

## EIA: Turkey's strategic importance in energy market growing

Daily Sabah, 27.07.2015



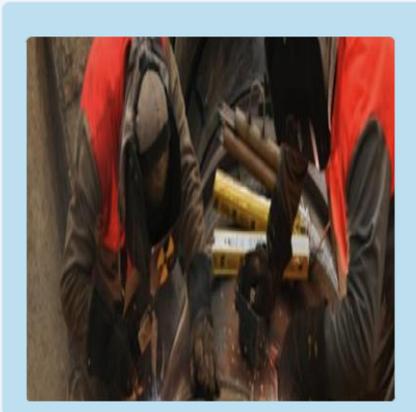
Azerbaijan key's strategic importance in transmitting Russian, Middle Eastern and Central Asian oil and natural gas to Europe is continuously growing, according to a report published by the EIA. Pointing to the significance of the Bosphorus and the Dardanelles, the report indicated that 2.9 million barrels of crude oil were carried through these two straits on a daily basis in 2013.

Despite being resource-poor, Turkey has the advantage of being in the middle of energy exporters and importers. Turkey is the sixth largest transition region in the world in terms of carrying the greatest amount of crude oil by sea.

A total of 5.1 percent of crude oil that was carried by sea in 2013 passed through Turkish straits. Crude oil from Kirkuk and Irbil in northern Iraq carried through pipelines and on trucks is offered to world markets from the Ceyhan port in southern Turkey. In May, a daily average of 550,000 barrels of crude oil were carried from the port to global markets. Azerbaijani crude oil is transported through the Baku-Tbilisi-Ceyhan (BTC) pipeline, which has a daily capacity of 1.2 million barrels, to the Ceyhan port, which according to the report, is of a critical importance in offering Middle Eastern, Caucasian and Central Asian oil to international markets. Turkey is of continuously rising strategic importance in the transmission of natural gas as well, the report suggested, adding that Turkey is gearing up to become a major gas hub. Turkey imports an annual average of 10 billion cubic meters of gas from Iran through the Tabriz-Ankara Pipeline and imports an annual average of 6.6 billion cubic meters of natural gas from Azerbaijan through the South Caucasus Pipeline (Baku-Tbilisi-Erzurum Pipeline). Russia, which is the largest natural gas supplier for Turkey, transmits 14 billion and 16 billion cubic meters of gas to Turkey through West Line and Blue Stream, respectively, on an annual basis. With the finalization of the Trans-Anatolian Natural Gas Pipeline (TANAP) in 2018, Azerbaijan will offer 16 billion cubic meters of gas to Turkey, and will also be exported to Europe through Turkey. It is expected that the capacity of the TANAP will rise to 23 billion cubic meters and 31 billion cubic meters in 2023 and 2026, respectively. With the Turkish Stream Project, which will carry Russian natural gas to Europe over the Turkish-Greek border, an annual average of 63 billion cubic meters of Russian gas will be offered to the Turkish domestic market and European markets.

## Attack halts Turkey-Iran pipeline, gas to flow “soon”

Natural Gas Europe, 28.07.2015



A natural gas pipeline connecting Turkey and Iran has been halted after an attack in Turkey's Agri province for which the local government blamed the Kurdistan Workers' Party (PKK). "An explosion occurred as a result of sabotage about 15 kilometres inside the Turkish border on the Turkey-Iran gas pipeline," Turkish Energy Minister Taner Yildiz said.

Turkish news agency Anadolu wrote that the blaze at the pipeline was shortly extinguished and that natural gas will flow again after repairs. Tehran increased gas deliveries to Turkey by 1 bcm. After Russia (27 bcm), Iran is Turkey's second main supplier of natural gas with about 10 bcm.

Reuters wrote that Turkey had not requested additional gas from other countries as a result of the explosion as there was no shortage in meeting domestic demand. Turkey's air force attacked Islamic State (IS) positions in Syria and Kurdish PKK militants in northern Iraq.

## Turkish stream negotiations suspended on gas discount, pipeline divergences

Natural Gas Europe, 28.07.2015



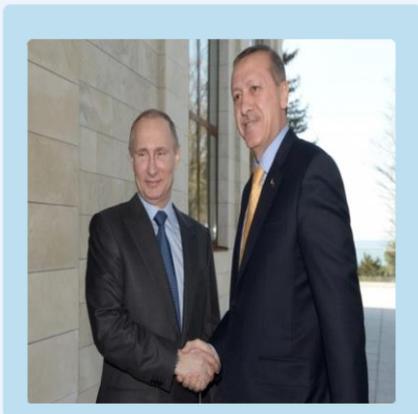
Negotiations between Turkey and Russia on the Turkish Stream project have been suspended as the two parties did not apparently agree on the 10.25% gas price discount. The deal reported by Turkish Energy Minister Taner Yıldız was not signed by Russian authorities.

According to Reuters, Turkish officials say that Moscow and Ankara diverge on the project, as Russia keeps asking the permits for the construction of planned lines, while Turkey has given licenses for the first line. Russian Energy Minister Alexander Novak voiced the possibility of delays. Gazprom said it is well positioned to fund the new gas pipeline projects

Novak said that Moscow could further liberalise the LNG export sector. “This niche should not be missed, it should be used. In addition to Gazprom, this is an opportunity for Rosneft and Novatek. Now it is necessary to analyse how foreign markets will react to our companies, so that they do not compete with each other” Novak said.

## Russia ‘ready to sign only part of Turkish stream deal’

Novinite, 29.07.2015



Russia is currently ready to sign only an agreement to build the first section of Turkish Stream, Russian news websites quote an Energy Ministry source as saying. This comes after reports that Moscow has sent a draft intergovernmental agreement to Ankara on the construction of a pipeline set to replace the abandoned South Stream project.

Turkish Stream is envisaged to carry gas from Russia along the bed of the Black Sea, like South Stream, but with Turkey hosting the landfall instead of Bulgaria. It was announced by Vladimir Putin, who then cited the Bulgaria’s reluctance to unblock construction permits for its own coastal area.

The cabinet source quoted by Vedomosti says that Turkey and Russia’s heads of state have agreed on a phased implementation of Turkish Stream. This means the gas delivered to Turkey through the first section (around 16 billion cubic meters) will be for domestic use, while the infrastructure that will deliver volumes for EU members will be arranged in a separate text. Turkish Stream will have a maximum capacity of about 63 bcm, or roughly the same as the planned capacity for South Stream. Earlier, Russia repeatedly warned Europe should prepare for a shift in gas transportation from Ukraine to Turkey, adding it would only use the latter as a transit country from 2019. However, reports from the last few weeks suggest Moscow might be abandoning the idea.

## Turkey-Iran gas pipeline blown up in Agri province

Anadolu Agency, 28.07.2015



The Turkey-Iran natural gas pipeline has been blown up in eastern Turkey's Agri province, Turkish Energy and Natural Resources Minister Taner Yildiz said.

According to a statement released by the Turkish Energy Ministry, Yildiz said that the suspected sabotage attack took place 15 kilometers inside the country's eastern border with Iran. "The explosion caused a fire breakout; however in a short time we managed to extinguish it. After repairing it, the gas flow will resume," he said. "We have taken measures to meet the natural gas demand in the area. Turkish citizens and industrialists should be at ease," he added.

Tehran increased gas deliveries to Turkey by one billion cubic meters of gas per year during 2014. Iran, Russia and Azerbaijan export about 10 billion cubic meters per year, 27 billion cubic meters and 6.6 billion cubic meters of gas per year to Turkey respectively. The statement added that the power line between Cizre and Silopi districts of southeastern Sirnak province had been attacked on July 24.

## Egypt: A potential market for east med gas

Natural Gas Europe, 28.07.2015



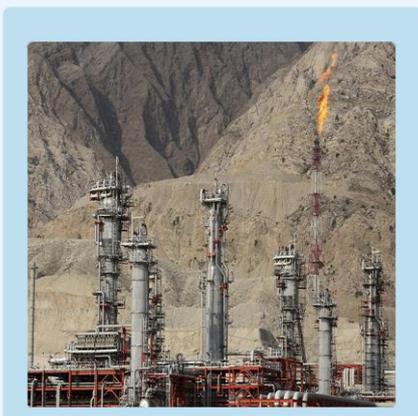
Nikos Tsafos' policy paper on Egypt as a potential market for Eastern Mediterranean natural gas is the latest of a GMF's series of papers. The authors highlights Egypt's imminent need for natural gas imports despite indigenous efforts at energy saving, reduction of subsidies and new investments and explains the commercial and technical conditions for Israeli gas to reach European and Asian markets through the under-utilized LNG terminals in Idku and Damietta. Egypt faces a major challenge, that is ensuring a sustainable and affordable source of energy. The country has turned from being a net exporter of natural gas in the mid 2000s, to a net importer of natural gas.

In 2015, Egypt is undergoing a severe energy crisis and needs to adopt new measures to solve its energy shortages. The author highlights Egypt's growing demand due to a growth in its population. Energy demand is growing faster than real GDP, according to the paper, and the share of natural gas in the energy mix is increasing. Egypt is considering imports from Israel, Cyprus or both via pipeline. So far, the country has opted for LNG imports, highlights the paper. Israel and Cyprus have signed a number of preliminary agreements with Egypt to export gas via pipeline to the Egyptian market and use Egypt's underused LNG export terminals to reach European and Asian markets. Israel, once solely dependent on Egyptian gas to satisfy its domestic demand in natural gas, is now considering exports from its 10 Tcf Tamar field and 22 Tcf Leviathan field to its Egyptian neighbour. Cyprus is also eyeing the Egyptian market to monetize its 4.54 tcf Aphrodite field. During a visit to Israel by a Cypriot delegation, the two parties discussed the possibility of merging pipelines to reach the Egyptian market.

The paper weighs the pros and cons of LNG vs pipeline imports to Egypt. Egypt has so far opted for the former, as LNG imports require limited upfront investment. The author predicts possible pipeline trade between Israel, Cyprus and Egypt, and warns that a race between Israel and Cyprus might develop if Egypt is not in a position to absorb gas from both. Exporting Israeli and Cypriot gas via Egypt is also a possibility but legal, political and commercial hurdles will need to be overcome, adds the paper. The author's conclusion is that Egypt will require gas imports until at least mid-2020 and possibly beyond that date. Regional deals with Israel and Cyprus may solve Egypt's ongoing energy crisis but substantial investments are required to develop the necessary infrastructure.

## Asia, top choice for Iran's gas exports

Anadolu Agency, 31.08.2015



**Iran's first priority for natural gas exports is in neighboring countries and in the Asian market, head of the National Iranian Gas Exports company told.**

**Ali Reza Kameli said that gas exports to neighboring states and Asia is Iran's first priority due to geographical proximity and the growing demand due to increased consumption in these markets. "Iran favors gas markets in Asia and the neighboring states over Europe for the export of its gas," Kameli said. According to the latest BP Statistical Review, Iran holds the world's largest gas reserves with 34 trillion cubic meters.**

However in 2014, BP statistics revealed that Iran only produced 173 billion cubic meters of natural gas and consumed 170 billion cubic meters. Iran and the P5+1 group of nations signed a final agreement in Vienna ending nearly two years of talks. The deal calls for an end to longstanding international sanctions on the Islamic republic in return for inspections of its nuclear energy program. Iran is now trying to revive its economy in preparation for the removal of sanctions. French President Francois Hollande has called his Iranian counterpart Hassan Rouhani in order to bolster relations between the two countries following the nuclear deal.

Additionally, German Vice Chancellor and Economy Minister Sigmar Gabriel paid a visit to Tehran on July 19, to reignite trade which took place a few days after the nuclear deal. Gabriel was the first high-ranking Western politician to visit Iran after the deal -- in a three-day trip, during which he was accompanied by a high-level business delegation, which included the executives of the largest German companies, including technology giant Siemens and chemical producer BASF. It is expected that more European countries will visit Iran to discuss investment opportunities in the coming days.

## Israel and Greek Cyprus pledge increased energy cooperation

Natural Gas Europe, 30.07.2015



Prime minister Benjamin Netanyahu visited Greek Cyprus where he met with President Nicos Anastasiades. Israel and Greek Cyprus agreed on strengthening energy ties and merging infrastructures to reach the European markets.

They discussed the use of pipelines and energy grids to link to Europe as both countries develop their export strategy. The two countries discussed several possibilities for collaboration, including an East Med pipeline to Europe and the Eurasia interconnector, a 1,500km undersea cable from Israel to Crete, via Vasilikos in Greek Cyprus, that will have a two-way capacity of 2,000 megawatts at its initial phase.

Netanyahu also said that the pair pledged increased security cooperation, on which depends regional peace. Despite its strong relations with its Arab neighbours including Lebanon and the Palestinians, the island maintained solid ties with Israel. In June, Anastasiades, headed a delegation of high ranking officials, visited Israel where he met with Prime Minister Netanyahu and senior Israeli officials. Efforts to collaborate in the fields of energy, security and economy have also included Greece. Prime Minister Tsipar has repeatedly expressed his strong commitment to develop the trilateral cooperation. Israel and Cyprus have made significant discoveries off their shores. Israel's newly found gas fields promise to ensure the country's natural gas independence for decades to come and ensure the country's entry into the export market. In June 2013, the Israeli government approved gas exports at a quota of 40% of the country's proven reserves. The Leviathan fields, estimated at 21 Tcf, and the Tamar field, estimated at 10 Tcf, are Noble Energy's most important discoveries in Israel's Exclusive Economic Zone.

Noble has also discovered the 4.54 Tcf Aphrodite field offshore Cyprus. Both Israel and Cyprus are eyeing the Egyptian and Jordanian markets as a first destination for their gas. Egypt and Jordan are facing a severe energy crisis as they struggle to meet domestic demand. Despite efforts to develop indigenous resources, Egypt needs to secure a reliable, cheap and secure source of natural gas to meet its short term needs. Jordan, once reliant on Egyptian gas to satisfy domestic demand is now suffering from energy shortfalls. The situation was made worse by the inflow of Syrian refugees. The development of Eastern Mediterranean gas could solve many energy problems, particularly for the countries directly involved. Important hurdles, of economic, geopolitical and technical nature will however need to first be overcome. Karen Ayat is an analyst and Associate Partner at Natural Gas Europe focused on energy geopolitics. Karen is also a co-founder of the Lebanese Oil and Gas Initiative (LOGI). She holds an LLM in Commercial Law from City University London and a Bachelor of Laws from Université Saint Joseph in Beirut.

## Greater Caspian Region weekly overview

Natural Gas Europe, 26.07.2015



Iran has \$1 Bln in ready documents to be signed with Turkmenistan. Iran said that some \$1 billion in ready contracts exist to be signed with Turkmenistan.

Amir Hossein Zamaninia, Iran's Deputy Oil Minister for International Affairs and trade announced that the contracts are in the export of technical and engineering goods and services spheres. Iran already proposed a gas-for-goods barter package to Turkmenistan totalling \$30 billion. Iran's services export increased by 22% last year to above \$12 billion in total. Iran's Oil Minister Bijan Namdar Zanganeh and Turkmenistan Foreign Minister Rashid Meredov met in Tehran

Deputy of National Iranian Drilling Company (NIDC) said that Iran has completed drilling of 60 oil and gas wells during first four months of current fiscal year, which started on March 21. Mehran Malekvandi announced on July 25 that drilling operations increased by 20% year-to-year. NIDC drilled 121,287 meters well by 73 rigs during this period. NIDC added Fath-39 rig to its drilling equipments in March, while Fath-94 and Fath 95 rigs are scheduled to become operational by the end of August 2015 and March 2016 respectively. All of the 73 operative rigs are on-shore, excepting three ones. National Iranian Gas Company (NIGC) plans to establish five new underground gas storage facilities, Abdolhossein Samari, the deputy director of NIGC announced on July 22th. Currently Iran has Shourijeh and Serajeh gas storage facilities. Last year, the country injected 2 billion cubic meters (bcm) of gas to these facilities in the summer and re-extracted that in winter, when the gas consumption reached the highest level. During the current spring some 477 million cubic meters (mcm) of gas was injected to Shourijeh, while 543 mcm was injected to Serajeh. Iran is aimed to inject 4.2 bcm of gas to these two storage facilities by the end of September.



Iran's housing gas consumption triples to about 550 mcm/d to 590 mcm/d in some weeks of winters, equals about 85 percent of total refined gas production level. Iran is carrying out the last stages of testing a pipeline, aimed to deliver gas to the power plants of Iraq's capital, Baghdad. The managing director of the Iranian Gas Engineering and Development Company Alireza Gharibi announced on July 25 that Iran will talk starting gas export with Iraq within the next few days. According to his statements, Iran has laid 100 kilometers of pipelines related for the project and delivering 5 mcm of gas would start in the first stage. According to a contract signed in 2013, Iran should have started 5 mcm/d of gas delivery to Baghdad last year, but the project delayed. Iran should increase this volume to 25 mcm/d by commencing 6th cross-country pipeline. Iran also has a 35-mcm/d gas deal to with Iraq to supply Basra's power plants with blue fuel.

Iran's Deputy Oil Minister Amir Hossein Zamaninia announced on July 23th that the country prefer to export LNG to EU rather than delivering natural gas through pipeline. He said that sanctions on Iran would be removed by November and Iran can deliver gas to the European Union in 5 to 10 years. Iran planned to resume development of "Iran LNG" project with 10-million ton per year production capacity with Linde AG. Iran also is in talks to use FLNG ships to deliver gas to EU in restricted volumes next year. Zamaninia also said during Iran-EU conference held on July 23 in Vienna that Iran has \$185 billion worth of upstream oil and gas projects to be offered to foreign companies by 2020. He said that Iran petroleum contract (IPC), a new generation of contract designed by Iran would be unveiled in two to three months, which offers long-term and more attractive conditions for contractors. During this conference Mohammad Khazaei, Deputy Minister of Economy, said that Iran held negotiations with European companies and approved projects for more than \$2 billion in the past couple of weeks. He didn't explain whether these projects are oil and gas-related or not. India ONGC Videsh Ltd (OVL), the offshore arm of Oil and Natural Gas Corporation Ltd, started new negotiations with Iran to to develop the Farzad-B gas field. These were among the companies which discovered the mentioned field in 2008, but all of them withdrew from developing this project due to sanctions. The Farsi Block, including Farzad B field is estimated to contain about 600 bcm of gas reserves. Alireza Kameli, Managing Director of National Iranian Gas Exports Company also said that Tehran is ready to negotiate gas export contract with Indian company South Asia Gas Enterprise Pvt. Ltd. (SAGE India) to export gas to India through Peace Pipeline (Iran Pakistan Pipeline). "Ever since Indians stepped out of the IPI gas pipeline projects which was supposed to transport Iran's gas to India through Pakistan, a consortium of several Indian firms governed by SAGE India has expressed willingness to buy gas from Iran," Shana quoted Kameli as saying on July 25th.

An Azerbaijani delegation headed by the CEO of State Oil Company (SOCAR) Rovnag Abdullayev traveled to Japan. Abdullayev announced during an interview to Azeri ANS TV on July 18th that Baku has been talking with Japanese banks to receive \$8 billion loan to fund its Oil and Gas Processing and Petrochemical Complex (OGPC) project with the capacity of processing 12 billion cubic meters of gas as well as producing 800,000 tons of petrochemicals annually. Abdullayev added that Japanese companies will purchase a stake in this project. A source from SOCAR told Natural Gas Europe anonymously on June 3th that a foreign company (or companies) can establish a joint venture with SOCAR to involve in OGPC, but according to the strategic importance of this project, SOCAR wants to have at least a 51 percent share in that.



As much as 30 percent of the work on the implementation of the Southern Gas Corridor project has already been completed, Economics quoted German media outlets on July 21st citing Rovnag Abdullayev, the head of the State Oil Company of Azerbaijan. “Contracts have been signed with 162 suppliers from 23 countries with cost \$10 billion euros... Drilling of 7 underwater wells in Shah Deniz field has been completed and it’s ready to transport first gas to Europe. Construction of compressor station and pipelines in Georgia rapidly continues.” As part of the Stage 2 of the Shah Deniz development, the gas will be exported to Turkey and European markets by expanding the South Caucasus Pipeline and the construction of Trans-Anatolian Natural Gas Pipeline and Trans-Adriatic Pipeline. The cost of the projects (including Shah Deniz stage 2) is estimated at \$45 billion.

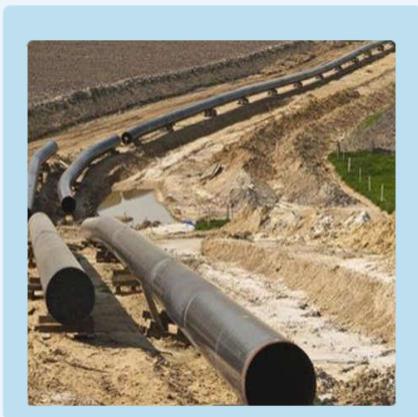
A week after Turkmenistan criticized Russian Gazprom over delayed gas payments for 7 months, Gazprom announced that it filed suit against Turkmen gas in a Stockholm court over high prices. Gazprom filed a lawsuit in Stockholm Court against Turkmenistan’s Turkmen gas company June 8, demanding to revise the prices in the gas supply contract, Forbes reported citing the sources close to Gazprom. Due to declining gas export prices in Europe, linked to the constantly falling oil prices, the previously set price for Turkmen gas at \$240 per 1,000 cubic meters appeared unsatisfactory to Gazprom. Gazprom increased gas import from Turkmenistan from 11 bcm in 2014 to 4 bcm in 2015. Japanese Prime Minister Shinzo Abe met with Baimyrat Hojamuhamedov, Deputy Chairman of the Cabinet of Ministers of Turkmenistan in July 16. According to the Turkmen government statement released on July 21st, the meetings focused on attracting Japanese investment, modernizing the oil and gas industry in Turkmenistan, and diversification of supply routes for Turkmen gas. Before that, during Turkmen President Gurbanguly Berdimuhamedov visited Tokyo in 2013, eyeing a \$10 billion energy-related investment package. During that visit, Turkmen gas, Turkmenhimiya and Turkmenoil signed documents with Japan’s Nippon, Sojitz, Sumitomo, Chiyoda, JGC, ITOCHU, TOYO, Mitsui, Tsukishima, Mitsubishi and Kawasaki. The construction of a Turkmenistan’s natural gas chemical complex for producing polyethylene and polypropylene started in the Caspian coast Kiyaly last year. The project with worth over \$3.432 billion is developed jointly with TOYO Engineering and a consortium of companies LG International Corporation and South Korean Hyundai Engineering Corp.Ltd. The production capacity of the complex is 386,000 tons of polyethylene and 81,000 tons of polypropylene per year. Japan’s Kawasaki and Turkey’s Ronas Holding are also investing in a plant to process natural gas into gasoline in Turkmenistan.

Currently, Turkmenistan is implementing several major projects aimed at increasing the production and export of natural gas, including the projects for deep processing of gas, reported Trend. The total cost of the projects is \$20 billion. The projects include the second stage of Galkynysh field’s development, construction of Turkmen sector of the fourth branch of Turkmenistan-China gas pipeline with the total capacity of 30 billion cubic meters of natural gas, a plant for polyethylene and polypropylene production in Balkan province, including a plant for producing synthetic gasoline from natural gas in Ahal province. Work is underway on starting deep chemical processing of natural gas in two directions, says the source. The first direction envisages removing propane, ethane and other components from the natural gas and processing them to produce polyethylene, polypropylene, polyvinyl chloride and other products. The second direction envisages chemical processing of methane to produce methanol and further processing this methanol to produce liquid fuels, or gasoline, diesel fuel, and others.

Uzbek Foreign Minister Abdulaziz Kamilov on July 15th met with Japan's Parliamentary Vice-Minister for Foreign Affairs Kentaro Sonoura in Tashkent. During that meeting, the sides signed several investment, loan agreements as well as technical assistance projects with worth \$3.8 billion. Japan has invested \$2.5 billion in this country so far. This amount in 2012 was \$1.8 billion. During last years, some Japanese companies including Itochu, Mitsui, Marubeni and Mitsubishi have opened their offices in Tashkent. Uzbekistan is selling 100% of the shares (49% state share and 51% share of authority of economic management – Uzkiyosanoat State Stock Company) of JSC Samarkandkimyo to the foreign investor, AKIpress reported on July 23. The production capacity of Samarkandkimyo is 250 thousand tons of fertilizer per year (nitrofos), 6,000 tons of liquid suspended phosphorus nitrate per year and 1,000 tons of precipitate feed per year. The joint Uzbek-Chinese enterprise CITIK Samarkand – NRK was organized jointly by the company and Chinese partners. The cost of the project is \$20 million, as a result of which a production of 240 thousand tons of fertilizers will be produced per year.

## Turkmenistan's joining TANAP becomes inevitable

Azer News, 28.07.2015



**Azerbaijan's** It has now become inevitable that Turkmenistan will join the Trans-Anatolian gas pipeline, amid the energy-rich Central Asian country's plans to enter the European markets.

**Turkmenistan**, a major energy producer in the Central Asian region and the fourth country in the world after Russia, Iran, and Qatar for natural gas resources, has been eager to sell its gas to Europe. The country has repeatedly expressed readiness to supply up to 40 billion cubic meters of gas to EU per year. Turkmenistan sells gas to Russia, Iran, and China and is actively seeking to diversify its gas exports,

Turkmen gas will not be able to penetrate European markets without a pipeline through Azerbaijan. While a gas corridor between Turkmenistan and Iran exists, the existing infrastructure cannot accommodate increasing volume. In this case, joining TANAP becomes inevitable for Turkmenistan. The legal foundation for this has already been set by Ashgabat. In November 2014, Turkmenistan signed an outline deal with Turkey to supply gas through TANAP. However, to join TANAP, Turkmenistan will have to lay another pipeline across the Caspian Sea. This is a short route and the infrastructure to pump gas through Azerbaijani territory already exists. TANAP, developed by SOCAR in collaboration with Turkish Botas and the energy company TPAO, will deliver the Shah Deniz field's gas to the Turkish-Greek border from eastern Turkey. The initial capacity of the pipeline will be 16 billion cubic meters of gas a year TANAP will link up with Trans-Adriatic (TAP) pipeline on the Turkish-Greek border.

About six billion cubic meters of gas will be delivered to Turkey, and the rest to Europe. Currently, Ashgabat is negotiating with Baku and Ankara regarding its plans to export gas to Europe “At present, we are holding the tripartite negotiations with Azerbaijan and Turkey. I hope that we will come to an agreement. This will be another step towards the implementation of the European vector,” said Turkmen President Gurbanguly Berdymukhamedov in April. Turkmenistan’s joining the TANAP gas pipeline project, initiated by Azerbaijan and Turkey, can add economic viability to the project. Ankara and Baku would receive additional revenues from the transit, while Ashgabat would realize its plans to diversify gas export routes.

## Making sense of Agri’s future

Natural Gas Europe, 27.07.2015



A lot of ink has been spilled as of late in praise or against AGRI, the Azerbaijan-Georgia-Romania Interconnector. The project, little known outside its region, consists of building the first LNG facilities in the Black Sea in the Georgian and Romanian ports of Poti and Midia, respectively.

Azeri gas would be transported by pipeline to Poti, where it would be liquefied and then shipped to Midia for regasification and further injection into the Romanian national gas grid, from where, again it would be exported to Hungary and possibly other markets. The project’s feasibility study was commissioned in 2012.

Finally presented during a Ministerial Meeting in Bucharest when the above-mentioned details emerged, along with details about the costs. These would vary from 2 to 5 bn euro, depending on capacity. The capacity options considered viable are 5 and 8 bcm respectively, possibly with the option of increasing capacity in time, if necessary. Serbia already announced its intention to join the project and Bulgaria could follow, so final volumes will have to consider level of demand apart from the costs. No O&G majors however, have shown interest in the project so far, with the stocks of the Bucharest-based company being split equally between Romania’s Romgaz, Georgia’s GEOC, Azerbaijan’s SOCAR, and Hungary’s MVM.

Like most O&G projects before it, AGRI has drawn both strong support and utter criticism, with reason on both sides. In the first corner, the AGRI-hopefuls. Their main argument is that AGRI is a strategic project, which, as part of the Southern Gas Corridor could offer not only diversification from Russian supply, but also from the evermore crowded Turkish gas route. Accommodation could be made, in time, for Turkmen and Iranian gas to flow onto European markets, thus increasing the project’s attractiveness. The countries on its path would stand to gain significantly from the investment also in terms of job creation and increased trade flows. Georgia would see its role as a strategic gas pathway strengthened. Romania would finally come onto the regional energy map with a project of its own after its disappointment with Nabucco. Plus, AGRI could contribute to bringing Black Sea offshore gas to regional markets if it acts as incentive for building infrastructure that connects the Black Sea to the national grid.

In the second corner, however, the AGRI-sceptics. There is not sufficient Azeri supply, on the medium-term, for both AGRI and the TANAP-TAP route, whilst Turkmen and Iranian gas will take a long time to flow towards European markets, if ever they will. LNG construction costs at current levels of technological development surpass those of pipelines. This means both that major foreign investors will be reluctant to engage (especially true during the current oil price slump), and that any LNG to be supplied will be uncompetitive in terms of price, especially compared to Russian piped gas. Furthermore, Turkey has no appetite to open up its Bosphorus Straits for tanker traffic, especially if this will bite out of its transit share of Caspian gas. A closed Black Sea keeps AGRI dependent upon regional demand, thus less appealing. If Black Sea LNG carriers would have access to the global LNG market and vice-versa, the project would make more sense for investors, especially at this time when the LNG sector is on the up. Last but not least, recent developments have also shown that the main value of AGRI, its strategic path, could be endangered by further encroachment by Russian troops on Georgian territory, posing threat to gas pipeline infrastructure. If Nabucco has taught us anything it is that pragmatism and financial calculations take precedence in such decisions. Until AGRI-hopefuls come up with a secure source of gas supply able to trigger the support of major investors, AGRI will stay in limbo, as others before it. As long as it does not cause countries to stall other diversification projects, this is not a menace. It could even serve governments as a negotiating tool for cheaper Russian gas, if Moscow is convinced of the project's viability. Or it can cause Turkey to offer cheaper transit through its territory. These arguments could become stronger if AGRI will benefit from Brussels' financial assistance; but that's a big if, and should it fail, it will render AGRI in limbo for a long time to come. Its next chance will depend upon successful implementation of the agreement recently reached with Iran, again to be clearer in the fall after the US Congress' vote, and still a long shot for AGRI. Anca Elena Mihalache works as a Senior Analyst with the Energy Policy Group, a Romanian think-tank specializing in energy security, as well as a Researcher for Wikistrat, a global crowdsourced consultancy for geostrategic analysis and forecasting.

## Gazprom seeking a way out

Trend, 25.07.2015



Recently faced problems by Gazprom, are forcing the company to look for new ways out and new solutions, even if this contradicts its own statements. The energy market today is developing so that Gazprom is absolutely in no position where it was 15, 10 or even five years ago. Those times when the company dictated its conditions throughout Europe and its other markets are left behind.

The worthy competition of the Azerbaijani project "Southern Gas Corridor" finds its reflection in Gazprom's activities, its projects and policies – something that can be seen even with naked eye.

After the failure of the “South Stream” project, which didn’t enjoy sufficient support in the EU, Russia announced a new stream – the Turkish one. The “Turkish Stream”, delivering Russian gas to Turkey and Europe’s borders, must become an alternative to the failed “South Stream”. Simultaneously, Gazprom, as if emphasizing its firm intention, announced that in 2019 it will cease all the gas supplies to Europe through Ukraine, thus putting a kind of ultimatum to the countries in Central and South-Eastern Europe, which aren’t getting gas via the “Nord Stream”. However, like its predecessor the “Turkish Stream” has faced a number of unforeseen problems. Gazprom to solve them even attempted a bluff, announcing that it would begin construction of the “Turkish Stream” in the Black Sea in June, having no intergovernmental deal with Turkey, and no consent of the Turkish Energy Market Regulatory Authority (EPDK). And without the EPDK’s consent neither the sale of oil and gas in Turkey, nor the transportation of hydrocarbons through its territory is possible. As a result, a bluff failed. Gazprom had to break a contract with Italian Saipem, by paying a huge penalty, suspend some work to expand the capacity for the Turkish Stream in the south of Russia, as well as tender procedures. The sides have not agreed on the gas price - a pressing issue in which Gazprom is not accustomed to yield to anyone. This adds fuel to the fire. Moreover, the problems occurred in Turkmenistan, where Gazprom was charged with evasion of payment for Turkmen gas and in China, where the negotiations on the Altai pipeline are greatly hampered. As a result, Gazprom had to find a way out of this situation. First, Gazprom CEO Alexey Miller said that the talks will be held with the Ukrainian partners to extend the transit agreement for the period after 2019. Then it was reported that Gazprom had an idea of the Nord Stream expansion. It seems that Gazprom sees the solution to its problems in the Russian proverb: “A bird in the hand is worth two in the bush”. It is interesting that almost all these problems are political and often arise as a result of an uncompromising and principled position of the Russian monopolist. Maybe it is time to make compromises?

## Medvedev: Slovenia may be part of Turkish Stream gas project

RT, 27.07.2015



The Slovenia may participate in the Turkish Stream gas pipeline after a level of certainty in the project is reached, said Russian Prime Minister Dmitry Medvedev after talks with his Slovenian counterpart Miro Cerar.

“We’re not standing still. We believe that Slovenia, which has always taken a constructive position on this matter, may be involved in other projects, including the Turkish Stream project, when the final agreement on its implementation is reached,” Medvedev said. Miro Cerar said that after the parameters of Turkish Stream are defined his country will assess the need for Russian gas transit through its territory.

It's up to the European Union to decide on means and methods of Russian gas transit beyond the Turkish Stream pipeline hub at the Turkish-Greek border, Medvedev added. The pipeline's key parameters differ from those of the South Stream project, he said. "During the South Stream project we initially wanted to agree with everyone but that did not happen due to the position of the EU," the Russian PM said. Turkish Stream is another story as it's a commercial project, that's why "the EU should decide itself how and where the gas should be delivered on its territory to avoid similar problems." Russia's task is to make gas available across the Black Sea to the Turkish-Greek border while the rest is up to European customers, said the Russian Prime Minister. Turkish Stream is the replacement for the South Stream gas pipeline which Russia suspended in December as the EU blocked its implementation. The 1,100 kilometer Turkish Stream pipeline will have four lines and an annual capacity of up to 63 billion cubic meters (bcm) of gas. About 16 bcm will be supplied to Turkey while the remaining 47 bcm will go to a hub on the Greek - Turkish border to be transported onwards to Europe.

## Gazprom to decrease production to all time low, confirms pipeline projects

Natural Gas Europe, 28.07.2015



While Ukraine said that it will increase gas imports from Europe in August and Russian authorities suggested that Gazprom will decrease gas production to an all-time low, the Russian gas giant confirmed its interest to invest in new pipelines.

'Gazprom is well positioned to fund gas transmission projects: Turk Stream, Nord Stream II, Power of Siberia 1 and 2' the company wrote on its Twitter account. As reported by Reuters, Russia's Economy Ministry contradicted previous declarations, saying that it expected Gazprom's production to go down to 414 billion cubic metres (bcm) per year.

Gazprom said that it expected 2015 production at 450 bcm, which would have bucked the downward trend that led 2014 production at 444 bcm. The ministry also sees a 5.5% decrease in total Russian gas exports at 164.6 bcm in 2015. The situation has partly to do with Ukraine, which is trying to increase its gas imports from Europe. Ukraine's Energy Minister Volodymyr Demchyshyn said that the Government hopes to import around 40 mcm of gas per day from Europe, up from 24 mcm of gas per day in July. Ukrtransgaz said it would import 24 mcm of gas from Slovakia in July, up from 17 mcm in previous months.

# Gazprom putting the squeeze on Turkmenistan

Natural Gas Europe, 28.07.2015



Natural gas often long, expensive and ultimately very difficult to end. There could not be a better example than the energy relationship between Gazprom and Turkmenistan.

Although the country's independence from the Soviet Union gave the newly-elected president, Saparmurad Niyazov, also known as Turkmenbashi (the Father of the Turkmens), exclusive control over the sixth largest natural gas reserves. The government's dependence on Russia to market Turkmen gas did not change. 1990s and early 2000s, Turkmenistan was selling the majority of its gas output, to Russia, with Iran being the next notable customer.

With a lack of other export infrastructure, Russia's vast pipeline network was the only export outlet for Turkmenistan. Gazprom has typically played the role of alternative gas supplier for countries in the Commonwealth of Independent States (CIS), a loose organization of former Soviet republics. Gazprom was the necessary middle-man purchasing the Turkmen gas low and selling it at a lucrative margin. The exports to Ukraine were able to instill powerful gas intermediaries in Kyiv, who negotiated with Turkmen gas via Gazprom officials, reaping huge profits from reselling the gas on domestic markets. Hence, Gazprom was relieved from the burden of being a supplier of last resort to the CIS countries and managed to maximize profit on its own gas by selling it at high oil-indexed prices on Western European markets. Related: Will 'Corner Office Syndrome' Be The Downfall Of Canada's Oilfield Services? This scheme operated successfully with Ukraine at least until 2009 when the global economic crisis depressed demand making the additional Turkmen gas simply unnecessary. Deliveries were halted for months due to technical reasons. Finally, in 2010, the state-owned Turkmen gas company and Gazprom signed a long-term take-or-pay agreement for the supply of 10 bcm of gas per annum (four times lower volumes than pre-2009) at US \$240 per 1000 cubic meters. Gazprom decided it does not need to "take" anymore. Gazprom's CEO promised that he would cut commercial ties with Turkmenistan. Then in the beginning of 2015, Gazprom said it would buy just 4 bcm of gas per year and would challenge the long-term contract in the Stockholm arbitration court in an attempt to revise the purchase prices.



The reason for the sharp move was that the drop in natural gas prices in 2014, due to their oil-indexation, made purchasing Turkmen gas and then reselling it abroad, simply too expensive. Thanks to shrinking demand in the EU, amid economic stagnation, and energy efficiency improvements, Gazprom is seeking ways to diversify its trading structure. Related: Oil Price Rout Set To Inflict Real Pain On Russia. Saudi Arabia is petrified of an oil boom here and with good reason. Similar geology to the U.S., vast shale deposits, an ever-improving investment climate and guaranteed higher oil prices than North America. Find out why OPEC is so afraid of this coming oil boom. Unilaterally, in the first half of 2015, Gazprom has started paying Turkmenistan the average European price instead of the agreed fixed price leading to around US \$400 million in losses for Turkmenengaz, according to the Turkmen energy ministry. Even if Gazprom wins the case, it is difficult to see how Turkmenistan would agree to abide by the court's ruling. The government in Ashgabat could respond by fully redirecting its gas supply to China, which already buys more than half of all gas exports via the Central Asia – China pipeline, whose capacity of 55 bcm/y is currently only used at approximately 50 percent capacity. China has also eyed higher gas imports from Iran in an attempt to meet its exponentially rising gas demand. China is also helping Turkmenistan develop the supergiant Galkynysh field, the second largest in the world. Estimated to hold up to 21 trillion cubic meters of gas, it could potentially turn Turkmenistan into the third largest gas producer in the world. Commercial gas production already started in the fall of 2013 and the expectation is that Turkmenistan could export up to 65 bcm of gas to China by 2020. This strategy makes sense considering current forecasts predicting natural gas consumption to reach 10 percent of total primary energy supply by 2020 up from 5 percent in 2012. This comes on the back of Beijing's attempts to limit pollution and diminish its dependence on coal for power generation.

The other alternative for Turkmenistan – namely to ship its gas westward to Europe – still looks highly unlikely. Despite EU insistence that a pipeline through the Caspian Sea should be built to link the existing Southern Gas Corridor with the Turkmen reserves, the outstanding dispute over the Caspian legal status prevents any major infrastructure project that is not supported by the five littoral states. Russia, in particular, has been most vocal in opposing new energy infrastructure in the Caspian, allegedly on environmental grounds. In addition, Turkmenistan lacks sufficient pipeline infrastructure to transport the natural gas from the Galkynysh field in the East to the Caspian Sea in the West. With demand uncertainty in Europe rising, funding a major gas export project would be a leap of faith at best. Russia has already started learning this lesson the hard way as it realizes the economic futility of building enormous pipelines that have purely political goals.

# Novatek increases liquid production, decreases gas sales in 1h 2015

Natural Gas Europe, 29.07.2015



Russia's Novatek reported a 27% increase in oil and gas sales and a simultaneous 43% operating expenses jump in the second quarter of 2015 with respect to the same period in 2014. Profit from operations registered a slight decrease, but normalised profit attributable to Novatek shareholders increased over good results of its joint ventures.

The share of profit of joint ventures, net of income tax, did indeed increase from 3,768 millions of Russian roubles in the second quarter of 2014 to 13,004 millions of Russian roubles in the second quarter of 2015. Looking at the first half of the year, the trends were similar.

'In the second quarter and first half 2015, our total revenues increased by 27.0% and 27.6%, respectively, compared to the corresponding periods of 2014. The growth was mainly due to an increase in liquids sales volumes and net prices in Russian rouble terms' Novatek wrote. Natural gas production increased 7.8% in the first half of the current year with respect to 2014, while the liquids production jumped from 2,742 mt in 1H 2014 to 4,189 mt in 1H 2015. In terms of sales, natural gas suffered, and liquid hydrocarbons allowed the company to report positive financial results. 'Our natural gas sales volumes totalled 14.5 billion cubic meters (bcm) in the second quarter 2015 and 30.5 bcm in the first half 2015, representing a decrease of 8.5% as compared to the first half 2014... In the first half 2015, liquid hydrocarbon sales volumes amounted to 5,745 mt, representing a 77.8% increase as compared to the first half 2014' the second gas producer in Russia explained on its website.

# Import fail: Ukraine replaces Russian gas with...Russian gas

Sputnik, 28.07.2015



Ukraine's gas imports from Europe over the last six months have outpaced Russia's supplies to the country by 3.1 billion cubic meters, according to Ukrtransgaz; however, Kiev's only European energy supplier actually gets their gas from Russia.

According to Ukrtransgaz, Ukraine's gas transport monopoly, the country's gas imports from Europe have tremendously exceeded Russia's supplies of natural gas to Ukraine over the last six months. The company's official statement said that since the beginning of this year Ukraine imported 6.9 billion cubic meters of natural gas — 3.1 billion cubic meters more than from Russia.

Ukrtransgaz named Slovakia Kiev's biggest European gas importer. For comparison's sake, in 2014 European countries exported about 5.1 billion cubic meters of gas to Ukraine. Kiev halted gas imports from Russia earlier this month citing a price issue, leaving it dependent on European supplies. However, the devil is always in the details: Ukraine's main energy supplier Slovakia is also receiving its natural gas from Russia. Slovakia is currently Ukraine's only gas importer, since Hungary and Poland suspended so-called "reverse" supplies to Kiev earlier this year. Ukraine's gas imports from Slovakia amounted to only 13-16 million cubic meters (mcm) per day — down from April's 38 mcm — prompting serious concerns regarding its ability to replenish the country's gas storages in time for winter. According to Brussels-based Gas Infrastructure Europe's data, Kiev had stored only 12.2 billion cubic meters of gas by early July, which is 15 percent less than it had at the same time in 2014. European experts have repeatedly underscored that although reverse flows from the EU offer a significant supply diversification they still fail to meet Ukraine's demand in natural gas. While Ukrainian Energy Minister Volodymyr Demchyshyn insisted that the country "would be comfortable" with 16.6 billion cubic meters of gas before the winter heating season, his Russian counterparts pointed out that Ukraine should pump at least 19 billion cubic meters into its storage. So far, Kiev has announced it will increase natural gas imports from Europe in August, planning to receive about 40-53 mcm per day to boost injections into its storage. However, energy officials warn that Ukrtransgaz should bolster its energy imports up to 60 mcm to ensure the country will store enough gas before winter.

# Econ. Ministry: Gazprom's prod. to fall to record low

Anadolu Agency, 28.07.2015



Russia's Gazprom is set to produce 414 billion cubic meters (bcm) of natural gas in 2015, a historical low for the company, according to a report released by the Russia's economy ministry.

The Economic Development Ministry said the state-owned energy giant had produced 444 bcm last year, but it fell to an all-time low despite initial plans for higher production due to a slowing down in demand and lower investment. Gazprom, the world's biggest natural gas producer, had expected to increase its production to 485 bcm but reduced its production expectation to 450 bcm in May this year.

Russia is struggling economically due to Western sanctions over the Ukraine conflict combined with low oil prices. Oil and gas revenues make up almost half of the federal budget and some 15 percent of the country's GDP. The economy contracted by 4.2 percent in June year-on-year, while its national currency, the ruble, has seen a four month low. The ministry also said Gazprom's gas exports to the EU and Turkey plummeted by 6.2 percent to 66.8 bcm in the first half of the year. The EU opened an anti-trust law case against the company in April accusing the company of monopolizing the gas market in Europe. Meanwhile, Russia and Turkey are still negotiating to reach an agreement over a gas pipeline that will potentially carry Russian gas to Europe through Turkey and Greece.

# It's all about gas: EU finds potential energy supplier to replace Russia?

Sputnik, 24.07.2015



Ukraine Washington and Brussels have long been expressing their anxiety regarding Europe's dependence on Russia's energy; the US has recently intensified its efforts to replace Russia as Europe's main provider of natural gas, while the European Council on Foreign Relations (ECFR) has presented a number of possible scenarios to diversify the EU's gas supplies away from Russia.

“Since relations between the West and Russia have deteriorated so rapidly following the US coup in Ukraine, Western strategists have been working relentlessly to find a replacement to Russian energy supplies to the EU.

In the immediate term, this is impossible, a reality that unnerves many in Washington and Brussels,” Scottish geopolitical analyst and editor of The Analyst Report Steven MacMillan underscored. Facilities of a natural gas refinery under construction in the South Pars gas field on the northern coast of Persian Gulf in Asalouyeh, Iran. However, neither Washington nor Brussels are ready to give up, the analyst noted, adding that the West is considering a number of countries which could in the medium to long term replace Russia's gas supplies or at least “dramatically reduce” Europe's energy dependence. The recent report by the European Council on Foreign Relations (ECFR) entitled “Europe's Alternatives to Russian Gas,” is considering a vast range of potential energy suppliers. For instance, among the “candidates” are such energy suppliers as Iraq and Libya. Alas, the states are so unstable — “due to Western foreign policy of course” — that they cannot be regarded as viable options, the expert underscored.

The ECFR analysts also view Israel as the EU's potential energy supplier, but this source is again an unlikely substitute for Russian gas: 60 percent of Israel's gas reserves go to the domestic market. Resource-rich Turkmenistan cannot solve the European dilemma either: the country has shifted its export strategy toward China. At the same time, the ECFR clings to the hope that Iran, a country that hosts vast oil and gas reserves, may become a possible player. “Speculation has grown in recent months that Tehran and Brussels could strike an energy deal in the near future that would see Iran supplying gas and oil to the EU. With recent news that the negotiations between Iran and the P5+1 states have concluded successfully, and a deal has been reached which is expected to see sanctions gradually lifted, this is becoming more likely,” However, it seems that Brussels is doomed to disappointment: according to Iranian President Hassan Rouhani, Iran is far from being able to replace Russia as a supplier, since it lags behind in gas extraction.

Furthermore, despite the agreement that has been reached between Tehran and the P5+1, Iran still views the Western countries “as perfidious partners,” given the controversial history of their meddling into Iranian affairs. “There is no question that many of the neocons in Washington will be irate at the recent deal and will still push for regime change in Tehran,” MacMillan remarked. Thus far, both Washington and Brussels should better seek more tame and subservient states than Iran to replace Russia. Remarkably, ECFR analysts claim that Azerbaijan could play this role, stressing that “Azerbaijan is the supplier best placed to respond to the EU’s strategy of diversifying gas supply away from Russia.” There is a project that envisages the connection of the Trans-Anatolian Natural Gas Pipeline (TANAP), that will run from Azerbaijan to Turkey, with the Trans Adriatic Pipeline (TAP) which will go through Greece and Albania to Italy. It is expected that TAP will become operational by 2020 and will have an initial capacity of 10 billion cubic meters of gas per year. “It will be important for the West to ensure that Azerbaijan continues to play a cooperative role with Western energy corporations in the future, as some voices in Washington have asserted that ‘US-Azerbaijan relations are clearly now in serious crisis’,” MacMillan pointed out. President Barack Obama thinks as he is asked a question And last but not the least is Norway that will most likely continue to play a significant role in providing the EU with natural gas. As the Norwegian Foreign Minister stated earlier this year, Norway will supply gas to Europe for “years to come.” While the West is sweating bullets about Europe’s dependency on Russia’s gas, Moscow is expanding its energy ties with Asian and Latin American countries. In addition to its ongoing projects Russia is considering building the Altai pipeline that will connect Western Siberia with northwestern China. Moreover, the Kremlin has already signed an energy deal with Argentina and inked an agreement with Saudi Arabia, the US’ longstanding ally, on cooperation in the nuclear energy sphere.

## Turkmen gas, a threat to Russia’s dominance in Europe

Anadolu Agency, 31.07.2015



Western plans to access Turkmen natural gas under the Caspian basin through Azerbaijan to reach Greece and Italy threatens Russia’s dominant gas market position in Europe, Emre Iseri, an associate professor at Yasar University in Izmir, Turkey, told.

“Russia would prevent Turkmenistan’s natural gas reaching Europe,” Iseri asserts. Europe is highly dependent on Russia for its natural gas consumption, while Turkmenistan, located in the energy-rich Caspian region, may export its natural gas to Europe in future through the Southern Gas Corridor to reach Greece and Italy.



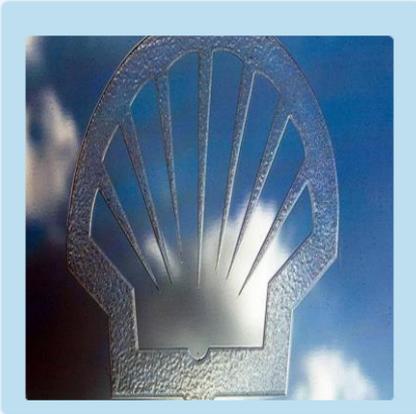
“Considering its ambition to maintain its dominance in the European gas market, one can expect Russia to put all of its political capital to prevent Turkmenistan selling its natural gas to Europe,” Iseri said. “For Russia, the already existing northern route, which runs from the western part of the Caspian Sea on the Russian shore to the northern Black Sea, is the most feasible option to ensure its energy monopoly in Europe,” he explained. Iseri underlined that Russia exported around 34 billion cubic meters (bcm) of gas to Germany, 29 bcm to Turkey, 23 bcm to Italy and 10 bcm to Poland in 2013. Europe consumed 510 billion cubic meters (bcm) of natural gas, of which 155 bcm or 30 percent, was imported from Russia in 2013.”The West has plans to deliver Turkmen gas under the Caspian basin via the proposed Trans Caspian Pipeline to Azerbaijan, where it would then connect to TANAP and TAP natural gas pipelines to reach Europe,” Iseri explained.

Iseri emphasized that the Caspian region can play a role for countries that wish to diversify away from Russia and OPEC for their energy security. However, he noted “There are diverse preferences in the region by major great powers.” He explained that every country has different interests in the Caspian; “For the U.S. and Europe, the Caspian region is perceived as an alternative to the Persian Gulf and Russia, and promotes the east-west energy corridor.” “For China, which is trying to break its dependence on U.S.-dominated seaborne trade, the region is viewed as an alternative for accessing oil and gas resources and promoting the west-east energy corridor,” he added. Yet, there are unsolved legal problems in the Caspian Sea between its littoral states. One of the major issues is in its legal definition in which a decision has to be reached to decide if it should be classed as a lake or a sea. “If the Caspian is defined as a sea, the territory will be divided according to coastal lines of the littoral countries. If it is defined as a lake, the Caspian will be a jointly controlled area,” Iseri said. “While Azerbaijan and Turkmenistan are closer to the sea idea - despite their differences and disputes on several offshore fields - Russia and Iran prefer a Caspian regime defined as a lake,” he said, adding that there have been three solution scenarios on the table to legally define it.

The first scenario envisaged marking the water borders of the Caspian to five equal parts so that each littoral state would have a 20 percent stake. However, this was not accepted since Turkmenistan and Kazakhstan have longer borders on the water compared to Iran, Russia and Azerbaijan. The second option involved marking the water borders based on coastal frontiers, which were also rejected because of the differences between Azerbaijan and Turkmenistan on the one hand, and divergences of opinion among the other three countries regarding this option. The third solution suggested marking the water borders on the surface and dividing the seabed resources based on coastal frontiers. However, Iran challenges this by claiming it would divide the Caspian’s resources unfairly.

## CEO: Shell to extend cooperation with Gazprom

Anadolu Agency, 31.07.2015



Royal Dutch Shell aims to extend its cooperation with Russia's Gazprom in the Nord Stream 2 gas pipeline project, Ben van Beurden, Shell's CEO said.

According to Russian news agency Tass, Beurden said that Shell and Gazprom are negotiating on the details for the consortium while reporting that Beurden considers Shell's strategic relationship with Gazprom a positive step towards the realization of the project. The Nord Stream-2 project was announced on June 18 when Gazprom, E.ON, Shell and OMV signed a memorandum of understanding for the construction of the project.

The project will add two additional pipelines to the Nord Stream pipeline to increase its capacity. The first two pipelines of the Nord Stream have been operational since 2011 and 2012, with an annual gas capacity of 55 billion cubic meters. The 1,224-kilometer-long gas pipeline runs from Vyborg in Russia under the Baltic Sea to Greifswald in Germany.

## Lithuania environment minister questions need for shale gas exploration

Sputnik, 28.07.2015



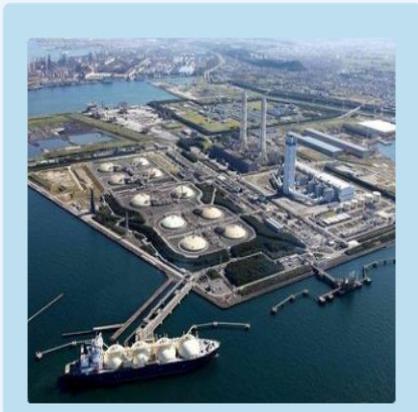
According to the minister, there may not be those willing to search for shale gas in Lithuania due to low global oil and natural gas prices."As the situation goes forward, I become more skeptical about the need to carry out exploration here" Trečiokas told reporters in Vilnius.

The minister noted that potential investors had paid no interest to the tender, despite the fact that it was circulated by Lithuanian embassies abroad. He underscored that it would be better to refrain from holding the tender, noting that a decision on this matter should be made by the country's government.

Lithuanian geologists told the government that the country had significant reserves of shale gas. The government immediately announced a tender for hydrocarbon exploration and production and only one company took part in it, US energy giant Chevron. Additional data on shale gas reserves was subsequently presented, diverging significantly from optimistic preliminary forecasts. Chevron refused to participate in the tender, citing imperfections in Lithuanian energy legislation. The tender was suspended until appropriate laws could be adopted. The Lithuanian government delayed the announcement of a new tender for the exploration of shale gas in the west of the country for four months, as the Geological Survey failed to prepare new conditions in time. The delay was said to be necessary to determine potential investors.

## LNG terminal deal close?

The News, 29.07.2015



A deal between the constructor of Poland's LNG terminal in Świnoujście, north-western Poland, and the Polish investor is reported to be close. The LNG terminal, which once open will allow Poland to import gas from countries such as Qatar.

The deadline was not achieved and the Italian construction firm in charge of the project, Saipem, asked for additional payment for completing the work. The investing company Polish LNG refused to make this payment. "Poland will not pay a single złoty more for the construction of the LNG terminal in Świnoujście as a result of a deal that will be signed with the builder of the gas port, the Saipem company,"

According to the unnamed source, under the agreement not only will the Polish investor avoid making any more financial contributions, but Saipem will also commit itself to opening the terminal this year and will pay a fine if this is not done. "I still have to check the proposals contained in the annex [deal] and then, after signing, I will inform about the specifics of the deal," Treasury Minister Andrzej Czerwiński commented last week. The details of the deal are secret until signed. The company Saipem says that the LNG terminal is currently 98 percent complete, and some sources have claimed that the construction phase should finish in September. Once operational the terminal will allow Poland to import up to five billion cubic metres of LNG per year, covering around a third of the country's demand. This will be one of the largest LNG ports in Central, Eastern and Northern Europe. If necessary capacity could be boosted to 7.5 billion cubic metres. A feasibility study was commissioned in April to look into the prospect of expanding the port in future. The LNG terminal is aimed to decrease Poland's dependency on gas supplies from the east, including Russia.

# Statoil, total: North Sea leaders bet on increased production, higher efficiency

Natural Gas Europe 28.07.2015



While Statoil is eying an increase in oil production from the Gullfaks South, Total is moving closer to divesting from the West of Shetland area. The two projects, which are relatively close, indicate how companies in the North Sea are trying to monetise assets, while increasing production.

Total signed an agreement to sell 20% of its interests in the Laggan, Tormore, Edradour and Glenlivet fields to SSE E&P UK for £565 million (around \$876 million). “The sale of these minority interests is aligned with Total’s portfolio management strategy and target of divesting \$5 billion of assets in 2015.

It allows us to capitalize fully on this new deep offshore development, while retaining a majority interest and operatorship,” Arnaud Breuillac, President, Exploration & Production, commented in a note released. Total will hold a 60% operated interest in the Laggan, Tormore, Edradour and Glenlivet fields, alongside partners DONG E&P (UK) (20%) and SSE E&P UK (20%). SSE will acquire a stake in the Shetland Gas Plant and interests in several exploration licences in the West of Shetland area. According to Total, the area will witness an increase in production. ‘With the imminent start-up of the Laggan project in the West of Shetland area, Total will open its third hub in the UK and a new frontier gas production area for the industry. By the end of 2015, Total is expected to become the largest producing oil and gas company in the UK.’ Similarly, Statoil, the main hydrocarbon producer in Norway, bets on increased efficiency to push production up. ‘Production from the Gullfaks South (GSO) fast-track project for improved oil recovery in the North Sea started on 27 July. GSO will increase the output from the Gullfaks area by around 65 million barrels of oil equivalent’ Statoil wrote on Wednesday. The sentiment for offshore activity in the United Kingdom remains negative, but it is rebounding. ‘Oil & Gas UK’s Business Sentiment Index for the second quarter of 2015 published today (29 July) shows that the UK oil and gas industry remains fragile but that companies’ outlook is improving. Pessimism has moderated with respondents returning a score of minus 27 on a -50/+50 scale, up four points from minus 31 reported by the survey in the first quarter of the year’ Oil & Gas UK wrote in a press release. Operator Statoil and its PL146/PL333 partner Total E&P Norge announced they made a gas and condensate discovery in the Julius prospect in the King Lear area in Norway’s North Sea

## What now for UK shale gas?

Rigzone, 27.07.2015



Plans to frack for shale gas in the UK are currently on hold in spite of the pro-fracking Conservative Party securing a majority in the country's Parliament in General Election.

The main company pioneering efforts to develop a shale gas industry in the UK, Cuadrilla Resources, has faced one obstacle after another in its attempt to explore for shale gas at two locations in Lancashire. The latest stumbling block is Lancashire County Council's refusal to allow Cuadrilla to explore for some of the 2,281 trillion cubic feet of shale gas that the British Geological Survey estimates could be contained within the Bowland Basin in northwest England.

The council's Development Control Committee rejected Cuadrilla's applications to drill at the company's Preston New Road and Roseacre Wood exploration sites due to too much noise and traffic. Cuadrilla itself has pointed out that the council's planning officer had in fact recommended approval of the Preston New Road planning application while the firm believes it can reroute traffic to the Roseacre Wood site in order to get around the council's concerns about more vehicles passing through the area. Recently, Rigzone caught up with Ken Cronin – chief executive of the UK Onshore Operators Group (UKOOG) – to find out how he thinks things will play out now. First of all, Cronin is dismissive of the idea that the resistance to fracking by the environmental lobby, certain sections of the public and, now, Lancashire County councillors means that the industry is dead before it has even really begun in the UK – as some commentators in the UK media have been suggesting recently. “The reality is that 12 years ago my opposite number in the wind industry was shouting from the rooftops that planning was the problem ... and [the wind industry] would never get planning for onshore windfarms through, etc. Ten years before that we had a nuclear power station that went through a seven-year planning cycle. So adverse planning decisions are not just something that's unique to this [the shale gas] industry,” Cronin told Rigzone. “It's an issue that onshore energy production has. You have national policies and local decision-making, and those two are always going to rub.” In fact, Cronin thinks that those interested in seeing the development of a shale gas industry in the UK should look at the positives from Lancashire County Council's recent decisions. “We had a planning officer's recommendation after a very detailed and elongated process in which basically he said: ‘All of the above, including the local issues, I've looked at and I give a recommendation to approve.’ That was backed up by legal advice, it's backed up by advice from third-party consultants for noise and transport, and the reality is that the councillors rejected it on the basis of very local decisions: noise and landscape. “So, I think there are a lot of positives to look at. Is one adverse planning decision going to stop the industry? No. There are a number of applications in the pipeline across the country and we shall see those coming through towards the end of the year. When will we see the first frack? We are at the vagaries of planning decisions but I'm hoping to see activity next year.”



As well as being optimistic, Cronin is also pushing for a faster approach when it comes to planning permissions. The lengthy time taken by authorities to allow fracking at a particular site is similar to the long, drawn out planning decisions faced by the wind industry more than a decade ago. “The Cuadrilla decision from applications being submitted took 15 months for a 16-week process. And the reality is that you cannot plan on that basis. You cannot invest on that basis. We have to have a system that is more streamlined, both for the industry and for the communities involved,” Cronin said. It seems that because fracking has become such a politicized issue in the UK, with several protests springing up around the country against onshore drilling activity, local authorities are spending longer over granting permission to drill. “If you compare 2013 with 2014 average planning times have gone from three-to-four months to 12 months, so we’ve seen a big increase,” Cronin said. “I think with the onset of the ‘anti’ movement these decisions have become much higher up in terms of public interest and that’s the reason you’re seeing decisions having to go to planning committee and therefore taking a much longer period of time.” Meanwhile, although the UK’s central, Conservative-dominated, government has expressed a great deal of interest in encouraging the development of a shale gas industry and wants to win hearts and minds among the public in support, the government departments it controls are proving to be somewhat of a liability. At the start of this month the details of a Department of Environment, Food and Rural Affairs (Defra) internal report into fracking were made fully public at the request of the Information Commissioner’s Office. The report – first released under UK freedom of information laws last year with several of its sections blanked out – has proved somewhat embarrassing to the government.

This is because, among other concerns it highlights about fracking, the report – “Shale Gas: Rural Economy Impacts” – suggests that house prices in close proximity to shale gas exploration sites could fall by up to 7 percent. In the property-obsessed UK, such a revelation is like gold dust to the anti-fracking movement. The study also suggests that properties located up to 5 miles from a fracking operation could face greater insurance costs to cover potential losses from an explosion on the site, and that the cost of renting homes near fracking sites could be pushed up by people coming to work on them. Much was made of the Defra report in the UK media in the following days, but Cronin told Rigzone that the context under which the report was written needs to be understood. The report, he said, was an internal document written by a junior member of Defra’s staff for a more senior member of staff. “It wasn’t an official report by government. It was a piece of research that was done by a junior member of staff. In my opinion it should never have even got to the stage where it was redacted because it was clearly a very internal piece of research,” he said. “It picks up a number of issues on the negative side. So, house prices? Well, I think there are two things to say there. First of all, all of the research both evidential and anecdotal in this country is that there are no issues with house prices next to oil and gas sites.” A report produced earlier this year by Jones Lang LaSalle, for instance, found that property prices near Cuadrilla sites in Lancashire have outperformed those of other parts of northwest England over the period that work has been conducted at these sites. “And we’ve seen data from Singleton and Witch Farm down in the south [of England] that shows house prices there exceed the average,” Cronin added, referring to two of the UK’s already-existing producing onshore oilfields.

The Defra report also mentioned issues around transport, noise and the visual impact of shale gas sites. “The reality is that although these are construction sites to start with, you end up with visually, and noise wise, a very benign site. But it does involve construction, it does involve truck movements and it does involve an element of noise. “If you look at the Lancashire example, they got the noise down below the UK regulations and below the worldwide health authorities’ absolute minimum. So, again all of these things can be managed and all of them in the Cuadrilla example were sufficient to pass muster with the planning officer. But I do accept that during the construction period there will be truck movements, just like creating a Tesco [supermarket] or a wind farm or a solar farm or any construction activity.” But, while pointing out that the Defra report is a red herring, Cronin is keen to state his commitment as head of UKOOG to defending the UK’s burgeoning shale gas industry against criticism such as this. “A large proportion of the media has written it in such a way that it was an official report and it wasn’t. It was a piece of research done by a junior member of staff ... It causes debate and I’m very happy to just give the facts,” he said.

## Saipem keeps suffering, writes down net current and capital assets for €929 million

Natural Gas Europe, 29.07.2015



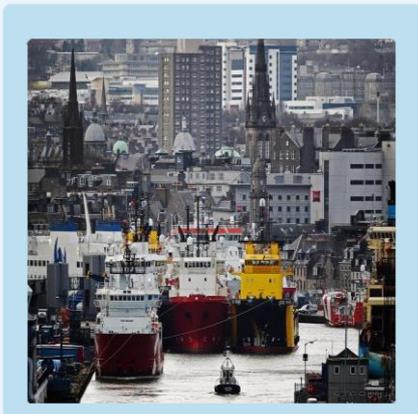
After releasing its first half 2015 results on Tuesday, Italy’s Saipem took another blow on Wednesday. Its stocks suffered a decline around 5% after the results reported total write-downs of €929 million of net current and capital assets, and a plan to reposition the company towards higher value core business segments.

The real problem has to do with the new contracts that plunged from €13,132 million in the first half of 2014 to €3,500 million. As a result the adjusted EBIT was negative (-€579 million) and the net profit for the first two quarters fell to - 920 million euros.

“Results for the second quarter of 2015 reflect a market that has greatly deteriorated. The further steep fall in the oil price has resulted in a major disruption, which is not likely to be reversed in the short-to-medium term and has resulted in Clients taking an increasingly rigid approach in the operational and commercial management of contracts” Stefano Cao, Saipem CEO, commented in the note released on Tuesday. The ENI’s subsidiary is proceeding with a rationalisation process that is expected to generate cumulative savings of €1.3 billion between 2015 and 2017. The share price was 7.72€, down 5.28%. It then rebounded to 7.91€, with a 3% loss at 17:13. Indeed, some positive news came on Wednesday too. Saipem and two South Korean companies - SK Engineering and Hyundai Engineering & Construction - reportedly won a \$1.5 billion contract to build a marine export terminal for Kuwait National Petroleum Company (KNPC). Saipem received notification of the termination for convenience of the South Stream BV contract.

# North Sea oil and gas companies still focused on job cuts

Herald Scotland, 30.07.2015



While MOST oil and gas companies in the North Sea continue to be focused on job cuts as they remain concerned about activity levels in the area, a survey shows. The findings of the latest Sentiment Index research by Oil & Gas UK underline the scale of the challenge facing the industry in the North Sea, where firms have slashed investment and cut around 5,000 jobs in response to the slump in the crude price slump.

They will lend weight to fears that many more job losses could be on the cards unless the oil price increases significantly. Aberdeen-based Wood Group said 200 North Sea jobs were at risk.

“A large number of companies remain apprehensive over future activity levels and concern over job losses and the cost base continue to be a focus for the majority of respondents,” said Oil & Gas UK. The trade body said around half the respondents to the survey had reduced employee numbers in the latest quarter. It added: “The majority of respondents note that they will face significant issues in the future if the oil price does not recover.” The survey found that confidence levels fell for the fourth quarter running. However, Oil & Gas UK took some comfort from the fact that the rate of decline slowed in the period. Oonagh Werngren, Oil & Gas UK’s operations director, said: “While the overall index remains in negative territory for the fourth quarter in a row, this slight improvement in mood is the first upward movement we have seen since Q1 2013.” The organisation welcomed signs of stability, after many firms cut budgets in the early part of the year in response to the downturn signs. Ms Wengren said: “A number of companies have already put significant effort into tackling cost and improving efficiency and are beginning to see the impact of these efforts.” She noted that while a large number of companies were concerned about a further decline in North Sea activity, some said they were busier in the quarter. This may be due to preparations for the annual summer maintenance programmes. However, Oil & Gas UK noted that the apparent increase in optimism in the quarter coincided with a rise in the crude price during the period. The Brent crude price has dropped to less than \$60 per barrel since the survey was completed. Brent crude fetched \$115/bbl in June last year. The headline sentiment index reading was -27, reflecting the fact 41 per cent of respondents said they became less confident during the quarter while 14 per cent reported an improvement in sentiment. Oil & Gas UK said business sentiment beginning to decline in mid-2012, before the drop in the oil price, amid the challenges of operating in a high cost, mature basin. The rapid decrease in the oil price had further exacerbated these challenges. Some 175 firms responded to the latest survey including firms that produce oil and gas and services businesses.

# Why Vermilion Energy Inc sees Europe as the next Canadian energy frontier

Natural Gas Europe, 29.07.2015



European companies have been developing Canada's oil and gas resources, but for entrepreneurial Canadian companies like Vermilion Energy Inc., the new promising frontier is Europe. Urgency to reduce dependence on Russian gas, high natural gas prices, little industry competition and lots of potential to revive mature pools with new technologies is feeding a push to find supplies in Europe.

"Europe in general imports about 30 per cent of their gas supply from Russia, and with what is going on with Ukraine, they are trying to diversify," Lorenzo Donadeo, CEO of Vermilion, said in an interview.

New reality sets in at Fort McMurray that this downturn is different. Besides their economic implications, oil downturns come with an ugly personal side, fuelling conflict over how to spread, manage or offload the hurt. Read on "We have broad support from various governments in Europe that are encouraging us to develop additional gas supplies. We think we can become a pretty dominant gas and oil producer in Europe." The Calgary-based mid-sized company boosted an already large European portfolio by signing farm-in agreements on 19 onshore exploration licenses with units of Exxon Mobil Corp. and Royal Dutch Shell PLC that are prospective for both oil and gas. In exchange, Vermilion will contribute to the cost of drilling exploratory wells. The farm-in provides Vermilion with a very large, nearly contiguous land block in the heart of the North German Basin, the company said in a statement. The basin has produced more than two billion barrels of oil and 34 trillion cubic feet of natural gas since its discovery, representing approximately 97 per cent of Germany's historical onshore production, the company said. Gas trades for about \$8.50 to \$9 per thousand cubic feet in Europe, or about three times more than in Western Canada, the fiscal terms are attractive, and services cost less because there is less competition, said Donadeo, whose company is also active in Australia and the United States. Some of the world's largest oil companies are based in Western Europe. But Shell, BP PLC, Repsol S.A., Eni S.p.A, Statoil ASA moved overseas over the years to concentrate on projects suitable to their size, such as liquefied natural gas operations and those in the oilsands and in deep waters. Europe in general imports about 30 per cent of their gas supply from Russia, and with what is going on with Ukraine, they are trying to diversify Entrepreneurial companies that can make money by developing smaller deposits, and which are abundant in Canada and the United States, remain rare in Europe, Donadeo said Vermilion first moved to the Old Continent in 1997 and built production in France, Holland, Ireland and Germany, by buying assets from oil majors like Exxon Mobil Corp., Total and Shell, and then growing production. It recently acquired land in Croatia and Hungary.

By next year, European gas will make up about 30 per cent of its production, which today sits around 55,000 barrels of oil-equivalent per day. There is also renewed interest in Eastern Europe, historically dominated by national oil companies. Super majors looking for shale gas in places like Poland and Romania came and went, but smaller companies remain active, and many Canadian players are on the hunt, said a senior Canadian executive working for a European company exploring in Hungary that is about to bring its first discovery into production.

## Serinus Energy resumes production at Sabria Field in Tunisia

Natural Gas Europe, 27.07.2015



Canada-based Serinus Energy resumed production at the Sabria Field in Tunisia, after more than a month-long break due to local protests. ‘The company is pleased to report that the CPF is operating and the wells have been restarted. Management expects that it will take several days for production rates to stabilize, but early indications are that the field will return to pre-shut-in levels’ reads a note released on Monday.

According to Serinus Energy, the ‘orderly’ protests, which were not directed at the company, led key players to discuss measures to develop the area known as Governate of Kebeli.

“We are very pleased that production has re-started at Sabria, particularly since it was done with the involvement and cooperation of the government, ETAP, other operators in the area and local community representatives” Jock Graham, Executive Vice President and Chief Operating Officer of Serinus, commented referring to the Entreprise Tunisienne d’Activités Pétrolières (ETAP). Serinus, through its wholly owned subsidiary Winstar Tunisia B.V., holds a 45% working interest in Sabria and is the operator, with the remaining 55% held by ETAP. The Winstar-12bis (“WIN-12bis”) development well in central Tunisia, which was the first of a 2-well program in the Sabria Field, commenced drilling in July 2014. Over the last months, Algeria and Tunisia strengthened cooperation in the energy sector, in the upstream and in the downstream.

## Nordic countries confirm interests, projects in North Africa

Natural Gas Europe, 30.07.2015



PA Resources submitted an updated Zarat Field Plan of Development to the Tunisian authorities, proposing a two-phase development, with the first oil expected in 2020 and the second phase meant to double the capacity of the production facilities.

‘The proposed development is in two phases, with Phase 1 comprising four production wells and production facilities to process and export 20,000 bbls/d of oil and 100 mmscfd of raw gas. Phase 2 comprises a further four development wells, with expanded facilities to increase capacity to 40,000 bbls/d and 200 mmscfd of raw gas’ reads a note released.

According to the company, the Zarat field is a shallow-water, gas-condensate and oil field containing estimated recoverable reserves of 147 mmboe. ‘It is Tunisia’s largest undeveloped field and production from Zarat Field will be critical in alleviating a forecast future gas supply deficit in Tunisia’ the Sweden-based company wrote. PA Resources worked with the state oil company Entreprise Tunisienne d’Activités Pétrolières (ETAP). The company published a press release about the recent Annual General Meeting, in which it reports that the Board decided that no dividend would be paid for the fiscal year 2014. The company will also reduce its share capital. Norway-based Subsea 7 informed it was awarded a contract by BP, and partner DEA for the development of the Taurus and Libra subsea fields offshore Alexandria, Egypt. The contract has a value of approximately USD 500 million. ‘The contract is the first phase of Egypt’s West Nile Delta project where field development will be at depths of approximately 800 metres. The contract scope includes the engineering, procurement, installation and pre-commissioning of subsea infrastructure required to develop the hydrocarbon resources from nine wells including 75 kilometres of umbilicals and 100 kilometres of pipeline’ reads the note. Also Subsea 7 reported some difficulties, with its revenues falling from \$ 3,573 million in the first six month of 2014 to \$ 2,534 million in the first quarter finished on June 30, 2015. ‘The sustained downturn in oil company expenditure continues to result in lower industry activity and the timing of new awards to market remains highly uncertain. By balancing the implementation of its cost reduction programme with a focus on maintaining its core in-house expertise and capability, Subsea 7 remains well positioned to continue to deliver its projects in a consistent and efficient manner and capture future business opportunities’ the company wrote.

## Statoil, BP suffer but reduce debts

Natural Gas Europe, 28.07.2015



Statoil and BP continue suffering current market conditions, but both managed to decrease net debt in the second quarter. In their second quarter results, the two majors reported lower profits and revenues with respect to the second quarter of 2014. In particular, BP bore the brunt of geopolitical complexities .

‘BP today reported its results for the second quarter of 2015. Underlying replacement cost profit<sup>1</sup> for the quarter was \$1.3 billion, compared with \$2.6 billion for the previous quarter and \$3.6 billion for the second quarter of 2014.

The result reflected the impact of continued low oil and gas prices, a reduced contribution from Rosneft, and one-off charges arising from circumstances in Libya, but also continuing strong earnings from BP’s downstream businesses and lower cash costs throughout the Group’ reads a note released by the UK-based company on Tuesday. BP’s net debt was \$24.8 billion, \$293 million lower than at the end of the first quarter, equivalent to a gearing level of 18.8%. Similarly, Statoil reduced its debt too. ‘Statoil maintained a strong capital structure, and net debt to capital employed at the end of the quarter is reduced to 22.4%’ the Norway-based company wrote on its website. On the other hand, its net income for the second quarter was NOK 10.1 billion, compared to NOK 12.0 billion in the same period in 2014.

## Meeting energy demand: a humanitarian imperative

Natural Gas Europe, 30.07.2015



Over the next 25 years the world’s population is set to grow from 7 billion to 9 billion, global GDP will more than double, and rising incomes in developing nations will lift billions of people into the energy-consuming middle class for the first time, according to Rob Franklin, President, Gas & Power, ExxonMobil.

Such progress will bring new energy and electricity developments. “Meeting this demand is more than a business objective it is a humanitarian imperative,” he stated, adding that one in seven people around the world have no access to electricity at all, while even more lack modern cooking fuels.



Mr. Franklin said that the question facing natural gas defines the industry today: “How can we meet the world’s vast and growing need for energy, whilst also taking meaningful and timely action to reduce the risk of climate change?” Increasingly, he answered, natural gas answers both parts of the question, emitting 60% less emissions than coal, “and right now it is the only energy source that provides significant emissions reductions whilst also being abundant, affordable, versatile, trusted and rapidly deployable on a large scale.” ExxonMobil, he said, sees global gas demand rising at more than 2%/year until 2025 – about twice the rate of oil; most of the growth, according to Mr. Franklin, will come from the Asia-Pacific region, where demand is set to double within a decade. He offered, “We also expect gas to surpass coal as the world’s second largest energy source as utilities and other power generators seek to reduce emissions by shifting from coal to gas.” Power generation, he said, offers a tremendous opportunity for emissions reduction, as generation is the largest and fastest energy demand center, accounting for about 40% of global emissions. “By maximizing the switch from coal to gas in the power sector, we can make meaningful progress on emissions and air quality,” he explained, “and we can do it quickly and affordably without constraining economic growth.” He pointed to what’s been happening in the US as an illustration of this, with American GDP expanding by nearly 20% in the last 5 years, manufacturing rebounding, and unemployment dropping to 5.5%. He reported, “And yet, over those same 5 years, energy-related CO2 emissions have fallen more in the US than in any other country, at their lowest since 1994.” Mr. Franklin attributed this growth and lowering of emissions to the growth of shale gas. “The abundance of affordable gas from shale not only kick-started the US economy, it also triggered a major shift away from coal for power generation,” he noted. Since 2008, he said, power generated from coal has decreased more than 20%, while natural gas has risen by nearly 20%. “This transformation happened without mandates, cap and trade, or price components – it was largely the natural outcome of markets operating freely all along the value chain.” He observed that this had not come at the expense of renewables. Wind and solar, he explained, have more than tripled since 2008.

Contrasting that approach with that of the EU’s approach, which he admitted has been successful in reducing emissions, he said it is at the expense of economic growth and job creation. Mr. Franklin added, “The good news is, the benefits of shale gas won’t be confined to the US much longer, because the US is poised to become a significant exporter of LNG.” According to a study by Carnegie Mellon University, US LNG exports will help reduce global greenhouse gas emissions by enabling the displacement of coal in other parts of the world. He added that LNG also strengthens energy security by expanding the diversity of energy supplies. “Similar benefits could be realized in Europe almost overnight,” remarked Mr. Franklin. “Indeed, unlike Asia Pacific, Europe already has in place the interconnected market and the advanced infrastructure to distribute and easily transport natural gas on a large scale at low cost.” Ms. Robin Dunnigan, Deputy Assistant Secretary, Bureau of Energy Resources, U.S. Department of State, showed delegates a slide of the growth of US gas supply to 2040. Noting the low price of oil and decreasing rig counts in the US and the ramification for tight oil and gas, she says that US production is remaining the same.



“And what we’re finding is, through innovative technologies, energy efficiencies and lowering costs, US companies are still producing at similar rates,” she reported, offering that recently production of oil was over 9.5 million barrels, the highest rate since 1983. Gas production, she showed, is set to continue growing, almost 40% through 2040, when the US should be producing 1 TCM/day. “It’s a lot of gas,” she quipped. Gas, she explained, is one of the factors that has lowered carbon emissions in the US, as well as the increasing use of renewables, retirement of coal plants. Ms. Dunnigan showed the “good news story” that CO<sub>2</sub> emissions from power generation are trending ever downward since 2012 and should through to 2040. The US no longer importing natural gas, she said, is significant. A decade ago, she recalled, the US was poised to import around 108 BCM of gas. “Instead, in 2014, we imported 1 BCM of LNG,” she explained. There is a huge differential of 250 BCM, she pointed out, between the 2005 and 2015 export forecasts for the US.

“So just the fact that we’re not importing what we were importing and the gas from Qatar, Trinidad and Tobago and other sources that was destined for the US is now headed to global markets – that’s changed the energy picture of the globe,” said Ms. Dunnigan. Regarding US LNG export policy, she said that all of the exporters and producers for the LNG coming online from the US in the next 5 years have received licenses or conditional licenses from the Department of Energy and from the Federal Energy Regulatory Commission to export to Free Trade Agreement (FTA) and non FTA countries. “Over 150 BCM of gas has been approved for both FTA and non FTA countries, so probably not all of it will come online in 5 years, but let’s say 100 BCM of it comes online. The first LNG will be exported at the end of this year,” she reported. The abundance of LNG exports from America, she said, could go to Europe, Asia, the Caribbean. She commented, “Those decisions will be made commercially, but the bottom line is, they can go wherever the market allows them to go, because the licenses have been approved.” In relation to the “trilemma” of energy security, climate goals and economic competitiveness and their intersection she called a “critical challenge” in the 21st century. “From a security perspective, one of the most important aspects, from our perspective, is diversity of supply, fuel type and routes,” she said, offering that the US has an “all of the above” strategy regarding this. “Diversity makes sense,” she added. Ms. Dunnigan presented a map of Europe that showed thick purple arrows for inflows of pipeline gas, most notably from Russia and Norway, slender blue arrows depicting LNG inflows from places like Qatar and Nigeria, as well as dots indicating existing and planned LNG terminals on European shores. “Those big arrows from Norway and Russia aren’t going away,” she said. “Europe will continue to benefit from affordable pipeline gas from those places, and they should – but it should also be able to benefit from all of the LNG that’s coming on the market, and to do that when those LNG terminals begin to import gas it needs to be able to move in Europe to any consumer in any country, including the Balkans and Energy Community countries like Ukraine and Moldova.”

The US, she said, strongly supports the Energy Union strategy and will work hand-in-hand with the EU, supporting it through diplomatic engagement. “That means helping countries build interconnectors; getting terminals in places where there aren’t LNG terminals where it might be helpful; getting policies in place that might facilitate the free flow of gas within Europe.” While there’s room for both pipeline and LNG gas, Ms. Dunnigan opined that this must all come together in a free market that lets it move around. The next speaker, Alexander Medvedev, Deputy Chairman of Gazprom’s Management Committee, observed that Russia had been a reliable supplier. “For almost 50 years, our country secures uninterrupted supplies of natural gas with European clients.”

Supplies for Europe, he said, had totalled 4.2 TCM, contributing to the reduction of CO2 emissions by 1.7 billion tons less than coal for producing the same amount of energy. He commented, “The current political turbulence has provoked an unreasonably negative attitude toward gas, including gas sourced from Russia. Instead of having a ‘Golden Age of Gas’, now natural gas is bad; Russian natural gas is awful. Some politicians even demand to rid Europe from dependence on Russian gas.” Russian gas, he said, makes up one-third of Europe’s consumption. Mr. Medvedev asked what the critical level of dependence to be able to sleep well. Russia, he said, had helped Europe reduce its consumption of oil. Today, he noted a distressing tendency that gas power stations in Europe are being put on standby and investments in new gas projects are frozen. “This adversely affects not only the gas industry, but the environment, too,” he said, offering that increasing renewables and reducing emissions simultaneously can only be done by introducing more natural gas.

## 150 years of gas (and a bright future)

Natural Gas Europe, 27.07.2015



Speakers on the World Gas Conference addressed various aspects of the global market for natural gas. Laurent Vivier, Senior Vice President, Strategy, Markets and LNG, TOTAL, said it's tough to speak about gas demand in the next 20 years, when forecasts have been consistently wrong in terms of demand and resources. Total hadn't seen the prospects for unconventional gas. “And now unconventional gas has nearly doubled,” he remarked.

“The life expectancy of gas is now about 150 years of available production at the current rate, which allows us now to see a bright future for gas.

The change in oil prices, he added, has had a dramatic effect on gas, as well as future gas demand. Regarding North America, Europe and Asia, he showed a comparison of gas prices in those places when oil is priced at \$60/barrel and \$90/barrel. Of North America, he said that Total believes there are sufficient resources to meet growing demand of around 2%/year. “We don't think this will affect, substantially, the price of Henry Hub, and I think there is enough, not only to meet domestic demand, but those coming export products,” explained Mr. Vivier. Meanwhile, he said, demand in Asia is booming, but according to a recent Total study, the efficiency of the industry in China has a significant effect, despite appearing to be very small. He offered, “If you change your assumption by just 1% until 2030 it has as much impact on the gas demand as not starting nuclear reactors in Japan – 1%. So if you can imagine that the efficiency of the industrial sector in China will be 56% instead of 57%, it's 10 BCM of gas, so it's pretty substantial and we have to be careful with the numbers we show.” He noted the increasing demand in Asia, around 4.4%/year until 2030, emanating from a variety of sectors. Mr. Vivier explained:



“It will be met by resources of supply that we all know: domestic production, mostly in China; imports by international pipe gas, from Russia or Central Asia; and LNG.” According to his graph, the future of LNG is still in Asia, where the demand will be because it is needed to balance gas demand in Asia in the long-run. Europe, according to him, is “middle of the road” because of the uncertainties of gas demand there, factors like environmental regulation or CO2 prices. He observed, “We don’t see a substantial increase in the LNG demand in Europe by 2020; we see that gas demand will be roughly stable and only increasing after 2020, and a decrease of domestic production, with continued supply from the traditional suppliers. “That will require some extra LNG,” he added, “but only in the period 2020-25, so basically Europe being back on the LNG scene and being able to pull new projects only after 2020.”

He said in North America the shale gas revolution will supply most of the increase in demand in the US. “In the US, everyone thinks that because of cheap gas that you have a lot of gas in power generation – it’s not only because of this,” he explained, saying there are many elements contributing to the displacement of coal, for example state regulations regarding emissions from power plants. He recalled that every year for the last 5 years, Total has been predicting a rebound in European gas, but now it may have reached a low point and could rebound. Mr. Vivier commented, “Gas demand now is sustained in Europe because of very high efficiency CHPs; because it is still in countries which don’t have many alternatives for producing power don’t have the opportunity to switch to coal. So the demand that you have today is pretty resilient.” That said, he reports that Total sees a demand increase for Europe in the future, as well as an increase in the carbon price. “New regulations will kill some inefficient coal plants and we will see a rebound of gas demand in Europe, post 2020, at some point attracting some new LNG flows.” In Asia, he said there will be an increase in LNG demand by over 50%. As to where that will come from, he displayed a chart showing those volumes already secured by oil formulas and, in red, what can be divined from Henry Hub-related formulas – those keen to secure volumes in the US, or through contracts which are Henry Hub-related. He stated, “Even if you put all this and imagine that all Henry Hub is going to be diverted towards Asia, you still need some new projects to meet this demand, and the question becomes ‘where will they come from?’“

Taking into consideration other studies Total has done worldwide, the total amounts to an LNG market of around 215 million tons/year, which is expected to double by 2030. “In order to face the incremental demand, and the natural decline of the fields, you need new projects to be sanctioned,” explained Mr. Vivier, who showed a world map of existing projects, those under construction, under study, existing regas terminals and those under construction. “You need all the rest, what we call potential projects, to be built and launched, reaching final investment decision (FID) by 2013 if you want to meet 2030 demand,” he stated. According to him, at \$12-14 or above, at current costs from contractors, some projects may not be developed. “Given the impact of low crude prices, they will not be launched at current levels – it does not make sense.” This means, said Mr. Vivier, that a new contractual framework is needed between buyers and sellers - more reasonable fiscal terms, more reasonable costs – to find a way to launch those projects which are needed to meet future demand.



Indeed, Europe may not see a lot of growth going forward, observes Shankari Srinivasan, Vice President, Power, Gas, Coal Renewables – EMEA, IHS, but her organization sees Europe as the fulcrum of the global gas system and will play an increasing role in being the pivot point and the global gas balancer. Since Fukushima, she explained, the market has focused on selling to Asia, “but now we think the market focus could be moving much more westwards. With China slowing there is more emphasis turning to India and perhaps even the Middle East.” But, she said, IHS expects the focus to increasingly be back on Europe. She commented, “Europe is ready, has substantial amounts of regas capacity – significant capacity that could swing up or down in summer versus winter, as well as an incredibly amount of pipeline capacity, and so much of it depreciated already.”

Demand weakness, she noted, persists. The global gas market will move from a tight to a loose market in the next 2-3 years, opines Ms. Srinivasan. “In many areas, production growth is expected to exceed demand growth and also including markets, therefore we believe there may be a significant amount of additional deliveries – flexible deliveries – set to grow in Europe,” she explained. She recalled the cycles of the LNG market, like in 2011 when the pendulum swung towards tight supply in the wake of the Fukushima nuclear disaster in Japan. “Now we would say the pendulum is starting to swing back and will be really in full force in 2016 back to ample supply.” While market growth may feel weak to many players, she said supply growth is just at the beginning. Ms. Srinivasan presented a graph of how supply is set to grow. “From 2015 to 2020 we see an additional 120 million tons of LNG capacity being added, so really a very substantial growth in the market.” Regarding how that gas is contracted – fixed destination versus flexible destination – she observes that while a lot is contracted, not much is contracted in an “anchor market.” What about Europe makes it a “global balancer?” Ms. Srinivasan explained Europe is still a very large gas market – over 500 BCM, very liquid traded markets, good rules for 3rd party access to gas infrastructure, a substantial amount of underutilized gas capacity, volume flexibility for pipeline contracts, and a large degree of price-responsive demand, particularly in the power sector. “So, clearly a market that could play this balancing role on quite a flexible basis.” According to her diagram, the EU 28’s import gap to 2030 has gone down 133 BCM – equivalent to 25% - since 2010, due to a forecast of declining demand and a slight increase in supply.

She offers, “As we all know, indigenous production is in decline in Europe, although there is a potential for developing shale in terms of geological reserves, we are not too optimistic about the actual development of it – so the import gap is decreasing, despite a pretty flat picture for demand.” The competition for the market, she explained, is between Russia and LNG. “Here I think we’d like to postulate that maybe there’s a change that could be coming in Russian strategy and approach to the market.” Should Russia, then, go for price maximization or market share growth? Ms. Srinivasan said: “We’ve observed that over the years the choice has generally been for price maximization and, more recently, taking over the role that the Dutch have played of being an accommodating supplier to the market, so at times we see much less Russian flow when other pipeline supplies have come onstream, and then we see more when there’s been some interruptions as well.” She contended the question on gas going forward is, how will the gas market respond to shale gas? “Is this now the new Russian supply choice? That Russia may in fact be looking at defending market share, because there may otherwise be a permanent loss of marketshare?” she asked.



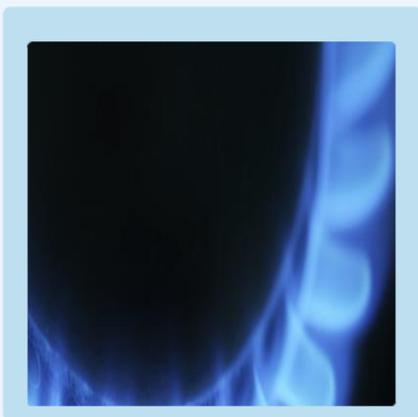
As old infrastructure is replaced by more efficient infrastructure, she pondered whether flat demand for Russian gas may actually be on the decline. Meanwhile, she observed that LNG contracts continue to be signed. “The prospective outlook to 2020 is firm, that we will see an additional 50-60 million tons from North America of LNG entering the market.” The global gas market, she concluded, is moving from an era of tightness to one of oversupply, and the response of Europe’s traditional pipeline suppliers will be the major driver of gas prices in the medium term. She added, “Watch for a change in these pipeline suppliers and the fact that perhaps this permanent loss of demand may be what changes the approach going forward.” Charles Ebinger, Senior Fellow, Energy Security Initiative, Foreign Policy at The Brookings Institution, spoke about North American natural gas exports. Referring to US restrictions on selling LNG to certain countries, particularly those with whom the US does not have a free trade agreement, he explained that in 2014 the Department of Energy had revised the process, which includes a “public interest determination” and, following the receiving of an environmental permit, projects are moving along fairly quickly. Canada, he said, used to be one of the top US suppliers of natural gas. “And, of course, the discovery of so much shale gas in the US has devastated the Canadian gas industry, because it has lost a huge portion of its market share in the US.” This, he said, has led the Canadian government to look at developing LNG projects, particularly in British Columbia, where there are 19 projects before the BC government. “Because of very strong opposition from native groups and environmental groups, none of these projects in reality is moving forward,” he reported.

“We have a very negative view of how successful Canada will be exporting LNG in any reasonable time horizon.” According to Mr. Ebinger, the US has five projects that are approved, totalling around 10.6 BCF. The first project from Cheniere will come into the market in early 2016, he said. He explained that all existing and future projects have been predicated on: 1) spot prices and Henry Hub remaining low (but they are projected to rise gradually); 2) that prices in Europe and Asia will remain high (but spot prices have tumbled), and 3) that low prices will stimulate steady demand growth, “but actually we have found so much shale gas that we are having price pressure. And even with the change in oil prices, we still see gas production remaining fairly robust, although that of course could change if these prices remain for any length of time.” Things that could influence how the US natural gas production fits in to the world market, he explained, are the pace of China’s imports from Russia and Central Asia; the degree and price at which other countries potentially will actually develop their shale reserves; interfuel competition from other sources – coal looks to remain competitive on the Asian power market; whether Russia be able to send LNG to Asia; the speed and degree Japan will reengage its nuclear resources; and the ability to make LNG a transport fuel. “And, finally, are we going to have a carbon price or not?” he added. Mr. Ebinger remarked on the very recent announcement by the environmental community that gas must be phased out of the California market. “This will be the next green environmental battle in the US, and of course oftentimes what happens in California is a harbinger of what happens in the broader nation down the road,” he explained. Brownfield projects, he said, are favorable in the US, due to relatively low level capital costs as well as Henry Hub pricing and flexible contracts that are allowing a lot of LNG not to have destination clauses. “We also have capacity costs that are unfixed and can rise or fall with labor demand; oil prices play a significant role as we have a lot of associated gas; and we also wonder about the absorptive capacity of Europe,” he offered.

If Canadian projects do go forward, Mr. Ebinger opined that they may miss the curve for demand in the Asian market. “So we think the Canadian situation remains very problematic – there’s strong possibilities for enhanced trade, which is already occurring between the United States and Mexico. We already are exporting nearly 4 BCF to Mexico via pipeline,” he reported. Though no outright ban exists, he said that US regulations are still fairly convoluted and cumbersome. “The Cheniere project has already spent \$100 million in the regulatory process,” he explained, “but on balance we only expect 2-3 LNG projects in the market by 2020 and 5-6 by 2025 – keep in mind that we have over 20 before the Federal Regulatory Authorities.” He reiterated that Canada is not likely to have a project by the end of the decade. “And while North American LNG will diversify global supply, it will not be the cure-all that many people have argued it might be,” concluded Charles Ebinger.

## Companies cling to downstream business for decent financial results

Natural Gas Europe, 27.07.2015



Following Statoil and Total, other majors reported serious difficulties in the first half of the year, proving once more that the downstream segment is the only part of their business that achieved good results with respect to the same period in 2014.

Anglo-dutch Shell published a note with its unaudited results, reporting that cash flow from operating activities fell from \$ 22,625 million to \$ 13,156 million. The upstream reported a drastic fall from \$ 10,432 million to \$ 1,712 million (-83%), while the downstream jumped from \$ 2,922 million to \$ 5,607 million.

‘In Upstream, earnings were impacted by the significant decline in oil and gas prices and decreased production volumes, partly offset by lower costs and depreciation’ the company wrote on Thursday. The dividend per share remained stable. Similarly, Italy’s ENI suffered despite an increase in production. ‘Increased guidance for full-year production growth from 5% to over 7%’ the company reported on Thursday. Despite the increase in production, the adjusted net profit plunged 84% to €0.14 billion for the quarter, and 62% to €0.79 billion in the first half. “In the first half of the year we have achieved excellent industrial results across our businesses, which enable us to revise upwards several of the targets set out in the strategic plan presented in March. In upstream we delivered record production growth and we have significantly contained costs. Furthermore, the recent start-up of production in the Perla field in Venezuela, and forthcoming start-up of Goliath in Norway will provide an important contribution in the second half” Claudio Descalzi, Chief Executive Officer, commented. Descalzi also explained that the mid-downstream businesses all reached profitability, as a consequence of increased efficiency of the refineries and successful renovations of gas contracts.



“Despite the halving of oil prices, we have generated €5.7 billion of cash flow, in line with the first half of 2014, which has financed almost all capital investment in the half year.” Repsol’s results further confirmed the centrality of the downstream businesses for oil companies. ‘During the first half of 2015, Repsol posted adjusted net income of 1.24 billion euros, 35% more than the 922 million obtained in the first half of 2014... The quality of its industrial assets and the efficiency of processes in the Downstream business units allowed Repsol to take advantage of the improvement in international margins and offset the Upstream results, which had been affected directly by the fall in international crude oil prices and by interrupted production in Libya’ the Spain-based company wrote on Thursday. Also France’s service company Technip reported a double-digit decrease in adjusted revenues.” Second quarter results were in line with the expectations we set out in our July 6th announcement. During the quarter, we continued to pursue our key strategy initiatives, to position ourselves on significant new projects and we launched a major restructuring plan across the Group to address the challenging market outlook we anticipate” Thierry Pilenko, Chairman and CEO, commented.



# Announcements & Reports

## ► *An Assessment of U.S. Natural Gas Exports*

**Source** : Brookings

**Weblink** : [http://www.brookings.edu/~media/research/files/papers/2015/07/us-natural-gas-exports/lng\\_markets.pdf](http://www.brookings.edu/~media/research/files/papers/2015/07/us-natural-gas-exports/lng_markets.pdf)

## ► *Will Equals Way: Unconventional Gas in Russia*

**Source** : PISM

**Weblink** : [http://www.pism.pl/files/?id\\_plik=20015](http://www.pism.pl/files/?id_plik=20015)

## ► *This Week in Petroleum*

**Source** : EIA

**Weblink** : <http://www.eia.gov/petroleum/weekly/>

## ► *Natural Gas Weekly Update*

**Source** : EIA

**Weblink** : <http://www.eia.gov/naturalgas/weekly/>

# Upcoming Events

## ► *7<sup>th</sup> South Russia International Oil & Gas Exhibition*

**Date** : 02 – 04 September 2015

**Place** : Krasnodar – Russia

**Website** : <http://www.oilgas-expo.su/en-GB>

## ► *22<sup>nd</sup> 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>



### ▶ 3<sup>rd</sup> 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.lnggc.com/?xtssot=0>

### ▶ 23<sup>rd</sup> 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>

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### ▶ Abu Dhabi International Petroleum Exhibition & Conference

**Date** : 10 – 13 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>



17<sup>th</sup> Annual  
**CIS OIL AND GAS  
TRANSPORTATION  
CONGRESS**

### ▶ 20<sup>th</sup> 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/>