment amount of Turkish energy sector" SOCAR President Rovnag Abdullayev said.

Abdullayev claimed Azerbaijan has become a key player in the region both from a political and economic point of view. SOCAR President explained that the Southern Gas Corridor is one of the winners of reduced local production in Europe.

"According to estimations, Europe's demand for natural gas will rise to 610 bcm, while annual natural gas import - to 400 bcm, thus, increasing the importance of the Southern Gas Corridor." Abdullayev also spoke about the TAP project, saying that SOCAR will bet on regional and global cooperation to increase global energy security.

Is Turkey really against Ukraine's LNG Project?

Anadolu Agency, *27.11.2014*

The decades long price arguments between Ukraine and Russia over the natural gas which is at a vital importance to heat the Ukraine in the bitterly cold winters has reached at the peak. The tension between two countries over the Russian invasion of Crimea and the separatist movements in the East has doubled Ukraine's fears of the future.

Russian aggressive actions has speeded up the decision makers in Kiev to diversify the gas supplies, so the liquefied natural gas (LNG) terminal project at the Black Sea coast of Ukraine is being re-considered as a top priority. They have apparently learned the lesson form the Lithuanian example.

Although the project was shadowed by the scandalous retreat of the Spanish company Gas Natural Fenosa, the discussions are apparently going on for construction and with the possible supplier countries. Financing, which is one of the most vital part seems to be not difficult taking into account the prospective profit of the cheaper LNG. Ukrainian authorities have another concern; A Turkish approval, which is an issue occasionally, rose at various platforms. It is related with the danger of the huge LNG tankers transiting through the Turkish Straits. “Such vessels represent a greater fire hazard in the busy straits,” according to the Center for Transport Strategy. The argument was started by the comment made by Bogdan Sokolosky who was presidential consultant on energy security of Ukraine between 2008 and 2010; “Another challenge to overcome for the project to reach full capacity is convincing Turkey to let more LNG-hauling tankers through the Dardanelles. So far, I have not heard of talks even taking place.”

Turkish authorities have not taken part in the discussion so far. However, the discussion looks likely to be based on a wrong point; The Montreaux Convention (1936) which was signed to regulate the maritime traffic through the Turkish Straits. The convention is based on “the principle of freedom of transit and navigation” which is stated in the very first article. Additionally, the signatory countries have agreed on Turkey’s position as the “Custodian Country”. So, Turkish authorities have no authority to prevent LNG tankers from going to Ukraine through the straits, but they do have the right to intervene if the safety of the straits is threatened.

Furthermore Turkish authorities have not declared any comment or intention regarding the issue, probably for the rights of regulation is defined clearly and carefully in various articles and annexes of the convention. On the other hand, Turkey operates an LNG terminal at the northern coast of Sea of Marmara which is supplied through the strait of Dardanelles under the Montreaux regime. If and when a cheaper LNG is produced in the Black sea basin, then it will be supplied through the Bosporus, no doubt.

The only but a small concern may be the extra costs of LNG traffic. The Straits Management Authority clear the straits from the vessels other than LNG tankers because they need to navigate alone to prevent an accidental collision. So the passage is hindered for several hours, just as it was the case for the “Varyag”‘s passage in 2001. Additionally, a couple of powerful tugboats are kept standby. Pilotage is another cost among others although not considerable. In any case, “LNG-hauled tankers” are unlikely to be as painful as the “Varyag case” for the Turkish-Ukrainian relations.

Turkey indispensable route for Israeli gas

Anadolu Agency, *27.11.2014*

The best option for the delivery of Israeli natural gas to Europe is through Turkey, Aksa Energy CEO said. The Leviathan field off the coast of Israel, discovered four years ago, is estimated to hold nearly 600 bcm of gas, according to the U.S. Energy Information Administration data.

Experts debate that Turkey is the only viable transit state for the Middle Eastern country's natural gas exports to Europe.If Israeli natural gas goes through Turkey to Europe, and if some supplies can be assigned for Turkey, Cuneyt Uygun, Aksa Energy CEO told The Anadolu Agency that his company would like to get involved in the delivery business.

Referring to the tense political relations between Turkey and Israel, Uygun said, "Of course no one would do any business against Turkey's foreign policy principles but we, as energy players in the industry, expect certain things to be isolated from politics." "We have been in touch with the private sector and the ministry of energy where we repeatedly indicated that we want to take a role in this delivery," Uygun added.

In the case of the Israeli natural gas delivery via Turkey to Europe, Uygun explained two possible scenarios, the first in using the existing Arab gas pipeline, and secondly a proposed parallel underwater pipeline to the Arab line. However, relations between Israel and other surrounding countries to the pipeline may not enable Israel to use the Arab gas pipeline.

The Arab Gas Pipeline, exports Egyptian natural gas to Jordan, Syria and Lebanon, with a branch underwater pipeline to Israel. It has a total length of 1,200 kilometers (750 mile). The pipeline is considered as a model for strategic Arab cooperation projects, and is an economic artery between Egypt, Jordan and Syria. In future phases it will be a link between Africa, Asia and Europe, according to Egypt's ministry of petroleum.

Istanbul Arbitration Ctr. to bring trust to energy feuds

Anadolu Agency, *27.11.2014*

A centralized system for trade and energy-related disputes is a necessity and the planned Istanbul Arbitration Center can fulfill this task, according to energy and capital markets counsel at Roschier in Finland - a Northern European law firm.

Ali Babacan, the deputy prime minister of Turkey said in 2013 that the country will establish a privately-managed arbitration center in Istanbul to deal with trade disputes including energy in which companies can apply to resolve their disputes prior to filing lawsuits in courts. The law to pass the approval of the Arbitration Center will be ratified in Jan. 2015.

The Chairwoman of the sixth Annual Baltic Energy Summit in Helsinki, Huomo in an interview with The Anadolu Agency, said it will be beneficial to have an internationally recognized place for arbitration which taking into account Turkey's role in the energy field will be in a location central to such activity. She explained that in Finland, most of the energy-related disputes are solved at market courts but there is no centralized system. "An arbitration center in Istanbul will bring trust to the system if it is genuinely neutral and it should be trustworthy," she added.

According to Huomo, an international arbitration center can lead to results that are more acceptable because those who make decisions at the arbitration center will be sector experts. "If you establish a system for energy arbitration, you should be certain that the personnel who make decisions know what they are talking about," she stressed. Huomo said that it would take time for the center to be established and to gain trust of the participants. "All the pieces of the puzzle need to be put in place. There will be a big demand and I'm sure there has been a fair amount of research done behind this center" she added.

Iraq to raise oil production despite low prices

Anadolu Agency, *26.11.2014*

Iraq is focusing on boosting oil production despite falling oil prices, ahead of OPEC's meeting on Thursday where the cartel will seek to resolve the cost and supply dilemma, Iraq's state company for oil projects Director General said.

Nihad Moosa, director general of Iraq's state oil company, told Anadolu Agency that the oil price fall will dramatically affect Iraq's economy as oil reserves represent 90 percent of the economy's income. According to Moosa, the country has a lot of energy whose extraction can be further increased along with a lot of licensing service contracts with International oil companies in place since 2010.

"Our main focus is to increase production, it doesn't matter whether the oil price will increase or decrease," said Moosa, and added that "we are working on increasing production in the giant fields." The dramatic fall in oil prices since June has hit oil-dependent economies. Russia, Iran and Venezuela already declared that they will defend their right to decrease oil production to raise the oil prices again. However, Saudi Arabia and the Gulf states resist cutting supplies.

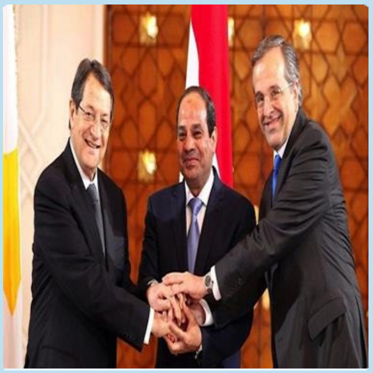
According to Moosa, Iraq's target is to increase oil production to eight million barrels a day by 2020. She said that the low oil prices will not affect their planned progress. Iraq's crude oil production is currently at three million barrels per day, according to U.S. Energy Information Administration. "We will try to find another way, a solution without decreasing oil production" she said, and added that she anticipates that OPEC will have a certain strategy to stop the decrease of oil prices. Crude oil prices fell more than 30 percent since June to a four-year low in November dropping below an $80 per barrel mark.

The Erbil and Baghdad governments had a dispute on energy resources in the Kurdish Regional Government. While the KRG insisted on defending its right to sell oil independently of the central government in Baghdad, the central government claimed that it is against the constitution for KRG to do so. Moosa said the plan of the new Iraqi government is to reach an agreement with the KRG to avoid conflict because it affects Iraq as a whole. "The priority of my government now is to reach an agreement and obtain results through passing the oil and gas law as soon as possible to settle matters," she said.

On Nov. 14, the Iraqi Oil Minister, Adil Abdul-Mahdi announced that the two sides reached an agreement. In accordance with the said agreement, the Iraqi government will pay the KRG $500 million as a start and the KRG will export 150,000 barrels per day of oil through Iraq. Moosa said Iraq is not likely to export natural gas in the near future, as domestic needs must be fulfilled firstly. Iraq's proven natural gas reserves as of 2013 are the twelfth largest in the world at 3.2 trillion cubic meters, according to U.S. Energy Information Administration. "I don't think in the very near future we will start exports because we need a lot of gas for power generation and still the gas process is not completed," Moosa said. "We still have a lot of exploration fields, so in the near future we can't export gas. We have to fulfill our requirements for power generation and petrochemicals so gas exportation will be delayed," she added.

Egypt and Cyprus freeze out Turkey in possible gas deal

Financial Times, *26.11.2014*



Egypt and Greek Cyprus are deepening energy co-operation, as an apparent anti-Turkey bloc emerges in the Eastern Mediterranean – potentially undermining US hopes that the area's gas finds could reduce regional tensions.

At a tripartite Egyptian-Greek Cypriot-Greek meeting, Sherif Ismail, Egypt's petroleum minister, said Cairo would speed up talks to pipe Greek Cypriot gas for domestic needs and possible re-export. The use of the gas is a point of heated dispute between Greek Cyprus and Ankara. "They should know that if they try to search for oil, natural gas, south of Cyprus we will not allow this," Ahmet Davutoglu said.

Israel proposes an east med gas pipeline

Natural Gas Europe, *24.11.2014*

Israel called on the EU to support the East Med pipeline project that would connect the natural gas fields in Israel and Greek Cyprus to the EU via Greece. Israel's Energy Minister Silvan Shalom reportedly stressed on the importance of the project when addressing the European Commission's new energy chief Maros Sefcovic at an event hosted by the Italian EU presidency earlier this week.

The Greek Cypriots also seem supportive of such an endeavour, the Greek Cypriot Foreign Minister receiving Israel's suggestion positively and stating that a viability study was being conducted.

The proposed pipeline could turn the Eastern Mediterranean into a natural gas hub that would contribute to EU's quest to diversify its sources of supply. It could also provide Europe with a cheaper source of natural gas. Its success would however depend, like always, on a solution for the various geopolitical problems in the region. The US and the UN remain committed to solving the Cyprus Island's problem, one of the many pending political issues in the Eastern Mediterranean. The island has been divided since 1974 and the failure to achieve a sustainable and fair settlement has led to increased tensions since the discovery of substantial hydrocarbon in Cyprus island's Exclusive Economic Zone.

Last month, Turkey issued a NAVTEX announcing its intention to conduct surveys covering Cyprus island waters and sent a Turkish vessel into Cyrpus Island's EEZ. Whilst the ENI/KOGAS consortium, currently searching for gas in block 9 of Cyprus Island's maritime waters pursued its plan despite Turkey's intervention, the renewed tension was interpreted as a sign that the road ahead will be bumpy unless a solution for the divided island was achieved. As a result of Turkey's action, Greek Cyprus suspended its participation in the UN-led peace talks with Turkey. Turkey accuses Greek Cyprus of unilateral drilling that will only benefit the Greek side of Cyprus dismissing comments from Greek Cyprus' officials that the gas wealth will benefit equally all Cypriots. Israel's support for an East Med pipeline comes after various signs that Israel is intending to export gas to its immediate neighbors first, Jordan, the Palestinian Authority and Egypt. Israel also expressed its intention to use Egypt's unused export facilities to reach export markets. However, regional deals remain fraught with political sensitivities. In fact, the recent escalation of the Israeli-Palestinian conflict questioned the likelihood of the Israeli-Jordanian deal ever coming to fruition.

The international community is committed to supporting the Eastern Mediterranean's path towards energy production and its entry in the natural gas export market. Joe Biden, during a recent visit to Istanbul, stressed on the urgent need to solve the Cyprus Island's problem, conveying President Anastasiades' wish to see the division end. US Vice President also highlighted the importance of the gas finds for both communities on the condition that Greek and Turkish Cypriots cooperate. Clearly there are various obstacles in the way of an effective development of the hydrocarbon wealth in the Eastern Mediterranean. Cooperation will benefit all the countries involved, including Turkey. But a question remains: how will Lebanon benefit from such grandiose undertakings? Will Lebanon be left out?

US to renew Israel oil pact

Upstream, *26.11.2014*

The US is in the midst of renewing its 35-year-old commitment to supply Israel with oil in emergency situations after the pact expired. The US "is in close contact with the government of Israel on extending the long-standing memorandum of understanding" between the two countries on oil supplies, Reuters quoted a State Department official as saying on the condition of anonymity.

The agreement was first signed in 1979 by Secretary of State Cyrus Vance and Israeli Foreign Minister Moshe Dayan after the Iranian revolution sent shock waves of higher prices and fears about disruptions through oil markets.

Under the agreement, the US, provided it has enough oil for its own use, will provide Israel crude for purchase. If Israel is unable to secure transportation for the oil, Washington will make "every effort" to help Israel secure transit, according to the agreement. The pact is an exception to Washington's ban on crude oil exports that Congress passed after the Arab oil embargo of 1973 to 1974 spiked petroleum prices and led to fears of shortages. Israel has never asked the US to supply it with emergency oil. Amid a six-year drilling boom that has led to a glut of light sweet crude along the US Gulf Coat refinery hub, the Obama administration has been pressured by oil companies to relax or lift trade restrictions.

OPEC heading for no output cut despite oil price plunge

Reuters, *26.11.2014*

OPEC Gulf oil producers will not propose an output cut on Thursday, reducing the likelihood of joint action by OPEC to prop up prices that have sunk by a third since June.

"The GCC reached a consensus," Saudi Arabian Oil MinisterAli al-Naimi told reporters, referring to the Gulf Cooperation Council which includes Saudi Arabia, Kuwait, Qatar and the United Arab Emirates. "We are very confident that OPEC will have a unified position." "The power of convincing will prevail tomorrow ... I am confident that OPEC is capable of taking much unified position," Naimi added in the conference.

A Gulf OPEC delegate told Reuters the GCC had reached a consensus not to cut oil output. Three OPEC delegates separately told Reuters they believed OPEC was unlikely to take any action when the 12-member organization meets after Russia said it would not cut output in tandem. The OPEC meeting will be one of its most crucial in recent years, with oil having tumbled to below $78 a barrel due to the U.S. shale boom and slower economic growth in China and Europe. Cutting output unilaterally would effectively mean for OPEC, which accounts for a third of global oil output, a further loss of market share to North American shale oil producers. If OPEC decided against cutting and rolled over existing output levels on Thursday, that would effectively mean a price war that the Saudis and other Gulf producers could withstand due to their large foreign-exchange reserves. Other members, such as Venezuela or Iran, would find it much more difficult. Brent crude LCOc1 was trading down 73 cents at $77.60 a barrel at 1919 GMT.

Naimi said earlier he expected the oil market "to stabilize itself eventually", after talks with non-OPEC member Russia on Tuesday yielded no pledge from Moscow to tackle a global oil glut jointly. The UAE sided with Naimi, saying oil prices would soon stabilize, while ramping up pressure on non-OPEC nations. "This is not a crisis that requires us to panic ... we have seen (prices) way lower," UAE Oil Minister Suhail bin Mohammed al-Mazroui told Reuters.

“The oversupply came from the evolution of the unconventional oil production ... I think everyone needs to play a role in balancing the market, not OPEC unilaterally,” he said. Iranian Oil Minister Bijan Zangeneh said some OPEC members, although not Iran, were now gearing up for a battle over market share. “Some OPEC members believe that this is the time where we need to defend market share ... All the experts in the market believe we have oversupply in the market and next year we will have more oversupply,” he added. The group could opt to roll over output levels but stress the importance of better compliance, while also agreeing to hold an extraordinary meeting if prices keep falling, a Gulf OPEC delegate and several OPEC watchers said.

Among the members of the Organization of the Petroleum Exporting Countries, Venezuela and Iraq have called for output cuts. OPEC’s traditional price hawk Iran said its views were now close to those of Saudi Arabia. Zangeneh said there was unity inside OPEC to “monitor the market carefully” but made no mention of a cut. “The onslaught of North American shale oil has drastically undermined OPEC’s position and reduced its market share,” said Dr. Gary Ross, chief executive of PIRA Energy Group.

Russia, which produces 10.5 million barrels per day (bpd) or 11 percent of global oil, came to Tuesday’s meeting amid hints it might agree to cut output as it suffers from oil’s price fall and Western sanctions over Moscow’s actions in Ukraine. But as that meeting with Naimi and officials from Venezuela and non-OPEC member Mexico ended, Russia’s most influential oil official, state firm Rosneft’s (ROSN.MM) head Igor Sechin, emerged with a surprise message - Russia will not reduce output even if oil falls to $60 per barrel.

Sechin added that he expected low oil prices to do more damage to producing nations with higher costs, in a clear reference to the U.S. shale boom. On Wednesday, Russian Energy Minister Alexander Novak said he expected the country’s output to be flat next year. Many at OPEC were surprised by Sechin’s suggestion that Russia - in desperate need of oil prices above $100 per barrel to balance its budget - was ready for a price war. “Gulf states are less bothered about a price drop compared to other OPEC members,” an OPEC source close to Gulf thinking said.

OPEC publications have shown that global supply will exceed demand by more than 1 million bpd in the first half of next year. While the statistics speak in favour of a cut, the build-up to the OPEC meeting has seen one of the most heated debates in years about the next policy step for the group. “The idea of unleashing a price war against U.S. shale oil seems strange to me. I doubt you can win this battle as most U.S. oil producers are hedging a lot of their output,” said a top oil executive visiting Vienna for talks with OPEC ministers.

US supports EU cooperation with Azerbaijan, Turkmenistan

Natural Gas Europe, *22.11.2014*

The US supports stronger cooperation between the European Union and two Caspian countries - Azerbaijan and Turkmenistan - in order to fast-track the construction of the Trans-Caspian gas pipeline. "The US supports the parties involved in the development of this project," Derek Hogan, American diplomat in Azerbaijan, said.

"Despite the fact that these volumes are not so great, the specified route will create an opportunity for the supply of gas from other fields of Azerbaijan as well and from Turkmenistan in the future," said Hogan, as reported by Azernews.

Earlier this week, Eni signed an addendum to the Production Sharing Agreement to extend to 2032 the duration of its contract to explore and produce oil and gas in the onshore Nebit Dag Area in West Turkmenistan. Earlier this month, Turkish President Tayyip Erdogan confirmed that TANAP could also supply Turkmen gas to Europe.

Belgium to help Greece set up gas market

Argus, *24.11.2014*

Belgian energy regulator Creg and gas system operator Fluxys have agreed to help their Greek counterparts establish a virtual trading point in Greece. Fluxys and Greek counterpart Desfa have agreed to carry out a feasibility study on the creation of a Greek wholesale gas market based around a virtual hub, while Creg and counterpart Rae will share best-practice information on market regulation.

Fluxys has some interest in the development of a Greek traded market — it holds 19pc of the Trans-Adriatic Pipeline that will carry gas from Azerbaijan at the Turkish border across Greece and Albania to Italy from 2020.

The firm is also working on plans to develop northbound transmission capacity through the Transitgas system that it operates in Switzerland, which would allow gas to be shipped from Italy through Germany to the Belgian border. But the plans have run into some difficulties because market participants are no longer willing to sign up for the long-term capacity contracts that would in previous years have underpinned such investments. Fluxys has operated a physical market at Zeebrugge — now called Zeebrugge Beach — since 1999. It also launched a new virtual trading point called ZTP in 2012, but the new virtual hub has suffered from extremely limited liquidity, drawing criticism from market participants.

Tug of war between MOL, Croatian government continues

Natural Gas Europe, *27.11.2014*

Hungary-based MOL asked Croatia-focused INA to press ahead with an extraordinary total dividend payout, distributing among the shareholders around 260 million euros.

"MOL proposes to the Annual General Meeting to vote in favour of two billion kuna (EUR 260 million), the payment of dividends from retained earnings" the Hungarian company wrote. According to MOL, the Croatian economy ministry forced INA out of business in the Sava river and in other areas of the country.

"The shareholders have come to understand that the Department does not currently support an investor-friendly climate in Croatia" MOL wrote. INA Management Board downplayed the current tensions. In a note released after a shareholders meeting, the Zagreb-based company wrote that the Croatian Government and MOL - which are the two main shareholders - agreed on the Strategy Discussion Paper, which suggests an increase in investments and a simultaneous growth in all business divisions. "The presented material was unanimously agreed upon by the Management Board with some questions still remaining open" INA wrote after the meeting.

MOL said it saved INA from bankruptcy, adding it could soon try to "realise return of … previous investments." According to several reports, the Croatian Ministry of Economy hit back, saying that INA is running into problems and that MOL's behaviour is having a negative impact on INA's reserves, production, processing and sales. Croatian authorities said that Budapest is trying to stop a Croatian growth, which could soon translate into a strong Zagreb-based regional hub. MOL could sell its shares to Russia, with some experts saying that both Gazprom and Rosneft could be interested in the acquisition. Washington sees it as a Hungarian drift into Moscow's sphere of influence. MOL's shares could be of interest also for other players. The Croatian government could try to buy MOL's 49.08% stake. America's Klesch Group is reportedly interested too.

Croatia a regional energy centre of the future

Anadolu Agency, *26.11.2014*

Croatia, with its underexplored hydrocarbon reserves and planned liquefied natural gas terminal, is becoming a strategic area for the EU's diversification of energy resources.

As a regional energy center, it will provide transit links to neighboring countries through its planned liquefied natural gas terminal (LNG) which is due to be built by 2018, thus increasing market transparency across the Europe, said United States of America Vice President on Saturday at the sixth Atlantic Council Energy and Economy Summit in Istanbul.

The liquefied natural gas terminal, which will be funded by the European Commission under the name of "Connected Europe Facility", is to be constructed off the coast of Rijeka, a natural deep-water port in the country. Rijeka enjoys connections to other markets with transit links to Italian production fields in the Adriatic and a connection to Austria and Eastern Europe via Slovenia and Hungary.

"Croatia is taking important steps to strengthen its own and by extension the EU's position regarding energy security. The country was opened to energy sector investments which aimed at further strengthening Croatia's rich hydrocarbon production," said Barbara Doric, the president of the Management Board of Croatian Hydrocarbon Agency. According to Doric, new licensing for both onshore and offshore hydrocarbon explorations have been launched, and added, "Industry experts recognize that particularly the offshore region is highly underexplored and it presents excellent prospects for substantial oil and gas discoveries." She explained that the reserves will increase the EU's gas supply and contribute to reduce EU's dependence on Russia, its largest gas source.

The EU is heavily dependent on Russian gas and has been trying to reduce this dependence and diversify energy resources due to the Russian-Ukraine crisis. Croatia imports 40 percent of its domestic consumption from external resources. Underlying the importance of Croatia's newly-initiated gas infrastructure projects, Doric said that, "while the projects will serve to diversify Croatia's gas import options, ultimately, its purpose will be to ship gas supplies to Central Europe.

The gas supplies will increase market transparency and improve access to new market participants.” The EU agreed to allocate €647 million ($810 million) in support of infrastructure projects in Central Eastern and Southeastern Europe as well as in the Baltic region for the “Connected Europe Facility.” Croatia’s liquefied natural gas terminal will get €4.9 million ($3.9 million) out of the total amount. The annual regasification capacity of the terminal is planned to be between four to six billion cubic meters.

Hungary looks to develop gas production

The Washington Post, *26.11.2014*

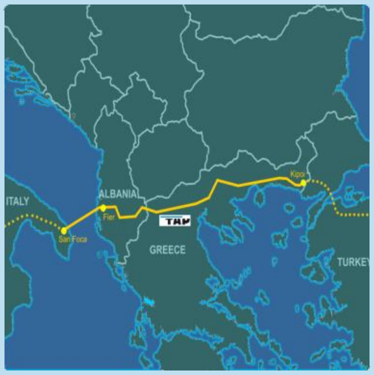
Hungary is looking to start extracting unconventional forms of natural gas in a bid to help Europe become less dependent on Russian energy imports, government official said. Hungary’s unconventional gas deposits are estimated at some 1,500 billion cubic meters enough to supply all of Europe for three years but they are deep and hard to access.

Unconventional gas are difficult to extract because the gas is trapped in rocks, requiring deeper and more complex wells and technology. Attila Nyikos told Hungary wants to be among the few European countries embracing extraction of this type of unconventional gas.

“If European unconventional gas stays down, European (energy) freedom will be buried next to it,” Nyikos said, speaking on the sidelines of a shale gas conference. Much of Central and Eastern Europe relies on Russian gas and is seeking new sources to limit that dependence because Moscow has been often using the fossil fuel for political purposes. Poland is the continent’s leader in exploration for shale gas, with some 67 wells drilled, but more data is needed to show if it is commercially viable. Shale gas is also pursued in Britain and in Romania, while politically-troubled Ukraine is waiting for foreign investors. But most European states are reluctant to pursue tight and shale gas amid concerns that the extraction methods hurt the environment. Hungary, which depends on Russia for some 80 percent of its gas needs, has about 100 research wells for unconventional gas, seven of them by the Canadian company Falcon TXM, including one with small-scale commercial production.

TAP launches two tenders for compressor stations in Greece, Albania

Natural Gas Europe, *26.11.2014*



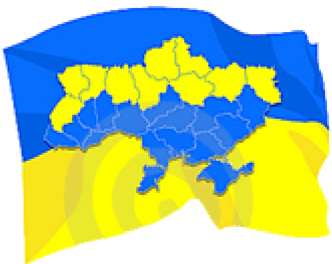
TAP has launched two tenders for two compressor stations, one in Greece and the second in Albania. "In Greece, the ITT will cover the provision of engineering, procurement, construction and commissioning of one compressor station at Kipoi" reads the note.

The invitation for tender in Albania is aimed at works for a compression station at Fier and one metering station at Billisht. "Design and specification for the compressor stations is in line with TAP's initial capacity of 10bcm per annum, gas transported from Shah Deniz II to Europe, with a possibility to expand that capacity up to 20bcm per annum."

TAP confirmed that construction works are planned to begin in 2016. "The selection of bidders who have been invited to tender for compressor stations has successfully passed a rigorous prequalification process" Knut Steinar Kvindesland, Procurement Director at TAP commented. Last month, TAP issued the first major Invitation to Tender (ITT) for the construction of the onshore section of the pipeline, asking engineering companies to present their projects for the 760 km onshore pipeline in Greece and Albania.

This winter needn't be a cold one in Ukraine

Natural Gas Europe, *26.11.2014*



Economic and political turmoil in Ukraine has already led to a significant reduction in energy consumption in the country. According to Ukraine's State Statistics Committee, from January to September, consumption of electricity fell by 5.8 percent and natural gas by 16.6 percent, compared with the same period last year.

The country nevertheless continues to depend on energy imports, and this trend is perceived by the current elites in Kiev as a major threat to national security. The energy import bill paid by Naftogaz is indeed one of the most important internal economic and political challenges Ukraine faces.

Kiev has already made several attempts to find alternative sources of supply for example, via reverse flow and is also mulling a liquefied natural gas (LNG) terminal option and even alternative pipeline routes. Due to the oversupply of natural gas in Europe, reverse flow offered this summer had competitive prices, but the volumes might not be stable and sufficient, especially during the winter months, and the price can go up as well. The examples of Poland and Lithuania show that new LNG contracts even with lower spot prices are more expensive than traditional pipeline supplies.

In November last year, Reuters reported that Lithuania would pay at least 10 percent more for Norwegian LNG than for Russian pipeline gas in 2015. Norwegian LNG will cost almost $400 per 1,000 cubic meters, while Gazprom’s shipments cost about $40 less. Potential deliveries of LNG to the Black Sea ports of Ukraine will be even more expensive. One could therefore argue that these options are by far too costly and unrealistic, and Kiev is better off looking for a solution closer to home. Energy efficiency, conventional hydrocarbons and even renewables are Ukraine’s largest sources of energy supply.

Improving energy efficiency and reducing energy consumption should be the key priority of Ukraine’s energy policy. Improvement of energy efficiency is extremely important for the country, which imports up to 60 percent of its energy and is in dire need of affordable energy supplies to relaunch its economic and industrial growth. According to the World Energy Council, the energy intensity of Ukraine’s GDP reached 0.47 million British thermal units last year, almost four times higher than the average within the Organization for Economic Cooperation and Development.

Ukraine’s energy-saving potential could therefore be as much as 50 percent of its current energy consumption. While some policy measures were implemented by the previous governments, introduction of energy-saving and energy-efficiency measures had been effectively blocked by lobbies of domestic energy intensive industries. In the last five years, the energy intensity of Ukraine’s economy decreased only by 3.5 percent a meager result even if compared with rather modest progress made by neighboring Russia and Belarus. Last year alone, per unit energy consumption of the Russian economy decreased by 5 percent. We should keep in mind that in the case of Ukraine, energy-efficiency measures are cheap. Improving the energy efficiency and energy savings both in the industrial and residential sectors could prove the best way to ensure Ukraine’s energy security.

An increasing indigenous supply of energy is the second-largest additional source of domestic supplies. This could be done by increasing the rehabilitation of existing conventional hydrocarbon deposits and promoting an economically sustainable use of renewables. Ukraine has already taken some steps in the right direction. For example, the country has a set of generous “green” electricity tariffs introduced in 2009. Last year wind energy was at 0.113 euro per kilowatt hour, biomass 0.124 euro/kWh, and solar at 0.427 euro/kWh. There is currently a strong pressure to reduce the solar tariff and it is unclear whether in the present economic and political conditions, the Ukrainian government will be able to go ahead with its plans to expand the share of renewables to 11 percent.

Hydropower, biomass and wind will have its part of the “energy cake,” especially if compared with (expensive) energy imports. On the other hand, rehabilitation of existing hydrocarbon deposits will definitely help to increase domestic oil and gas output. According to the conservative estimates made by BP, current reserves of gas will last at the current production rate for almost 34 years.

Ukraine's reserves/production ratio is higher than those of many important mature gas-producing countries such as Norway (18.8 years) and the Netherlands (12.4 years). Despite high capital expenditure for new natural gas deposits up to $200 per 1,000 cubic meters domestic gas production can be increased if fiscal incentives are properly designed and managed. Right now the government is doing the opposite and has increased the tax burden by raising a subsoil fee for private producers.

These measures will not entirely cut Ukraine's dependency on Gazprom at least in the midterm future; they will improve the country's energy balance and will set a necessary foundation for an economic recovery. The political establishment in Kiev should also keep in mind that the energy reform is not only a function of relevant policy measures it also depends on internal peace and stability in Ukraine. Only the peaceful resolution of internal tensions, which takes into account the interests of all regions and key parties, will re-establish confidence of investors in Ukraine's energy sector.

Ukraine still struggling to get shale investment

The Washington Post, *25.11.2014*

Ukraine's government is still struggling to entice Western companies to invest in exploration for shale gas despite recent reforms meant to help the industry.

Maksim Karpin, a Ukrainian state official for geology and mineral resources, said Tuesday that the government was "taking every step" to meet international standards as well as the needs of the companies on the ground, but it was still waiting to see foreign investment. Speaking on the sidelines of a conference in Poland, he said that the hostility of local communities in western Ukraine might be stalling license holders Chevron and Eni.

In eastern Ukraine, the armed conflict has made Chevron abandon drilling for conventional gas, according to Georgi Rudko, chairman of a Ukrainian state commission for mineral resources.

Gazprom, PetroVietnam sign agreement for two fields in Russia

Oil & Gas Journal, *26.11.2014*

Gazprom and PetroVietnam signed a framework agreement for the joint development of two fields in Russia. Nagumanovskoye oil, gas, and condensate field is in the Akbulak district of the Orenburg region, and Severo-Purovskoye gas-condensate field is in the Purovsky district of the Yamal-Nenets autonomous area.

Gazprom Chairman Alexey Miller and PetroVietnam Chairman Nguyen Xuan Son signed the agreement in Sochi in the presence of Russian President Vladimir Putin and Nguyen Phu Trong, general secretary of the Communist Party of Vietnam.

The companies signed a strategic partnership agreement in 2009. Also in Sochi, JSC Gazprom Neft Chairman Alexander Dyukov signed an agreement with PetroVietnam’s Nguyen “to start exclusive talks on possible cooperation” in the exploration and development of the Dolginskoye field in the Pechora Sea. Gazprom Neft also signed a refinery maintenance agreement with Binh Son Refining & Petrochemical that includes oil deliveries to the Dung Quat refinery from the Russian port of Kozmino. Gazprom Neft said the companies are negotiating the price of Gazprom Neft’s proposed acquisition of a 49% stake in the refinery.

What price European natural gas independence?

Platts, *26.11.2014*

If you are a state-run gas company in a Baltic state–once part of the Soviet Union, and tied to the former empire by gas pipelines–you might grab with both hands the chance to buy gas from someone who is not associated with the Kremlin.

Lithuania has asserted its independence from Russian gas by chartering a floating liquefied natural gas import terminal, the Independence, from Hoegh. The first LNG cargo came under a five-year contract in November. The seller was Norway’s Statoil, which operates Europe’s only liquefaction plant, Snohvit.

Symbolically, the plant gives Lithuania access to global markets. True, the politics of dealing with Russia have now become much worse than they were when the idea was conceived. Even though there are no transit states, there is plenty of hostility between Moscow and its former subjects following NATO expansion and difficult relations with Russian nationalities in the Baltic states. However, those global markets are likely to be less attractive, commercially, than Russia. So after all the talk, only one company–state-owned Litgas–has a gas purchase agreement. That accounts for a bare 15% of the terminal's capacity.

There are back-to-back offtake agreements for that gas between Litgas and other gas marketers. But buyers outside Lithuania can use the existence of the terminal to bargain with Gazprom and they may find that they can secure a discount without bearing any of the cost of the terminal. The project is commercially ruinous without support from Lithuania's neighbors. The Lithuanian gas market is small: at 2.5 billion cubic meters/year, it is just over half the capacity of the 4 Bcm/year terminal. The bulk of the cost burden is to fall on Lithuania, after allowing for European Union funding. But regional rivalries are frustrating this idea of cooperation.

Estonia and Latvia so far have shown no interest in booking capacity. Indeed, Estonia and Finland remain wedded to the idea of an LNG terminal of their own, with a pipeline linking the two countries. They made an announcement to that effect even while the first molecules were being regasified. And Latvia has its own gas purchase agreement with Gazprom, which is reportedly less severe than Gazprom's contract with Lithuania, which has still another five years to run. Everyone from the Lithuanian prime minister downward is trying to manage expectations, talking only of long-term benefits and the need for solidarity among the three states. Whether that will happen is questionable though. Maybe other states' intervention will be needed to knock heads together and show up the absurdity of vanity LNG projects without a pan-Baltic association.

European gas stocks enough to survive without Russian supplies for a year

Reuters, *25.11.2014*

Most European countries have enough stocks to cover for "lost" gas from Russia should there be a major disruption. Hardest hit would be Slovakia, Austria, and Turkey as they rely on Russia for at least 15 percent of their energy needs, OECD experts say. For Germany, Italy and Poland gas imports from Russia provide about 10 percent of their energy demand, OECD said.

A possible shortage of gas from Russia to Europe through Ukraine will not substantially affect the price in the short term as the current level of stocks in European underground storage would cover the deficit for a year, OECD says.

Europe has about 130 billion cubic meters of stored gas ready fill any gap in Russian supplies. However, OECD analysts say that if the disruption lasts longer than a year, the price of gas in some European countries would most likely rise. According to the independent Bruegel think tank, this will boost the move to alternative energy sources; change the balance of energy provision, and lower power consumption. The deficit will partly be offset by more expensive LNG supplies and the replacement of gas with oil in the production of electricity and heating. Even though Europe will be able to compensate for the shortage of gas, a lack of infrastructure for imports (LNG terminals or pipelines) could cause problems in some countries, and high gas prices can greatly affect certain industries.

Russia, Ukraine and the European Commission in late October agreed the so-called winter gas plan. It assumes the resumption of Russian gas supplies to Ukraine on condition of prepayment, the repayment of a multibillion dollar debt, and the guarantee of uninterrupted transit to Europe.

Oil indexation and the falling oil price: the beginning of the end for indexation in Europe?

Natural Gas Europe, *24.11.2014*

Can the defence of gas indexation to the oil price be maintained in the light of the continued fall in the oil price? The traditional supporters of the oil price link, such as Gazprom, Sonatrach, Statoil as well as many of the major utilities are likely to find it increasingly difficult to sustain their case for indexation if the oil price continues to fall in future.

Already approximately half of European gas prices are secured from hub and not contracting pricing linked to oil prices. Will the other half of European gas prices go the same way?

At first sight the collapse in oil prices since early summer 2014 should help to protect the linking of gas prices to oil. The falling cost of natural gas as a result of the oil price links should make customers less restive and accepting of indexation. The net effect looks like it should restrict the growth of natural gas trading hubs and the move away to indexation.

This however, is likely to only be the case if the fall in oil prices is marginal and is not sustained. A sustained significant fall in the oil price is likely to make it very difficult to sustain indexation. This time ironically the case for opposing indexation will not come from the customers but the suppliers. It would be a repeat of the late 1990s arguments where even Gazprom sought to argue that indexation was dispensable.

Most suppliers will restrain themselves from making the case against indexation for as long as possible. However, a significant and sustained fall in the oil price would both cause so much economic damage to gas suppliers that there would be intense pressure to seek price revision on European markets on traded not indexation basis.

This is reinforced by the potential for hub prices to end up, through the drying up in domestic production; failure to develop shale gas and higher Asian related LNG prices, higher than European indexed prices. It is not beyond the bounds of possibilities if oil prices remain low, and hub prices are higher that some of the major suppliers may themselves seek a price review to take account of the oil price collapse and the difference between indexed and hub pricing.

Gas suppliers will however be very wary of doing anything to challenge indexation. The danger they face is that if they challenge indexation they will never be able to credibly go back to the old pricing method. The market is already around 50% linked to hub based pricing. A major retreat by suppliers to hub pricing would finish off European indexation. Furthermore, it would be very difficult contractually to seek to enforce a pricing mechanism that could be so easily abandoned. The other major difficulty is the antitrust and regulatory angle. If under tremendous commercial pressure gas suppliers abandon indexation for hub pricing European regulators are likely to make it difficult for suppliers to return to indexation later on. Regulators will argue that indexation cannot be used as a ‘fair weather’ pricing mechanism for suppliers only when the price is high. Once they switch to hub pricing they will really have to stick with hub pricing for the upside and downside of the markets.

The antitrust regulators in particular are likely to take a dim view of dominant energy companies switching from one pricing mechanism to another. Using EU competition law, regulators can argue that super-dominant companies have a special responsibility on the market and cannot just jump pricing mechanisms when the price moves against them. If this view is correct it suggests that dominant energy companies would be well advised to seek a price review from an arbitration panel before they switched to hub pricing-to provide themselves with some additional legal defense. However, again, once they had switched, antitrust law would be likely to make it very difficult to switch back again. Jumping once following a price review obtained by a dominant supplier might be deemed acceptable by the European Commission.

It is very difficult to see how a second jump say back to oil pricing, as the oil price goes back up, would ever get DG Competition’s consent even if there was second price review decision. For the defenders of the old pricing order it may be that the indexation will survive if the oil price is not sustained, the price decrease is marginal and hub prices are not significantly higher. However, what appears to be taking place is a structural alternation in global energy markets with increasing shale oil production combined with slowing Chinese growth creating significant spare capacity which may last for some time. If this is the case it is difficult to see how the European tradition of indexation can be easily sustained. Ironically the final end of indexation in Europe may be brought about by a collapse in the oil price, not its rise. Hub pricing may in fact prove more efficient and more favourable, even to suppliers than pricing through indexation to oil.

Natural gas in Germany: an uncertain future

Natural Gas Europe, *27.11.2014*

A self-described "hands-on guy," Stephan Dewald, Executive Manager Legal/Projects/Operations, dlp - dewald law & projects, has worked in the upstream and midstream and downstream segments of oil & gas in Germany, notably for Wintershall and Wingas. I

In an exclusive interview with Natural Gas Europe, Mr. Dewald offers his views on, among other topics, how Germany and others will fare if Russia cuts natural gas supplies to Europe this winter, and how the oil and gas industry is doing in Germany, given the country's green sentiments and commitment to renewable power.

Given his former position as Chairman of Wingas Storage UK Ltd, we asked him what it means for countries like Germany in connection with gas deliveries and storage, with Europe facing a possible natural gas supply cut with the onset of winter and the continuing crisis in Ukraine. Mr. Dewald says he believes the Russians will use the situation to pressure the regulator in Germany. He explains, "We have regulations, not on Nord Stream itself, which is an offshore pipeline, but for the grid which is connected with the NEL going to the Netherlands, and the OPAL going from north to south to the Czech Republic.

There are some limitations: the Russians have always complained that they can't run Nord Stream as planned, and if they could now fill up Nord Stream with more gas because we might have a crisis through Ukraine, I think they can fully compensate this, especially via OPAL. The capacity can go down to the Czech Republic, where a lot of gas is arriving from Ukraine. There might be a shortage or even an infrastructure problem in the very south of Germany and I assume Austria and other countries might experience some trouble because I don't know the reach of the OPAL, volumes down to Austria – these will have to be checked. On the other hand the gas underground storages in the south are a good backbone to fight a crisis.

One of the major problems for the grid, he explains, is the inability to be sure that customers receive all the gas they've booked traditionally. "I think these days that the system is so optimized that there is no spare capacity really around, which means if you have a crisis in the south and your pipeline is full for your customers, to what extend can you support the south?" he queries. This signals an internal problem, both in Germany and Europe, according to him, that grids are so well optimized. "The reverse-flow aspects I think are now solved, which was the outcome of the first Ukraine crisis, that we now can do some reverse-flow to Hungary and other countries. That's fine, but first of all you need the gas volumes to be able to bring it down from the north, from LNG or however."

In that context, as to whether there is a rationale for South Stream, Mr. Dewald says there is, but only if the Ukraine crisis subsides, as the pipeline project has become a political issue. “I think this will now be used by the EU to pressurize Russia and to tell them ‘you play by our rules, or you’re out.’ This may be a tough game – we’ll see,” he says. “If we had South Stream, we wouldn’t need Ukraine at all, and I’m not sure this would be good for the Ukraine crisis, because then the world, or Europe, would pay less attention to what happens there.”

In Germany, Mr. Dewald reports, Russia’s reputation as a gas supplier has become a bit fuzzy. He recalls, “During the Cold War, and during the 70s and 80s when it started, the Russians always delivered on time, always paid back the money we lent them; therefore, there was never any trouble, but I think political opinion in society is going to change – Unfortunately they do not trust them any more based on what they’re seeing now.” Meanwhile, natural gas is taking a beating in Germany, he says. Today, he offers, the main natural gas producers in Germany are ExxonMobil, RWE, GDF and Wintershall, as well as smaller players that are trying to enter the market, like Vermilion, BNK Petroleum, CEP Central European Petroleum, and others who have acreage.

Mr. Dewald reports, “All the gas we have domestically is something which is relatively cheap, and companies are still earning a lot of money with gas produced here in Germany. The proportion used to be 20% of the entire gas consumption in Germany but now it’s down to nearly 10% and will go further down, because we are not going for shale gas. He observes that such companies have really lost their reputation upstream-wise and midstream-wise on gas, despite the fact that people are still reliant upon gas in Germany. “I think Wingas especially has to fight to keep the trust, because they will be 100% owned by Gazprom. This will not be very easy for them, but gas is still accepted in Germany, as is underground gas storage because you don’t see them.” And, despite the pending nuclear power phase-out in Germany, set for 2022, he says the country’s consumption of natural gas will not be increasing. “It would be a good chance to build up gas power plants,” he explains. “The main conversation is that nuclear power plants are being covered for by the renewables, meaning to a good part wind. On the other hand, to compensate and keep the net and grid stable you need gas power plants for electricity, but they are always stand-alone projects, so we’ve made a big mistake in not combining: when we build a windfarm offshore I think you have to build a powerplant fired by gas to compensate the instability of your electricity. If these were combined, I think there would be an economical chance for gas power plants resulting into an increase of gas consumption.”

Despite this, he says virtually no company would be willing to do that, even for the most modern gas-fired power plants. “Even the most modern are shut down, because it’s not economical anymore. Therefore, I doubt that there are any companies brave enough to say they’re going to plan and build one, which takes at least 8 years.” This is especially so, he says, in view of a big campaign in Germany to insulate households, and numerous other possibilities for domestic heating. Not that long ago, he recalls, Germany was at peace with oil & gas exploration and production, but that’s no longer the case. “In the past, especially in oil and gas, upstream was very popular,” he recalls. “It had a good image. They were creating a lot of value. We have a kind of royalty system in Germany whereby it’s up to the state to decide every year whether they take royalties or not, ranging from 0 to 40%. So whenever the prices were very high they increased the royalties, and when the prices were very low to support and continue local and domestic production, they lowered it again. “So, in the end there was always a very good relationship between the industry, politics and society at large.”

These days, he admits, upstream has been under the microscope in Germany, mostly due to the bad reputation of hydraulic fracturing in Germany (which, thus far, has been under a moratorium). He explains, “People in Germany are really going crazy over fracking. There are no real reasons for this – it’s more a political aspect and a development we see in our lives in general, that everyone seems to be informed when actually they are not.” Germans are even against many majorprojects that have been through long approval processes with the society, notes Mr. Dewald. “This is now the new culture we have,” he says, “and the politicians as well as the big companies do not really know how to deal with it.”

He reports that there are even municipalities in Germany with signs at their borders declaring that no fracking is going on. “This is not their political business but that of the mining authorities,” he remarks. “People are very emotional about such things and the industry was not quick enough to communicate in a proper way.” Fracking is something that has been done for 25 years in Germany, he says, a fact which many people are unaware of. “It’s a different fracking indeed, but if you go for shale gas fracking you go for the rock source which is often deeper than the gas cap of a normal gas field so you go deeper. “This is what people do not understand, they can’t distinguish, and the oil companies here are really helpless,” he adds.

Mr. Dewald explains that the same sort of overly-cautious atmosphere prevails regarding wind power developments in Germany as well. Just a decade ago, he contends, such developments would have received their permits, but those days are over. He remarks, “It’s unbelievable how they’ve increased the standards without technical need, just to be on the safe side, so that you come to a point where it’s not even technically feasible anymore to build it.”

As an example, Mr. Dewald says that for a transformer platform that is being built which needs a foundation on the sea bed, by 4 piles up to70 meter-long with a diameter of 3-to5 meters are being installed. Such measures, he says, are not even taken for oil & gas production platforms, which are less heavy but arguably higher risk. “So I think this characterizes the atmosphere we have in Germany, that we overdo it a little bit. We pretty clearly understand how important energy is and that we have to change, but we are so slow, so expensive, so unreliable even for investors that they step back and say, ‘well, I don’t know what’s going to happen here.’“ We have to be straighter on our ‘Energiewende’ and better in balancing the fear of the public and the energy needs of the future - and have to speed up.”

Baltics no longer isolated in energy

Anadolu Agency, *28.11.2014*

Estonia in a bid to remove the Baltics "energy islolation" label, plans to connect the electric transmission systems of the Baltic States and Europe, according to Strategy Manager of Elering, the electric transmission systems operator in Estonia.

"We want an independent energy market. That's why we want to be connected with the rest of Europe. We should not be only connected with each other, but also we need European connections," said Strategy Manager Kalle Kukk at the sixth Baltic Energy Summit in Finland's capital, Helsinki.

Kukk said in order to have more energy security, energy supplies and future projects; there should be connections between Europe and the Baltics. He explained that Elering has two strategic goals on electricity connections. Firstly is to have a common Nordic-Baltic power market, and secondly to have a synchronous connection between the Baltics and Central Europe.

With a policy named 'Away from the east, joining the west', Estonia plans to reduce prices and become more independent from Russia on energy. "We have Litpol 1, Litpol 2, NordBalt and Est – LV 3rd projects for the future. Most of the projects will be finished in five years' time. We already have operational interconnections with Finland and some other European countries. EstLink 1 and EstLink 2 are already operational. With the third line, we will have the same price level with all the Baltic countries," he said.

"We need a few more years for desynchronization from Russia and the most economical way is to be remain connected. However, energy and supply security are the most important factors for us and we need these connections for this purpose." he said, and added that the startup of new projects will not be cheap, but will be an absolute necessity. Kukk, who also spoke about natural gas dependence of Baltic countries on Russia, said it is possible to break down Gazprom's price monopoly with several natural gas suppliers. "That's why we planned three LNG terminal projects between Finland and Estonia. The Klaipeda LNG terminal and the natural gas pipeline project, named "Balticconnector" are very important," he added. Finnish and Estonian governments agreed to build three LNG terminals, two large scale LNG terminals will be constructed between Finland and Estonia followed by the construction of a small-scale terminal. In addition, a pipeline, 'Balticconnector' will be laid to link gas markets in Finland to Estonia by 2019.

Egypt approves opening of bids for shale gas licenses in western desert

Natural Gas Asia, *22.11.2014*

Egypt has granted approval for opening of bids for exploration of shale gas in four areas in the Western Desert, according to an EGAS official. Daily News Egypt reported that the project will be offered in a special bid by the Egyptian General Petroleum Corporation (EGPC), due to EGPC's jurisdiction in the Western Desert.

EGPC will decide on a date for the bid. The EGAS official told Daily News Egypt that the areas to be included in the bid include sites where Shell and Apache are conducting shale gas production trials in the Western Desert.

Egypt is looking to expore for shale gas from the Western Desert in order to augment its domestic gas supplies amid rising demand. The North African nation produces around 4.75bn cubic feet of gas per day while actual demand is approximately 6bn cubic feet per day.

Eni, Ghana ink $6 billion gas deal

Natural Gas Asia, *25.11.2014*

Ghanaian government and Eni have signed a $6 billion deal which allows the Italian energy major to develop oil and gas resources in the Offshore Cape Three Points block. The project is expected to start commercial production of oil and gas by mid-2017, the government said in a statement Monday adding that it promises to deliver up to 170 million cubic feet of gas per day for the next 20 years.

The next stage of the agreement will be the approval of Plan of Development (POD) and ratification of the approval by Parliament.

The start of commercial gas production will also require the construction of a 3rd FPSO unit to produce at maximum 170 million cubic feet of gas in addition to the 120 million cubic feet from the Jubilee Fields and 50 million cubic feet from the Tweneboah Enyeara and Ntomme (TEN) projects. ENI and Vitol will focus on domestic gas markets, the government stated.

China LNG group, Sinopec to cooperate in transport LNG sector

Natural Gas Asia, *27.11.2014*

China LNG Group on Tuesday signed a framework agreement with Sinopec Fuel Oil Sales Corporation Limited in relation to cooperation in the development of LNG refueling station and application of LNG heavy trucks businesses in China.

Both parties intend to select two highways, Huhangyong highway, which is an important highway in connecting Shanghai Shen Zhuang Zhen and Hangzhou Peng bu Zhen and Hang Pu highway, which connects Shanghai Pudong and Hangzhou Dajing, as a pilot scheme for adding liquified natural gas refueling facilities in existing gas stations along these two highways.

Following successful implementation of such stations, Sinopec will increase the number of LNG fuel stations based on the demand and development of the company's LNG businesses. Sinopec Fuel Oil Sales Corporation Limited is a wholly owned subsidiary of China Petroleum and Chemical Corporation (Sinopec Corp.). It is specialized in comprehensive operation and professional management of fuel oil business of Sinopec Corp.

Hardy Oil may review India investment amid gas price uncertainty

Natural Gas Asia, *27.11.2014*

Hardy Oil said it may review its investment in India amid unattractive pricing and uncertainty surrounding long-term price outlook for natural gas sales. The Aberdeen based firm is a partner of Reliance Industries (RIL) and BP in the D3 block in the Krishna-Godavari (KG) basin.

Business Standard (BS) newspaper, quoting from company's half yearly report, said the joint venture (JV) partners might have to relinquish portion of the block owing to Indian defence ministry's new policy on access restriction. It said India's Defence Research and Development Organisation has classified one-third of the D3 block as "impact zone" BS said.

Hardy has a 10 per cent stake in the block; RIL has 60 per cent, while BP holds 30 per cent. Reliance is the operator of the block. “The new GoI (Government of India) pricing policy implies a significantly lower price than the previously-notified Rangarajan Committee formula. There remains some uncertainty surrounding a pricing premium for deep-water discoveries and the development of our D3 discoveries is dependent on the future long-term price outlook for gas sales. The JV is currently reviewing the appropriate way forward, taking into account policies recently announced by the Indian government and the overall prospectivity of the block,” said Ian MacKenzie, chief executive officer, Hardy. D3 is located off the eastern coast of India and is spread over an area of 3,288 km, in water depths of 400 metres to 2,200 metres. Hardy said four gas discoveries have been made via the Dhirubhai 39, 41, 44 and 52 (KGV-D3-A1, B1, R1 and W1) exploration wells. The joint venture has acquired 3,250 km of 3D seismic data over the block.

China to finance LNG terminal, pipeline project in Pakistan

Natural Gas Asia, *25.11.2014*

Beijing and Islamabad have signed a deal under which China will finance the LNG terminal and pipeline project in Pakistan. According to initial estimates, the project is expected to cost $3 billion – $1 billion will be needed to lay the pipeline from Gwadar and over $2 billion will be required to construct LNG terminal and re-gasification facilities and to develop large storage facilities, said Express Tribune report published.

“The agreement was signed during Prime Minister Nawaz Sharif’s visit to China. It is a state-to-state deal and no bidding will be held for the award of contract,” an official told Express Tribune.

China will meet 85% of the financing needs for constructing the pipeline from Gwadar Port to Nawabshah. This will be the second LNG terminal in the country as a fast-track terminal is already being built by Elengy Terminal Pakistan Limited (ETPL) at the Port Qasim, which is likely to be completed in February next year. Pakistan hopes to extend the pipeline from Gwadar to Iran for gas import when sanctions on Tehran are lifted. The pipeline will have the same specifications that were proposed for the Iran-Pakistan gas pipeline, Express Tribune added.

According to officials, since Pakistan has not been able to lay a 781km pipeline from the Iranian border to Nawabshah because of its failure to tap foreign finances, it has decided to build the pipeline from Gwadar to Nawabshah in partnership with China. This will transport at least 500 million cubic feet of gas per day (mmcfd) after re-gasification of imported LNG.

India's Adani Group looks to acquire shale assets in US

Natural Gas Asia, *19.11.2014*

Indian private sector firms Adani Group and Welspun are looking to acquire liquid-rich shale and oil sands assets in the US and Canada, according to a report by Times of India newspaper.The two companies have a strategic partnership for oil and gas business and together own conventional hydrocarbon blocks in India, Thailand and Egypt.

The duo now plans to invest $1.5 billion towards stake purchases in select Louisiana and Texas shale fields in the US and some Alberta oil sands projects in Canada as they bet big on unconventional resources, said Times of India.

Unlike their earlier strategy where the joint venture firm, in which Adani owns majority shares, bought exploratory blocks and then had to discover oil, this time around the plan is to buy interest in oil-producing assets, the newspaper added.

Japan's crude oil storage leases with producers: scope to do more with strategic stocks

Platts, *25.11.2014*

Japan's recent deal with Abu Dhabi to lease out more crude storage capacity to the emirate under a renewal agreement is deemed mutually beneficial. Not only will it enhance Tokyo's supply security, but it also wiill give the Middle Eastern producer greater access to the Asia-Pacific market.

Under the agreement, similar to one Japan has with Saudi Arabia, the Japanese government will pay for storage to be used by Abu Dhabi for commercial purposes, in exchange for assigning priority to supplying the crude to Japan in an emergency.

There is little information available on how actively crude moves in and out of the Japanese storage sites being used by Saudi Arabia and Abu Dhabi. But sources believe the facilities made available free of cost by Japan provide the producers competitive access to the growing markets in the East. Under a “memorandum of cooperation” that Japan’s Ministry of Economy, Trade and Industry renewed with Abu Dhabi’s Supreme Petroleum Council earlier this month, the emirate can store 6.29 million barrels of crude at Kiire in southwestern Japan for three years, with an option for another two-year extension after that. The volume was bumped up by 43% from the previous deal as part of an agreement forged in February between Japanese Prime Minister Shinzo Abe and visiting Abu Dhabi Crown Prince Sheikh Mohammed bin Zayed al-Nahyan. Abu Dhabi National Oil Company is expected to store its crude at the Kiire tanks of Japanese refiner JX Nippon Oil & Energy. METI leases capacity for the national strategic petroleum reserves at the Kiire storage facility from JX.

METI’s latest deal brings the total crude storage capacity leased by Japan to Abu Dhabi and Saudi Arabia to around 12.58 million barrels. The storage deal is also part of Tokyo’s efforts to secure extensions for Japanese upstream concessions in the emirate, more than 60% of which are due to expire in 2018. The concessions, held by Inpex’s wholly owned subsidiary Japan Oil Development Co., or Jodco, are in the Umm Shaif, Lower Zakum, Umm Al-Dalkh, Satah, Nasr, and the Umm lulu fields in the ADMA block. Also, under a new policy enacted September 8, Japan designated half the crude volume stored in the country by Saudi Arabia and Abu Dhabi — at the time around 5.35 million barrels — as “secondary SPR.”

This gives the scheme, formally known as “Joint Crude Storage by Producing Countries,” a new, strategic status. Starting April 2015, the volume accounted for in the “secondary SPR” will be 6.29 million barrels, in line with the increased Abu Dhabi storage. Saudi Aramco also boosted its leased storage capacity in Okinawa, Japan by 25% to 6.29 million barrels when it renewed its deal for a period of three years last December. Since the storage idea was first proposed to Abe in 2007, his first stint as Japan’s premier, by Saudi Arabia’s King Abdullah, Tokyo has leased storage only to the Kingdom and Abu Dhabi, saying it would prioritize “strategic crude suppliers.” Spare capacity available with Japan remains limited. But if any more is freed up in the coming years, owing to a reduction in SPR volumes as domestic demand continues on a downward spiral, perhaps Tokyo could look at inviting more strategic suppliers to store oil on its soil.

PTT will decide on third LNG terminal by year end

Natural Gas Asia, *26.11.2014*

Thai energy company PTT is likely to decide by year end where it will establish its third LNG terminal, The Nation newspaper reported. Pailin Chuchottaworn, president and chief executive officer, said last week that the Phase-3 proposal was already approved by the board and would be forwarded to the Energy Ministry and the National Energy Policy Council for further consideration, the newspaper added.

The terminal will have an annual capacity of 5 million tons. Thailand has been buying LNG on the spot market, but next year, PTT will start importing from Qatar.

Australia's Woodside gets licence to explore offshore Morocco

Natural Gas Asia, *25.11.2014*

Australia's Woodside Petroleum announced it has entered into a contract for an exclusive Reconnaissance Licence (RL) with the Office National des Hydrocarbures et des Mines, the National Oil Company of the Kingdom of Morocco, to explore a block offshore Morocco.

The block, known as the Rabat Ultra Deep Offshore area, comprises a total of 36,737 km2 with depths ranging from 1700m to 4400m. It is located just west of the Rabat Deep Offshore I-VI permits, in which Woodside has acquired, subject to Ministerial approval, a 25% interest. Commitments under the RL work program include a 2D seismic survey.

Canadian oil sands producers pledge to cut pollution

Upstream, *15.11.2014*

Canada's largest oil sands producers have pledged to make their crude less polluting than conventional oil by cutting water use and lowering energy consumption, as environmental protesters move to block new pipelines to ship the product abroad.

Speaking at a meeting held by the Canadian Oil Sands Innovation Alliance (COSIA), an industry group that shares environmental technology among its 13 members, Suncor Energy chief executive Steve Williams said his company alone has spent nearly C$2 billion ($1.8 billion) on technologies to reduce toxic tailings.

The COSIA members said they expect to cut water use in half, to 0.2 barrels of water per barrel of crude produced, by 2022. That comes as the companies, which produce tar-like bitumen from the oil sands, expect to raise output to 3.2 million barrels per day by 2020 from about 2 million bpd.

The growth comes even as protesters seek to block the pipelines projects. Keystone XL has waited six years for USapproval, and Canadian police have in the past week arrested roughly 80 people in the Vancouver suburb of Burnaby as environmental activists and local residents protest against Kinder Morgan Energy Partners' planned expansion of its Trans Mountain pipeline.

Williams said that the industry could do little to win over many of its opponents, whom he characterised as a small segment of the population concerned primarily with climate change. "There's nothing we can actually do to gain their support. The issue is not per se the pipeline in Burnaby and not per se the oil sands, it's about (other) issues," Williams said. "The whole of the oil sands (greenhouse gas) impact is one-tenth of 1%. We could shut the whole industry down tomorrow and it will not be impactful on global greenhouse-gas emissions."

Petronas' Canadian LNG project gets environmental permit

Natural Gas Europe, *25.11.2014*

British Columbia granted environmental permit to Petronas backed Pacific NorthWest LNG export facility in Prince Rupert and the Prince Rupert Gas Transmission pipeline. The Pacific NorthWest LNG export facility is also the subject of a federal environmental assessment.

The facility involves construction and operation of an LNG export facility located on Lelu Island and adjacent water lots in the Port of Prince Rupert. The estimated capital cost is $11.4 billion. The Prince Rupert Gas Transmission pipeline involves construction and operation of a 900-kilometre natural gas pipeline. The estimated capital cost is $5 billion.

Last month, CEO of the Malaysian energy major warned that the project could be delayed by up to 15 years unless tax and regulatory issues are resolved by year end. Petronas, Sinopec, JAPEX, Indian Oil Corporation and PetroleumBRUNEI are all shareholders in Pacific NorthWest LNG and the associated natural gas supply.

Brent oil price dips to new low on eve of OPEC meeting

Anadolu Agency, *27.11.2014*

Brent crude oil price dipped to a new four-year low below $77 per barrel on the eve of the OPEC meeting to discuss setting of production quotas against falling oil prices since June. The leading global benchmark for oil trading fell to $76.28 per barrel on Thursday morning, the lowest point since October 2010, according to official figures.

The Brent crude oil price fell more than 30 percent since June, from $115 per barrel to below $80 in November and reached its lowest point at $76.74 per barrel on Nov. 14. The prices fluctuated between $78 and $80 per barrel in the last two weeks.

Non-OPEC oil producing countries, Russia and Mexico, met with Saudi Arabia and Venezuela on Tuesday to push for a cut in oil production to increase the prices, but the meeting ended without any resolution. OPEC members Saudi Arabia, Kuwait and Iraq, who also have some of the lowest oil production costs in the world, indicated earlier they would not cut their oil production volumes - a move to preserve their market shares.

Saudi Arabia and Iraq also stated that they would lower their oil sales price to U.S. buyers in order to compete with the domestic shale oil producers in the country, which contributed to the rapid fall, according to oil experts. Meanwhile, other OPEC countries led by Venezuela are leaning towards cutting production in order to increase oil prices to preserve their oil-revenue-dependent economies from further damage.

The highly-anticipated OPEC meeting that will take place in Vienna on Thursday at 9:30 a.m. CET is expected to shed some light on the oil cartel’s strategy against the decline in oil prices. The low global demand for oil, slow growth rate of Asian and European economies, the increasing value of the U.S. dollar straining the purchasing power of oil-dependent countries and the rise in U.S. shale oil production are considered as long-term factors responsible for the price slump since June.

Announcements & Reports

► *Hydrocarbon Gas Liquids (HGL): Recent Market Trends and Issues*

Source : EIA
Weblink : http://www.eia.gov/analysis/hgl/pdf/hgl.pdf

► *Regular Review of Energy Efficiency Policies in Kazakhstan*

Source : Energy Charter
Weblink : http://www.encharter.org/index.php?id=137&L=0

► *Can Indonesia's policy of reconfiguring its energy mix by increasing natural gas usage support its initiatives to reform energy subsidies?*

Source : Oxford Energy Institute
Weblink : http://www.oxfordenergy.org/wpcms/wp-content/uploads/2014/11/NG-93.pdf

► *Completing Europe–From the North-South Corridor to Energy, Transportation, and Telecommunications Union*

Source : Atlantic Council
Weblink : http://www.acsummit.org/wp-content/uploads/Completing-Europe_web.pdf

Upcoming Events

► *Ashgabat Energy Charter Forum: Reliable and Stable Transit of Energy*

Date : 08-09 December 2014
Place : Ashgabat - Turkmenistan
Website : http://www.encharter.org/index.php?id=676&L=0

► *8th Transparency Workshop*

Date : 11 December 2014
Place : Brussels - Belgium
Website : http://www.entsog.eu/events/entsog-8th-transparency-workshop#welcome

► *Kurdish – Iraq Oil & Gas*

Date : 16 – 18 December 2014
Place : London – United Kingdom
Website : http://cwc-news.com/S3A-2TCLY-E1BYMVHYA9/cr.aspx?v=0

► *Middle East and North Africa Energy*

Date : 26 January 2015
Place : London – United Kingdom
Website : http://www.chathamhouse.org/events/Mena-Energy2015

► *Middle East and North Africa Energy*

Date : 18 – 21 February 2015
Place : London – United Kingdom
Website : http://www.chathamhouse.org/node/15232

► *4th Erbil Oil & Gas International Exhibition*

Date : 18 – 21 February 2015
Place : Erbil – Iraq
Website : http://www.erbiloilgas.com/

► *Ukrainian Energy Forum*

Date : 02 – 05 March 2015
Place : Kyiv – Ukraine
Website : http://www.ukrainianenergy.com/

► *14th Turkish International Oil & Gas Conference*

Date : 18 – 19 March 2015
Place : Ankara – Turkey
Website : http://www.turoge.com/Home.aspx

► *14th Georgian International Oil, Gas, Infrastructure & Energy Conference*

Date : 25 – 26 March 2015
Place : Tbilisi – Georgia
Website : http://www.worldoils.com/showevents.php?id=3945&event_name=14th%20Georgian%20International%20Oil,%20Gas,%20Infrastructure%20&%20Energy%20Conference%20(GIOGIE)

► *9th Atyrau Regional Petroleum Technology Conference*

Date : 14 – 15 April 2015
Place : Atyrau – Kazakhstan
Website : http://www.oiltech-atyrau.com/About.aspx

► 14th North Caspian Regional Atyrau Oil & Gas Exhibition

Date : 14 – 16 April 2015
Place : Atyrau – Kazakhstan
Website : http://oil-gas.kz/en/

Supported by PETFORM

► 6th World Forum on Energy Regulation *(in Turkey)*

Date : 25 – 28 May 2015
Place : Istanbul – Turkey
Website : http://www.wfer2015.org/

► OGA 2015

Date : 02 – 05 June 2015
Place : Kuala Lumpur - Malaysia
Website : http://www.oilandgas-asia.com/home/index.php

► 22nd International Caspian Oil & Gas Exhibition and Conference

Date : 02 – 05 June 2015
Place : Baku – Azerbaijan
Website : http://www.caspianoilgas.az/2015/

► 6th OPEC International Seminar

Date : 03 – 04 June 2015
Place : Vienna - Austria
Website : http://www.opec.org/opec_web/en/press_room/2793.htm

► 12th Russian Petroleum & Gas Congress

Date : 23 – 25 June 2015
Place : Moscow – Russia
Website : http://www.mioge.com/RPGC-Congress/About-the-Conference.aspx

► 13th Moscow Inernational Oil & Gas Exhibition

Date : 23 – 26 June 2015
Place : Moscow – Russia
Website : http://www.mioge.com/mioge-exhibition/about-the-exhibition.aspx

► 7th South Russia International Oil & Gas Exhibition

Date : 02 – 04 September 2015
Place : Krasnodar – Russia
Website : http://www.oilgas-expo.su/en-GB

► 22nd Annual India Oil & Gas Review Summit and International Exhibition

Date : 09 – 10 September 2015
Place : Mumbai – India
Website : http://www.oilgas-events.com/india-oil-gas

► The Energy Event 15

Date : 15 – 16 September 2015
Place : Birmingham – United Kingdom
Website : http://www.theenergyevent.com/Content/MAIN-SF-W2L-enquiry-form

► 3rd East Mediterranean Gas Conference

Date : 22 – 23 September 2015
Place : Paphos – Greek Cyprus
Website : http://www.oilgas-events.com/East-Med-Oil-Gas

► 23rd Kazakhstan International Oil & Gas Exhibition and Conference

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