

## Turkey a gateway for international investors to Iran?

Natural Gas Europe, 23.07.2015



Azerbaijan and Armenia are getting ready for business opportunities stemming from the likely lifting of international sanctions against Iran. Indeed, Iranian officials showed interest for “projects like TAP and TANAP”, while Armenia voiced its willingness to take part in the construction of a gas pipeline sidetracking Russia. A ratification of the P5+1-Iran deal on Iran’s nuclear program would change the rules of the game for these two countries.

Turkey could join them and try to reap the benefit of recent developments. Ankara could take advantage of a possible decrease in oil prices due to an uptick in Iranian export.

However, this is a process that will require time for three reasons: the business environment in Iran is difficult; international investors remain cautious and look at the country with an attentive eye, while a smokey cloud of political uncertainties hangs over the deal in the US, where President Barack Obama is about to face internal strifes to stop the deal. In this sense, the relation between Turkey and Iran requires time, relatively stable and predictable diplomatic developments, and a proof of leadership from Barack Obama. “Iran has long been an elephant in the room in world energy because of the sanctions. Now that this constraint will be progressively lifted from early 2016 Iran can move forward to fully utilise its oil and gas potential” Mehmet Öğütçü, chairman, Global Resources Partnership, told Natural Gas Europe. The interest for Iran’s riches is clear. It comes as no surprise that, after hosting the negotiations, Vienna will capitalise on the thaw of ties between Iran and the six world powers.

On Thursday and Friday, the Iran-EU conference will take place in Vienna, along with Austrian speakers, high-profile Iranian experts, ranging from Deputy Ministers to scientists, will make the case for investments in the country. Iran could be soon under the financial spotlights. Nonetheless, this will not immediately translate into oil and gas production. As said in February by Manfred Hafner, Professor at Johns Hopkins SAIS, Sciences Po Paris, Teheran will need at least 10 years to fully develop its potentials. Öğütçü agrees, adding that Iran will soon face a new business environment, where producers have significantly less bargaining power than a decade ago. This will also come along with another set of difficulties. “Tehran will have to deal with the new global energy dynamics where the buyers are likely to be the king in the face of oversupply in oil and gas. Also, Iran has to inspire confidence among the international investors given the bitter past experiences. Its terms of production sharing contracts have to be revised to offer more carrots. We do not have a clear picture as to who has the upper hand in decision-making on energy matters - the religious leader, the president, the revolutionary guards? Therefore, we do not expect a surge of investment to Iran’s energy sector in the near future. It will take time” the former Turkish diplomat explained.



Several experts contacted by Natural Gas Europe agreed on the room for more cooperation between Iran and Turkey. It is clear: Iran wants to sell hydrocarbons, and Turkey is willing to buy oil and gas to diversify its energy supplies. “The deal on Iran’s nuclear programme reached in Vienna opens new trade opportunities for Turkey, in particular as far as energy is concerned. The lift of international sanctions will indeed allow Iran to consistently expand its oil and gas market” Simone Tagliapietra, Visiting Fellow, Bruegel, wrote to Natural Gas Europe. He explained that there are two elements to keep in mind. “First of all, new oil supplies from Iran will naturally have an impact on global oil prices, thus also favouring Turkey’s oil import needs. Secondly, new investments will allow Iran to develop its gas sector, currently still underexploited. Considering that the country owns the largest gas reserves in the world, this will represent a game changer for both world gas markets and Turkish gas market. In fact, in the future additional volumes of gas might well reach Turkey if a new trade scheme will enhance the currently weak gas relations between the two players, in the interest of both of them.” According to Ögütçü, there are other events to keep an eye on. He basically argued that many international firms will not directly enter the Iranian market, but will prefer the Turkish gateway to test the waters, before embarking in long-term commitments in Iran. “Turkey will benefit from the removal of sanctions in the foreseeable future. Most international firms will prefer to operate in Iran through the Turkish door, at least initially until full confidence will be achieved. Ankara and Tehran do not see eye to eye on regional issues and need to try converging positions or minimise their differences so that a common approach could possibly be forged to mutual benefit. Both nations have imperial spines and co-existed effectively since the Treaty of Kasr-I Sirin without a change in the borders” There are several complexities in the region, and some divergences between Iran and Turkey. Gas is one of these hot issues. Turkey, which is the main market for Iranian gas exports, is complaining about the price it is paying for Iranian gas. Russian and Azeri gas is indeed significantly cheaper. Ankara is asking for a significant price discount, also eyeing Kurdish gas as a feasible alternative.

Celebrations can wait for another reason. In the next two months, the US will be the battleground of serious wrangling between the Obama administration and the Congress. As history shows, American position on Iran is not easy to understand and it could be quite unpredictable. On top of that, Israel might have an influence on these decision-making processes in Washington. Israel’s Deputy Foreign Minister Tzipi Hotovely made it clear on her Twitter account, with statements ranging from “this agreement is a capitulation of historic proportions by the west to the Iran-led axis of evil” to “Israel will act with all means to try to stop the agreement being ratified.” In other words, the next two months could be the beginning of another roller-coaster, this time probably more public than the behind-doors P5+1- Iran negotiations. The outcome of the White House vs Congress battle, though, is equally difficult to foresee.

## BOTAS to invest \$74 million for supply security

Anadolu Agency, 24.07.2015



BOTAS aims to increase security of natural gas supplies from the east of the country with a new pipeline.

The company aims to secure supplies through the new pipeline originating from eastern sources to Turkey's west and southwest. In addition the company plans to have a sustainable transmission service. The Mersin-Karaman Natural Gas Pipeline will pass through Mersin, a city and port in southern Turkey and will end near Ayranci, a district of the Karaman province in Central Anatolia. The length of the pipeline is estimated at around 138-kilometers with a cost of around \$74 million.

The pipeline will consist of natural gas pipes, line valves, pigging stations, pressure measurement and reducing stations. For the construction phase of the pipeline, 200 will be employed while 10 management personnel will be engaged to oversee the project. Once the environmental impact assessment report is successfully approved, the pipeline is planned to be operational in 30 months.

## Major obstacles stand in way of 'Turkish Stream'

Anadolu Agency, 23.07.2015



Experts believe that there are many crucial obstacles standing before an intergovernmental agreement between Turkey and Russia on the so called 'Turkish Stream'.

Russian President Vladimir Putin announced the Turkish Stream project in Turkey which aims to carry Russian gas to European markets via the Black Sea and Turkey. Although it has been nearly eight months, an agreement between Turkey and Russia for the Turkish Stream pipeline project has yet to be signed. The main issue between the two countries is Russia's persistence in using the subject of gas discounts on Russian gas supplies to Turkey as leverage against Turkey.



Turkey's Energy Minister Taner Yildiz had announced on Feb. 27 that Russia agreed to give Turkey a 10.25 percent discount on natural gas supplied from March onwards. However, according to official sources, Russia is not willing to provide the agreed discount unless Turkey signs the agreement on the Turkish Stream. As Russia's second biggest client for its natural gas, Turkey requests the discount be provided regardless of the status of the Turkish Stream project. Turkish officials state that natural gas prices are linked to oil prices, and added that oil prices have fallen by more than 40 percent since June, 2014. Another important difficulty on the negotiation table is the clause over the pipeline's incorporation. While Turkey requests the pipeline be incorporated into its national gas grid to have gas flowing through its grid freely, Russia's energy tsar Gazprom wants the pipeline to be isolated from Turkey's grid and to reach the Turkish – Greek border as a singular natural gas pipeline.

Commenting over the disputes, Volkan Ediger, chief of the energy systems engineering department at Kadir Has University, estimates that conditions Russia put forward during negotiations were very harsh. "Russia wants the pipeline to pass through Turkey and reach Greece and pay Turkey a regular transit fee," Ediger said. He pointed out that Turkey had previously been open to Russia's conditions for the project to show goodwill and in the hope that it would enhance its bargaining power, "However, Turkey now understands that it's getting nothing in return," Ediger underlined and added that now Turkey is reluctant to advance negotiations with Russia on the project. Ediger pointed out that with the impending lifting of sanctions against Iran, which holds the world's largest natural gas reserves, Turkey has new clout that it can use during negotiations with Russia.

Volkan Ozdemir, head of the Institute for Energy Markets and Policies, EPPEN, is another expert that believes Turkey is now sending a clear signal to Russia that it is unwilling merely to be a gas carrier facilitating the creation of a gas hub in Greece instead of on its own territory. "Russia wants the pipeline to pass through Turkey and use Turkey as a corridor, however Turkey will no longer let Russia proceed with this idea," Ozdemir said. Underlining that Turkey wants natural gas that would come through the pipeline to be marketed together with Russia, Ozdemir said if the two countries want to work together, there has to be a mutual center where gas prices are agreed bilaterally and marketed to foreign countries together. The expert also stressed that Turkey is not bringing the gas trade pricing issue to the table during negotiations with Russia. "Gas prices in Europe are breaking off from being indexed to oil prices, while Turkey still uses the same index, which causes its market to move away from European gas markets," Ozdemir said. He added that if Turkey brings this issue to the table, Russia may have to offer unprecedented discounts.

# Iran approved \$2 billion projects with European partners, says Khazaei

Natural Gas Europe, 23.07.2015



During the first day of the Iran-EU Conference, signs of strong cooperation emerged, with Iranian leaders making the case for European investments in the country. According to officials, Iran has completed negotiations with some European companies approving more than \$2 billion in projects, with Iranian LNG possibly reaching Europe in 5-10 years.

**“We are recently witnessing the return of European investors to Iran. Some of these negotiations have concluded, and we have approved and granted them the foreign investment licences and protections,”** said Mohammad Khazaei.

During his intervention in Vienna, he explained that the government held negotiations with European companies and approved projects for more than \$2 billion in the past couple of weeks. Meanwhile, according to TASS, Iran’s Deputy Oil Minister Amir Hossein Zamaninia said that the country could start LNG supplies to Europe in 5-10 years. The conference in Vienna seems like the place where political declarations are getting along with serious business meetings. Apart from the oil and gas industry, much attention has been devoted on the automotive and heavy vehicle industry. According to online documents and pictures, Iran also signed a contract for JV with German and Austrian companies. Apart from Italian, German, French, British, Spanish, and Austrian companies, also Turkish players voiced their interest to increase cooperation with Iran.

## Iran nuclear deal: what it means for natural gas

CS Monitor, 20.07.2015



Saudi With a nuclear deal in hand, it's not just oil that Iranians can offer. The country has the second biggest natural gas reserves in the world. The historic deal between Iran and the P5+1 group has several oil majors and oil refiners considering the impacts of new Iranian crude hitting the global oil market.

“As soon as Iranian oil becomes available, we will certainly start buying again. Motor Oil was always very fond of Iranian crude,” said Loukas Tripelopoulos of Motor Oil Hellas SA. The removal of international sanctions would be a game changer for the Iran.

Estimates vary, but Iran could pump somewhere between 400,000 and 600,000 barrels per day over the next year or so, which will enter a market that is already oversupplied by around 2.6 million barrels a day. Much like its oil sector, Iran's natural gas industry has been adversely affected by the U.S. and European-led sanctions that have restricted the flow of foreign direct investment and the transfer of technology. (Related: [This Is Why Oil Markets Shouldn't Worry About Iran's Comeback](#)) Going by a recent report from Fitch, Iran has close to 34 trillion cubic meters of natural gas reserves, which is around 18 percent of the total global natural gas reserves.

## Prime Minister Netanyahu to review gas export quota

Natural Gas Europe, 22.07.2015



Prime Minister Benjamin Netanyahu is working on upping the export quota to allow additional exports from Israel's 10 trillion cubic feet Tamar field to Egypt's liquefied natural gas plant.

Exporting to Egypt's export terminal would allow Israeli gas to reach the European market. In 2013, a fierce debate divided the political class and the Israelis alike between those who fought for gas to be reserved for domestic consumption and those who believed exports would generate a healthy inflow of gas revenues and encourage further exploration activities off the Israeli coast.

In June 2013, the Israeli cabinet approved to export 40% of Israel's natural gas reserves and to retain 60% of the discovered gas for domestic use. The decision was contested before the Supreme Court but the appeal was rejected and the High Court of Justice ratified the cabinet decision. Netanyahu's efforts to up the export ceiling and review the natural gas framework are motivated by his plan to seal a deal with Spanish Union Fenosa Gas which owns together with Italian ENI a liquefied natural gas plant in Damietta Egypt. The Tamar partners have been engaged in talks with the Spanish company and signed a memorandum of understanding to sell 67.5 billion cubic meters of gas over the next 15 years. Israel's ambition expands beyond the regional market as it plans to use Egypt's unused export terminals to access European markets. Israel is also looking to export gas to neighbouring Jordan undergoing a severe energy crisis. Talks with neighbouring Cyprus are also underway as the two newly gas producing Eastern Mediterranean countries are discussing potential ways to merge export infrastructures including a pipeline to Europe via Greece. The discovery of natural gas fields in the Levant basin is likely to significantly strengthen the energy security of the countries directly involved. Their entry into the export market will however require important efforts to end domestic deadlocks and overcome geopolitical hurdles. According to Al Jazeera, the possible kidnappers are part of the Jaish al-Qabail militia, which many think to be linked to the Parliament in Tobruk, which is the Libyan authority recognised by the International community. The Italian Minister Paolo Gentiloni did not confirm the affiliation of the kidnappers. On his Twitter account, Gentiloni simply confirmed Rome is working on the file.

## Developing Aphrodite field should be 'immediate priority'

Cyprus Mail, 21.07.2015



Cyprus island' immediate priority on the hydrocarbons front should be to develop the Aphrodite gas reservoir, and although an export pipeline to Egypt appears to be the best solution for monetising the gas, there are question marks over its feasibility, recent research has concluded.

The findings of two papers commissioned by the GMF were presented to media in Nicosia. Presenting main findings was Michael Leigh, consultant and senior advisor to the GMF. The papers are titled "Financing gas projects in the Eastern Mediterranean" and "Egypt: A market for natural gas from Greek Cyprus and Israel?"

The first provides a detailed assessment of the factors that influence investment in gas and related infrastructure projects worldwide with a focus on the Eastern Mediterranean. It examines the relative merits of project finance and corporate finance for the development of offshore gas resources and for bringing the gas to market. In the authors' opinion, Greek Cyprus' most immediate priority will be to develop the Aphrodite field and to continue exploration, in light of some initially disappointing results and low oil prices. Given the country's financial position, the authors suggest project finance might make sense as it allows the state to participate.

The main uncertainties in Greek Cyprus focus on the ultimate size of the resource. The preferred solution at the moment seems to be a pipeline to Egypt, if this proves commercially feasible. However, alternative gas monetization options, such as LNG (Liquefied Natural Gas) could again be considered if additional gas quantities are discovered.

The second paper analyses the opportunities and risks associated with the possible export of natural gas from Israel and Greek Cyprus to Egypt. It finds that there will be significant shortfalls in gas supplies to the Egyptian market in the decade ahead despite major new investments, efforts at energy saving, and the reduction of subsidies. The commercial case for re-exports via Egypt is stronger than the case for supplying the Egyptian market. Both scenarios, however, face legal, political, and commercial challenges. Moreover, the paper found, a race between Israel and Cyprus might develop since Egypt may not be able to absorb gas from both. Ultimately, success in the pipeline trade will depend on finding a commercial structure that balances risks and rewards for the different parties involved. Regarding the prospects of solving the Cyprus problem in relation to energy, Leigh said that a settlement will create stable conditions to attract investors and also conditions in the gas market allowing companies to proceed with further research for natural gas reserves. Also on Monday, Leigh briefed energy minister Giorgos Lakkotrypis, and on Tuesday he will be meeting with President Nicos Anastasiades, and on Wednesday with foreign minister Ioannis Kasoulides. During his stay in Greek Cyprus, Leigh will see Turkish Cypriot leader Mustafa Akinci and representatives of companies active and in the field of energy in Greek Cyprus. The GMF is an American public policy think tank and grant-making institution dedicated to promoting greater cooperation and understanding between North America and Europe. Founded in 1972 through a gift from the West German government on the 25th anniversary of the Marshall Plan, GMF contributes research and analysis on transatlantic and global issues.

## Israel's Delek confident of quick sale of Tanin, Karish gas fields

Reuters, 20.07.2015



The owners of the Karish and Tanin natural gas fields off Israel said they are confident of meeting a disposal timeframe proposed by the government to break up what it sees as a monopolistic partnership in the eastern Mediterranean. The undeveloped fields together hold about 3 trillion cubic feet (tcf) of gas but their development has been at a standstill since a regulator in December deemed a partnership between Delek Group and Noble Energy a monopoly.

Prime Minister Benjamin Netanyahu has been pushing to ratify a disposal deal quickly so exploration can resume. Under a roadmap put forward by the government.

Noble and Delek will have 14 months to find a buyer for Tanin and Karish, which analysts say could together be worth \$1.5 billion. Delek will also have six years to sell its 31.25 percent stake in the larger Tamar field, and Noble is being forced to lower its Tamar stake to 25 percent from 36 percent. Tamar holds 10 tcf and analysts value it between \$13 billion and \$14 billion. Noble and Delek will keep control of the largest field in the region, Leviathan. “There was no other choice but to agree to this roadmap,” said Yossi Abu, CEO of Delek Drilling, a unit of Delek Group. “We were aware we were taking a hit, but we didn’t want to wait any more to develop the gas fields,” he told Reuters, referring to their reluctance to sell off billions of dollars in assets. “We believe that if this roadmap is approved, it will bring regulatory certainty and stability to Israel and we are confident that we will be able to bring to Israel new operators to develop Karish and Tanin,” Abu said. If the group does not complete a sale in the allotted time, the projects will be turned over to a trust that will sell to the highest bidder. Italian utility Edison, owned by France’s EDF, had expressed interest in Tanin and Karish, but talks faltered due to the regulatory uncertainty.

## Sale of Tanin and Karish gas fields to proceed

Natural Gas Europe, 23.07.2015



The owners of the Tanin and Karish fields, two natural gas fields located off the Israeli coast and estimated at a combined 3 trillion cubic feet of gas (Tcf) are set to proceed with the sale of the two gas fields as part of a plan proposed by the Israeli government.

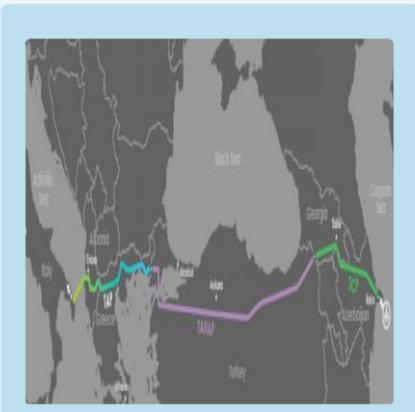
The sale of Tanin and Karish, considered small in size in comparison to the larger 11 Tcf Tamar field and 22 Tcf Leviathan field, is part of an effort to break a cartel. Texan Noble Energy and Israel’s Delek Drilling and Avner Oil Exploration were accused by Israel’s Antitrust Authority of forming a cartel that would distort competition.

In December 2014, Israel’s antitrust commissioner announced that Noble Energy and Delek Group controlled most of the shares in the gas fields in Israel’s Exclusive Economic Zone and hence constituted a monopoly. The dispute between the Leviathan partners and the competition regulator spurred fears that production from the Leviathan will be delayed beyond 2018, which may jeopardize regional deals with Egypt and Jordan. After a lengthy debate that divided the political class, the government issued a proposal that would allow the partners to pursue their partnership on the condition they sold Tanin and Karish estimated at \$1.5 billion. Delek will also have six years to sell its 31.25% stake in the Tamar field, and Noble to reduce its Tamar stake to 25% from 36%. Noble and Delek will keep control of the Leviathan.

The government's proposal was not unanimously accepted by the Israelis as some considered it too lenient and siding with Noble against the interest of the public. They fear that allowing Noble and Delek Group retain shares in Israel's largest offshore fields will result in high prices for the private and commercial consumer. The resolution of the dispute has however the merit of allowing progress in Israel's hydrocarbon industry. Analysts say regulatory certainty is a key element for Israel to successfully develop its offshore fields, retain investors and enter the export market. Israel and its Eastern Mediterranean neighbours have the ambition to sell gas beyond regional markets, to Europe. Egypt's unused export terminals could allow Cyprus and Israel a route to far-reaching destinations.

## Technip awarded with tap onshore contract

Natural Gas Europe, 21.07.2015



The TAP selected Technip for a Project Management Consultancy (PMC) Services contract for the onshore section of the pipeline designed to transport gas from the Shah Deniz field to the European market.

'The PMC contract awarded to Technip will cover the onshore portion of the pipeline from Greece to Albania and in Italy. The services will include the overall project and site management, procurement and subcontracting for all the EPC packages throughout the engineering, procurement and construction phases, as well as warranty management and the project close-out' reads a note released.

The project completion is scheduled for the first quarter of 2020."This contract is an important milestone for Technip PMC. With this award, Technip will be able to reaffirm its strong project management capabilities, through the execution of a very prestigious project" Riccardo Moizo, Senior Vice President of Technip PMC, said in the note. The services will be mainly performed at TAP's headquarters in Baar, Switzerland, and Technip's office in Rome, Italy. The TAP pipeline will start from the tie-in with the TANAP portion of the Southern Gas Corridor project, at the Greece/Turkey border. The pipeline will then go through Greece and Albania, to eventually cross subsea the Adriatic Sea to end in Puglia, Italy, where it will connect to the Italian natural gas network. At the moment, TAP is a joint-venture between BP (20%), SOCAR (20%), Statoil (20%), Fluxys (19%), Enagás (16%) and Axpo (5%). Statoil could soon sell its share to Italy's Snam, as recently reported by Italian daily newspaper Corriere della Sera.

# Azeri gas export up 7% despite halting deliveries to Russia

Natural Gas Europe, 07.07.2015



Azerbaijan's gas export increased by almost 7 percent in the first half of 2015, despite the country having stopped gas deliveries to Russia during the current year.

According to the State Customs Committee of the Republic of Azerbaijan's report, the country exported about 4.548 bcm of gas during six months of 2015, which indicates 6.8 percent increase year-to-year. About 896 bcm of the mentioned figure is Azerbaijan's gas export to Georgia, as well as gas swap with Iran and the rest of volume is its gas deliveries to Turkey. In total, Azerbaijan has planned to increase gas production level from 29.7 bcm in 2014 to 30.2 bcm in 2015.

Azerbaijan permitted Russia to supply gas to methanol plant. After a month Russian Gazprom announced that it is preparing to export gas to Azerbaijan, Baku confirmed on July 15th that AzMeCo methanol company will received Russian gas and the country has already permitted Gazprom to start gas supply. The head of the State Oil Company of Azerbaijan Republic (SOCAR) Rovnag Abdullayev told reporters that AzMeCo hasn't signed long-term gas contract with SOCAR and we don't have resources for this methanol plant. The chairman of Management Board of Gazprom Alexei Miller explained during a meeting with the President of SOCAR Rovnag Abdullayev on June 19 that "due to the increasing domestic gas consumption and economic growth in Azerbaijan, Gazprom is ready to satisfy the country's demand for gas import in required volumes." According to his statement, Gazprom is ready to export 1 bcm to 1.2 bcm of gas to Azerbaijan by the end of 2015. AzMeCo's final production capacity is 720,000 tons per annum, but since August 2014, AzMeCo has produced and exported 191 thousand tons of methanol.

# President: Azerbaijan's reserves enough to supply Europe with gas for decades

Trend, 22.07.2015



Azerbaijan's reserves are enough to supply Europe with natural gas for decades, said Azerbaijani president Ilham Aliyev. He made the remarks at the joint press conference with the President of European Council Donald Tusk in Baku July 22. "Azerbaijan's proven gas reserves are about 2.6 trillion cubic meters, Shah Deniz, which is so far the only resource for the Southern Gas Corridor, holds more than 1.3 trillion cubic meters.

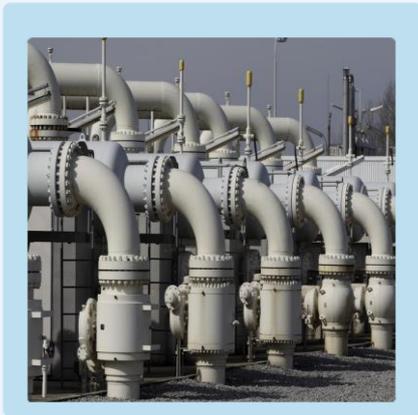
"The Southern Gas corridor project, which was launched last September in Baku, is already in the active phase of implementation," said the president.

"Azerbaijan initiated this project, and is actively working with its partners, neighboring countries, investors, to implement the project on time." President Aliyev went on to add that the Southern Gas Corridor is the project that unites countries and which is to the benefit of investors, transitors and consumers. "This March, TANAP, which is the part of the Southern Gas Corridor, started to be constructed, and we're on time," said the president. "TANAP is the project of energy security, and today energy security cannot be separated from national security," said the president, adding that TANAP is also a project of energy diversification. TANAP project envisages transportation of gas of Azerbaijan's Shah Deniz field from the Georgian-Turkish border to the western borders of Turkey. TANAP's initial capacity is expected to reach 16 billion cubic meters of gas per year. Around six billion cubic meters of this gas will be delivered to Turkey and the rest of the volume to Europe. Turkey will obtain gas in 2018, while Europe will get it in early 2020 after the Trans Adriatic Pipeline (TAP) is constructed. The project's cost is estimated at \$10-\$11 billion.

The president further said that the Southern Gas Corridor is not only the diversification of roots but more importantly, diversification of supply sources. "Azerbaijan, with its supply sources, infrastructure, and experience of implementing mega energy projects is playing its role here," said Ilham Aliyev. The Southern Gas Corridor envisages the transportation of gas from the Caspian Sea region to the European countries through Georgia and Turkey. At the initial stage, the gas to be produced as part of the Stage 2 of development of Azerbaijan's Shah Deniz field is considered as the main source for the Southern Gas Corridor projects. Other sources can also connect to this project at a later stage. 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. Further on, the president said that among the discussed issues were also regional security issues in the broader region of Caspian, Middle East and Central Asia. Ilham Aliyev said that Azerbaijan has good potential for cooperation in culture and humanitarian spheres with Europe. He also said that issues related to religious tolerance, religious dialogue are actively addressed here in Azerbaijan.

# Trans-Adriatic Pipeline Deal: Does European Union, Azerbaijan agreement undermine Russian energy plans?

IB times, 22.07.2015



The European Union and Azerbaijan have agreed on building the long-awaited Trans-Adriatic pipeline that would transport Azeri natural gas from the Caspian Sea to Europe, according to a EU press release.

The pipeline, which would run the length of Greece into neighboring Albania and across the Adriatic Sea to Italy, was almost not agreed on after Greece came close to agreeing, instead, to a similar Russian pipeline in the wake of Athens' disagreement over a bailout deal with its European creditors. The pipeline was symbolic of a changing relationship with Russia, the main provider of natural gas to Europe.

Europe's desire to diversify its energy needs comes amid the breakdown of relations between Moscow and Brussels over the war in eastern Ukraine and the annexation of Crimea, which has led many European leaders to be wary that Russia could use European energy needs as a weapon. "Azerbaijan is our reliable and strategic partner in the energy field, and we want to take this partnership further. One aim of the European energy union is to exclude the possibility of using gas as a threat. The conflict in Ukraine shows that such threats are still possible," said European Union president Donald Tusk during talks in Azerbaijan. European leaders had worried about Greece's overall growing relationship with Russia for some time.

Russian President Vladimir Putin has met with Greek Prime Minister Alexis Tsipras on a number of occasions, with many political commentators believing that Putin's overall plan was to drive a wedge between European Union members and create a conflict of interest inside NATO that would undermine its stance against Russia's action in Ukraine. However, it was not yet known if Greece would agree to the Russian pipeline in addition to the Trans-Adriatic one. Knowing the strategic importance of the pipeline, the United States had also previously lobbied Greece to accept the Trans-Adriatic pipeline over Russia's version. Some Washington officials feared that Moscow's ability to turn off the gas at any moment could weaken its European NATO partners and the alliance's overall ability to react to Russian threats. During meetings in Greece, State Department envoy, Amos J. Hochstein, said the Russian pipeline plan was "not an economic project" but "only about politics." The pipeline, which would meet the energy needs of southeastern Europe, was expected to cost around \$2 billion and was scheduled to be completed by 2018.

# Ex-Minister: Turkish Stream pipeline priority for Greece, despite EU pressure

Natural Gas Europe, 07.07.2015



Greece has put a lot of effort into a gas deal with Russia and will keep on working on the South European gas pipeline despite pressure from the EU former Greek Energy Minister Panagiotis Lafazanis said. The pipeline is a €2 billion extension through Greece of the Russia-led Turkish Stream project.

“We have put in a lot of effort to sign an agreement with Russia on the southern European gas pipeline from Turkey’s border to Central Europe despite pressure and obstacles. Greece may move onto a new path with an independent energy policy,” Lafazanis said

“The European Union is continuing to pressure, attempting to stop the southern European gas pipeline project and its implementation,” Lafazanis added. New minister Panos Skourletis backs Lafazanis’ position, saying that Greece supports the joint construction of a pipeline with Russia which will be part of Turkish Stream in Greek territory. “We support the plan for the construction of the Greek-Russian gas pipeline on our territory. It opens new opportunities for us, which should be used,” Skourletis said. Greek Prime Minister Alexis Tsipras reshuffled his Cabinet on Friday replacing government members who voted against further austerity. Panagiotis Lafazanis was replaced then with Labor Policy chief Panos Skourletis. Of the 300 Greek lawmakers, 229 voted in favor of the austerity bill, 64 voted against it, while six abstained. The Greek parliament’s approval of the austerity bill was needed for talks on the third €86 billion aid package to take place. Lafazanis repeatedly said that Greece would continue supporting the Russian gas pipeline. In May, Washington was calling on Athens not to abandon West-backed Trans-Adriatic Pipeline (TAP) project in favor of Turkish Stream. The Russian project is more profitable for Athens than the TAP, according to Lafazanis, because Greece would own part of it and the project “will have higher tariffs.” The project which is fully financed by Russia will create 20,000 jobs in Greece. At present, Athens and Moscow are working out the details to construct a segment of the South European gas pipeline starting on the Greek-Turkish border that will the EU to be supplied.

During the St. Petersburg Forum in June, the two sides signed a memorandum to set up a joint company to construct the pipeline. The pipeline is supposed to supply 47 billion cubic meters of gas a year. Investment in the construction will amount to €2 billion. Construction will start in 2016 and will be completed by 2019. Greek state-owned Energy Investments Public Enterprise SA and Russian Vnesheconombank will be partners in the project. 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. It is replacing the South Stream project which Russia suspended in December as the EU blocked its implementation.

# How will Azerbaijani energy projects help Greece?

Trend, 20.07.2015



“A The economic situation in Greece is deteriorating, literally, every minute. The country’s foreign debt continues to increase, and new agreements with lenders on financial assistance only entrap the country in debt.

In such a difficult situation, Greece needs to focus on developing strategic projects that will bring revenues and dividends to the country in the future. Azerbaijani projects can also be considered in this regard: a deal on purchasing a share by the State Oil Company of Azerbaijan in Greek DESFA natural gas transmission system operator and the project for construction of the Trans-Adriatic Pipeline (TAP)

Nevertheless, the new Greek government which took office in January 2015, initially ignored these projects. The government showed absolute passivity with regard to SOCAR-DESFA deal. This was followed by an attempt to revise the existing agreements and to reduce the share to be obtained by SOCAR to 49 percent. (This is while the tender, won by the SOCAR, was held for 66-percent share). Thereby, Greek government wanted to retain more than half of the shares in the gas operator. Apparently, the new cabinet presumed that by retaining the major part of shares in DESFA, it will get more revenues from its operation. However, the Greeks forgot that investments in a project are made in accordance with the share and under the current conditions, they won’t be able to make more investments than SOCAR. This made the project even less advantageous and caused doubts about SOCAR’s participation in the project under these conditions. The expectations came true: SOCAR refused from making concessions and changing the existing agreements.



## SOCAR: 30% of work on Southern Gas Corridor project completed

Trend, 21.07.2015



As much as 30 percent of the work on the implementation of the Southern Gas Corridor project has already been completed, German media reported July 21 citing Rovnag Abdullayev, president of the State Oil Company of Azerbaijan. "Contracts have been signed with 162 suppliers from 23 countries," adding that the total cost of these contracts exceeds 10 billion euros.

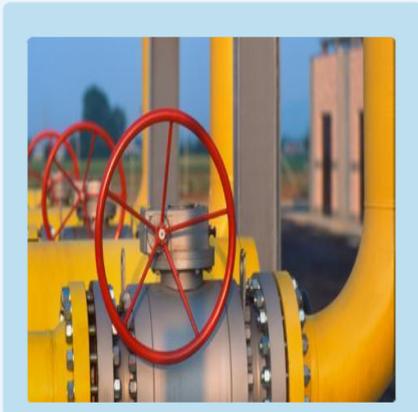
Over 9,500 people work on the project. The president said that seven producing wells have been drilled as part of the Shah Deniz-2 project, while the construction of a compressor station in Georgia and manufacturing of pipes is at full speed.

Abdullayev added that new era will begin in Europe's energy security once Azerbaijani gas is supplied to Europe in 2020. The Southern Gas Corridor is one of the priority energy projects for EU. It envisages the transportation of gas from the Caspian Sea region to the European countries through Georgia and Turkey. At the initial stage, the gas to be produced as part of the Stage 2 of development of Azerbaijan's Shah Deniz field is considered as the main source for the Southern Gas Corridor projects. Other sources can also connect to this project at a later stage. 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 is estimated at \$45 billion..

Greece had an uncertain position on TAP project as well. The government first expressed its commitment and interest in the project, but then hinted that it would like to get more benefits from its implementation. In the case of DESFA, Azerbaijan which has already grew stronger with similar trials when implementing the Baku-Tbilisi-Ceyhan project, made it clear to the Greeks that no one is going to revise the international agreements and contracts after signing. The current situation can push Greece to revise its views. The country's parliament accepted the conditions of the creditors under which they agreed to allocate additional funds to Greece. The paragraph on privatization of state enterprises is among these conditions. This situation can push Greece to be more active in DESFA deal. The cost of the deal estimated at \$400 million euros is no object to Greece. In parallel to the news about possible acquisition of a share in TAP by Italy's Snam company, there are also reports about the desire of Greek companies to obtain share in the project. Participation of one or several Greek companies in the project will naturally require certain investments from them. Nevertheless, in the future, the revenues from the operation of TAP will be even more. Undoubtedly, the flow of funds to Greece's private sector will have a positive impact on the country's economic development. Namely for this reason, Greece should understand that Azerbaijani energy projects will help it.

## SGC's significance increases

Azer News, 16.07.2015



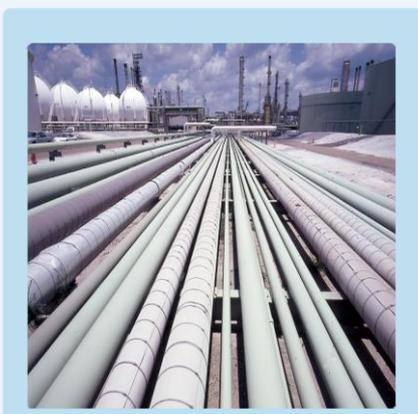
Since Significance of the Southern Gas Corridor is increasing day by day due to the conflict in Ukraine, also the relations between Kiev and Moscow in the gas sector.

Davit Bakradze made this remark, the Georgian State Minister on European and Euro-Atlantic Integration. "There is already cooperation experience between Azerbaijan, Georgia and Turkey," he told Trend. "It is a strategic partnership on the project that has already been formed and aimed at ensuring the energy security of not only region, but also Europe. Georgia is interested in this project both in terms of transit and a country that contributes to Europe's energy security.

"Energy security is one of the key issues for Europe today," Bakradze said. "Diversification is very significant. It is very important for Europe to obtain the energy resources of the Caspian Sea." The Southern Gas Corridor, aimed at diversifying energy supply to enhance Europe's energy security, will connect the Trans-Anatolian and Trans-Adriatic pipelines. At the initial stage, the gas, which will be produced as part of the second stage of development in Azerbaijan's giant Shah Deniz field, will stand as the primary source for the Baku-initiated energy corridor. As part of Stage 2 of Shah Deniz field's development, gas will be exported to Turkey and European markets by expanding the South Caucasus Pipeline and the construction of both the TANAP and TAP.

## Ukraine plays Slovakian card to increase gas storage, more efforts needed

Natural Gas Europe, 21.07.2015



The While Gazprom was turning from a Open Joint Stock Company (OJSC) into a Public Joint Stock Company (PJSC), several reports published on Tuesday indicated that Ukraine increased its requests for reverse flow gas from Slovakia by 34.6% to 23.833 mcm from the 1st of July. Reports said that Uktransgaz would import 24 million cubic metres (mcm) of Slovakian gas up from 17 mcm in previous days.

Ukrainian officials said that "would pump a total of 40 mcm of gas per day into storage, compared with 30-32 mcm so far this month". Nonetheless, in order to meet winter needs, the country should further increase by 50% the gas stored daily.

Meanwhile, Gazprom explained that it changed its name. 'The procedure of renaming Open Joint Stock Company (OJSC) Gazprom into Public Joint Stock Company (PJSC) Gazprom has finished...The Company's name was changed with a view to bring it in line with the provisions of Chapter IV of the Civil Code of the Russian Federation' reads a note released on Tuesday. Other Russian companies made a similar move. For instance, in June, Rostelecom, Russia's national telecommunications operator, changed its legal form to a public joint stock company (PJSC). According to a source who asked not to be named, the change will not have practical consequences, as it is simply the result of a Russian law passed in September 2014.

## The coming Russia-Iran energy axis

Politico, 21.07.2015



**Armenia** As a key negotiator in the landmark nuclear deal with Iran, Russia may have helped to reawaken a powerful competitor for gas exports — unless Russian energy majors get there first.

Once sanctions against Iran are lifted, possibly by the end of this year, the country will need experienced international companies to invest billions of dollars in upgrading and expanding its energy infrastructure. While Iranian oil exports could hit the market within weeks of the sanctions ending, it will take years to develop its gas reserves and ready them for exports, analysts say.

Iran's reopening presents Russian companies such as Gazprom and Lukoil, which have been there before, with the chance to put money into potentially lucrative new projects, including oil and gas production, pipelines, petrochemicals, nuclear energy, and, eventually, even liquefied natural gas (LNG) exports. "There may be a bigger convergence of business interests between Russia and Iran now, given that Russia is being increasingly sidelined by Europe," said Ellie Geranmayeh, an Iran expert at the European Council on Foreign Relations. Along with the business opportunities, Russian companies will also be driven to Iran by the need to establish a presence before Iran emerges as a new rival on the export market, added Valentina Kretzschmar, director of upstream corporate research at the energy consultancy Wood Mackenzie. "It's really about securing a market share for Gazprom," Kretzschmar said. "Russia would be better-positioned to protect its market share if it has a position in Iran. It's all about controlling that gas; it's a global market share whether the gas goes to Asia or to Europe."

Iran has long been seen as a potentially big new gas exporter both in the EU, which is trying to reduce its reliance on Russian gas, and in Asia, where countries are under pressure from wide supply-demand gaps and hefty LNG import bills. Still, Maroš Šefčovič, the EU's vice president for the energy union, played down talk of Iranian gas being a significant factor in Europe, noting that much of Iran's gas is already used at home. The country used 170.2 billion cubic meters out of the 172.6 bcm it produced last year, and imported 6.8 bcm from Turkmenistan and Azerbaijan, according to BP. It also exported 8.9 bcm to Turkey. "It's quite clear that when it comes to gas, the necessary infrastructure will have to be developed, and they have to decide whether they go for LNG, or for pipeline construction," Šefčovič said. "It takes time, because most of the gas areas, as far as we know, are more to the south, and of course Europe is more to the north. So it's quite a big distance." Meanwhile, Russia has its own grand plans for upping exports to both east and west. In Europe, by building the controversial Turkish Stream pipeline across the Black Sea through Turkey and to Greece and by expanding the existing Nord Stream pipeline under the Baltic. In Asia, with the Power of Siberia pipeline and, possibly, the Altai pipeline, to China.

## Game of stans: Ukraine seeks Russia gas bypass

Neurope, 20.07.2015



**Naftogaz Desperate to reduce its reliance on Russian gas, Ukraine is turning to Kazakhstan, Turkmenistan and Uzbekistan.**

The Ukrainian government said representatives from Ukraine and Kazakhstan would examine the potential for energy cooperation. "The participants of the meeting also agreed to study the issue of supply to Ukraine of Kazakhstan natural gas and transit through the territory of Kazakhstan of Turkmen and Uzbek natural gas," the Ukrainian government said. "We are ready to buy gas from Kazakhstan. We should return to this issue." Ministry Mykhailo Bno-Airyian said.

"There are transit issues, but we have to work it out. There is a similar situation with transit of gas from Turkmenistan. We need the transit of Central Asian gas," he added. An April report from the International Energy Agency said a more liberalised energy sector in Eastern Europe and Central Asia is necessary for regional energy security. While countries like Azerbaijan and Kazakhstan are emerging as oil and gas powerhouses, their reserves are under "rigid" and mostly government control, the report noted. The European market relies in part on Russian natural reserves. Ukraine's state gas firm Naftogaz in early July said it would stop purchasing gas from Russia until new contracts are brokered, though supplies to the European market would continue. Naftogaz earned about \$2 billion in transit fees from Russian gas monopoly Gazprom last year. Naftogaz might get a trade finance loan of up to \$300 million in September from the European Bank for Reconstruction and Development (EBRD) to bridge the gap between purchasing and selling natural gas.

European Commission Vice President in charge of Energy Union Maros Sefcovic reiterated that Russia's refusal to pump gas through Ukraine will change the balance in Europe, which will have a negative impact on the energy security of Europe. Russia plans to bypass Ukraine completely after 2019 by expanding the Nord Stream pipeline and building Turkish Stream. "If you look at the construction and plans of gas pipelines, one of the goals is to make the Ukrainian transit system less relevant, or to cut off supplies through Ukraine completely. This would have very negative consequences for energy security in Europe, because the Ukrainian transit is very important, it is the largest, at 140 billion cubic metres per year," Sefcovic told reporters.

He said that if the purpose of the Turkish Stream project is to gradually empty the Ukrainian transit route, it is unacceptable for Brussels, as it will change the balance of gas in Europe. It will put the countries of Central and South-Eastern Europe in a very difficult situation, he added. The 1,100-kilometre-Turkish Stream will have four lines and an annual capacity of up to 63 billion cubic metres of gas. About 16 billion cubic metres will be supplied to Turkey while the remaining 47 billion cubic metres will go to a hub on the Greek – Turkish border, where the gas can be transported onwards to Europe. However, the project has been facing difficulties. The EU has stressed that the pipeline must comply with EU law. Moreover, Gazprom decided last week to sever an agreement with Italy's Saipem as the major contractor, just as construction of the first part of the project under the Black Sea was about to start. The termination would not affect the construction schedule, as it is a technical issue, Russian Energy Minister Alexander Novak said. In addition, Russia had planned to sign an intergovernmental agreement with Turkey on the project by the end of June, but it never happened.

## **Kolomoisky initiates arbitration proceedings against Ukraine over gas supplies**

Rapsi News, 22.07.2015



**Ukraine** The companies owned by billionaire Ihor Kolomoisky initiated proceedings against Ukraine over gas supplies at the Arbitration Institute of the Stockholm Chamber of Commerce seeking payment on debt worth about \$5 billion, RIA Novosti reported.

He said his companies had filed two lawsuits, one at the London court of arbitration over infringements on the rights of Ukrnafta minority shareholders, and the other in Stockholm over debts for gas supplies to Ukraine. Kolomoisky has confirmed that the lawsuit filed in Stockholm was to collect \$5 billion dollars in debt from Ukraine.

According to media reports in mid-July, the Ukrnafta minority shareholders affiliated with Kolomoisky's Privat Group have filed a lawsuit in London over the alleged violation of the shareholder agreement by Naftogaz. More precisely, they demand compensation for gas delivered to Naftogaz in 2006-2011. Ukrnafta is a state owned company and Ukraine's largest oil and gas producer and the operator of the country's biggest network of filling stations. In 2011, it produced 2.27 million metric tons of oil and gas condensate and 2.15 billion cubic meters of natural gas. Ukrnafta produces 68 percent of Ukraine's oil and gas condensate and 11 percent of its natural gas. A 50 percent plus one share stake in the company belongs to Naftogaz, the leading state-owned oil and gas company and one of the biggest companies in Ukraine. Over 90 percent of the oil and gas in Ukraine is produced by Naftogaz enterprises. Igor Kolomoisky, former governor of the Dnipropetrovsk Region and the second or third richest man in Ukraine, owns 42 percent of Ukrnafta shares.

## The EU's non energy union

Natural Gas Europe, 20.07.2015



The EU's all-encompassing long-term strategy, known as the Energy Union, seems to be out of context when observing current developments and especially in the natural gas sector. Each country or groups of states follow their own policies and make or break alliances as suited to their national interests and wider visions. Below, a set of present day developments is going to be presented so as to illustrate the case and the factors involved.

**Gazprom announced that it will proceed in with Nord Stream 2 phase together with E.ON, Shell and OMV, in addition to this BASF is a possible partner.**

This new route will run in parallel with the already operational Nord Stream and it is envisaged it will be completed by 2019 and will be able to carry up to 55 bcm per annum. Effectively this project renders the unstable role of Ukraine as a transit route for Russian exports into Europe and further elevates German territory as the ultimate gas hub in Europe, a long-term national priority for Germany. Despite numerous analyses by mostly eastern US political papers, there seems no way that major economic powers in Europe/Eurasia such as Germany would relinquish their special and very profitable but also industrially vital relationship with Russia over Ukraine's geopolitical brinkmanship. Furthermore, the Energy Union as it has been beginning to take shape under Maroš Šefčovič directorship seems to have been shaped more on rhetoric and sentimentalism rather than the hard and cold logic of geo-economic relations. Hence Nord Stream 2 also contradicts recent Gazprom initiatives to construct Turkish Stream as only one of the two could be established due to mass quantities having been already allocated.

Moving into the Balkans, the Greek government, already embroiled in hard bargaining over its debt, seems eager to proceed with Turkish Stream and has signed a “political declaration memorandum” with the Russian government. More interestingly, Greek Foreign Affairs Minister Nikos Kotzias at a recent visit to Belgrade complained that Athens is being frowned upon for attempting to be involved with Turkish Stream, while its Northern partners proceed with their own plans which are of a competitive nature. Similar comments were made by the Serbian side which has already complained that Northern EU states want to be exclusive importers of Russian gas and excluded the Balkans. Nevertheless, Athens still strives for the project which was the top item in the agenda for Kotzias when meeting his counterparts in Serbia but also in FYROM.

Meanwhile, Romania follows its own individual course away from Germany and from the rest of the Balkan states. The Energy Ministry in Bucharest unraveled the two basic versions of the Azerbaijan-Georgia-Romania Interconnector (AGRI). The first plan calls for a 5 bcm per year transfer via LNG from Georgia to Constanta in Romania and the second option is for 8 bcm per year. The project has been pending since 2010 and the quantities are deemed as small for the EU’s overall needs, but Bucharest assures its partners that it aims to open the Caspian Basin producers (Turkmenistan, Uzbekistan) with far larger supplies sometime after 2025. Interestingly enough that is exactly the assumption of the designers of the TANAP-TAP-IAP system of pipelines, commonly known as the Southern Gas Corridor, thus it becomes clear that competing projects have been taken off by different countries, aiming at the same producers, regardless of the fact that supplies are far from being tapped either in the short term or in the long run.

Conclusively it is becoming obvious day by day that the Energy Union has strategic deficiencies in terms of implementation since diverging interests of a vital nature regarding energy security interlinked with geopolitical considerations are nullifying any common stance. Additionally, other countries such as Spain and Portugal are relying on their plans for LNG introduction and their strong bonds with the North African producers, while Turkey, being of course an outsider but with a strong influence in the EU, follows its own individualistic natural gas strategy.

## Gas transport via Slovakia shrank in 2014

Natural Gas Europe, 14.07.2015



On THE GAS transmission company Eustream transported 46.5 bcm of natural gas last year, a drop from 58.5 billion transported in 2013. This means that its capacity was used at about one half. “The transport network of Eustream makes up a reliable part of the international transition network transporting natural gas onto the European gas market,” the ÚRSO wrote in its annual report as cited by the TASR newswire.

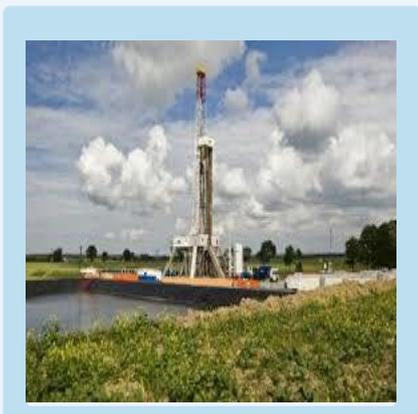
Among users of the Slovak gas transition infrastructure were, based on the ÚRSO’s annual report, Slovak and foreign companies.

“Gazprom Export was the biggest user of the transit network from the viewpoint of the volume of transported gas,” ÚRSO wrote in its annual report as cited by the TASR newswire. The total length of the transportation network is 2,332 kilometres and consists of a system of four to five parallel pipes leading from eastern Slovakia westwards. The annual capacity of the transit network is as high as 90 billion cubic metres which is more than 15-times the domestic gas consumption. International gas transit makes up more than 71 percent of the total transport of gas via Slovakia.

Slovakia’s ambition, while the route through it is key for gas flows to some of Gazprom’s biggest clients, Italy and Germany, is to keep gas flowing via Slovakia while Russia plans to drop Ukraine as a route for transporting natural gas to Europe. Such a step would leave state-run Gazprom facing about \$1 billion in annual transit fees to Slovakia and Bulgaria for years to come, analysts and industry sources say as cited by Reuters on July 20. Thus, according to some analysts circumnavigating Ukraine will come at a too a high cost. Billions of euros will be needed to build and expand alternative routes, and the route of the existing pipeline means transit fees to Slovakia and Bulgaria will have to be paid by Gazprom even if Russia manages to bypass Ukraine by 2020. Under the contracts with the two countries, which ship gas on to western and southern Europe respectively, Gazprom will have to pay Slovakia until 2028 and Bulgaria until 2030 regardless of whether they actually ship any gas through them, wrote Reuters. “This is the biggest issue - no-one knows what to do with this (Slovak) contract,” a Gazprom source said as cited by Reuters.

## **PKN and PGNiG extend cooperation in search for Polish oil and gas**

Reuters, 20.07.2015



As Poland’s dominant gas firm PGNiG and No.1 refiner PKN Orlen have joined forces in the search for gas and oil deposits in the mountains of south-eastern Poland, PKN said in a statement.

Orlen Upstream has signed a deal with PGNiG under which both firms are to conduct research on eight exploration licences near the Bieszczady mountains. Both firms have already worked together in parts of Poland. Poland is trying to reduce its reliance on imported energy from Russia, but still more than a half of the gas it consumes is imported from its former imperial master.

The dependency is even bigger in terms of oil. Poland had expected to find huge shale gas deposits but these hopes have faded and major energy firms including Chevron , and Total have pulled out of shale gas exploration concessions.

## Estonian and Finnish energy cooperation dwindles

Baltic Course, 20.07.2015



“South The energy cooperation agreement Prime Minister Taavi Rõivas concluded with Finland has started to crack after the northern neighbours’ energy company Gasum gave up participating in the Balticconnector investment application, LETA/Äripäev writes.

Elering announced unexpectedly that it submitted the application for investment to Estonian and Finnish regulators for building the Balticconnector gas pipeline, however without the Finnish cooperation partner Gasum. CEO of Elering explained that while the original plan was that Elering and Finnish Gasum would apply for financing together.

Finns will not join the financing application at incomprehensible motives despite repeated negotiations. This is one part of the agreement concluded between Estonian Prime Minister Taavi Rõivas and the then Prime Minister of Finland Alexander Stubb, according to which a regional LNG terminal would be built in Finland and the Baltic countries would be connected to that via Balticconnector. Balticconnector deadlock could in turn jeopardize the development of the liquefied natural gas (LNG) terminal project for the whole region.

## British government presses for domestic production

Natural Gas Europe, 20.07.2015



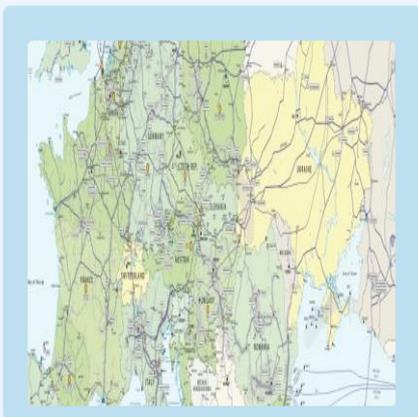
The British Government published updates about the offshore environmental legislation for oil and gas activities, in another effort to support the hydrocarbon industry.

The update, reflects the attention paid in the UK for domestic production. The DECC published a new spreadsheet providing resulting time series for the average carbon intensity of electricity displaced by gas CHP. “The Future of Heating: Meeting the challenge” indicated that DECC would develop a bespoke policy to support new, Good Quality natural gas CHP, subject to confirmation that this would not displace lower carbon electricity generation’ DECC reiterated.

The move arrived a few days after the Government's planning consent for the Preesall Underground Gas Storage Facility project. 'The facility is proposed to be constructed on the east side of the Wyre Estuary at Preesall in Lancashire and will be used to store and extract gas from local underground salt caverns. The project may create up to 300 jobs during construction and up to 40 permanent jobs once operational' the office of the Energy Minister Lord Bourne wrote. The government said that the location is suitable for the new project. 'Investment in new energy infrastructure is essential if we are to keep the lights on and bills down. This is a major project which will benefit the local economy by creating jobs and stimulating businesses' Bourne commented. Recently, the British government proposed to change the rules for hydraulic fracturing in protected areas, and it formally established the Oil and Gas Authority (OGA) as an independent regulator.

## EU Council presents energy diplomacy action plan

Natural Gas Europe, 23.07.2015



The European authorities acknowledged the importance of diplomacy for the realisation of its Energy Union project, reporting that the Council of the European Union is in favour of seeing a growing role of the High Representative Federica Mogherini, whom is called to strengthen strategic guidance on energy diplomacy.

'EU policy objectives defined in the EU Energy Union should be supported by a coherent EU foreign and energy policy action, taking into account geopolitical developments' the Council of the European Union wrote in its conclusions on Energy Diplomacy.

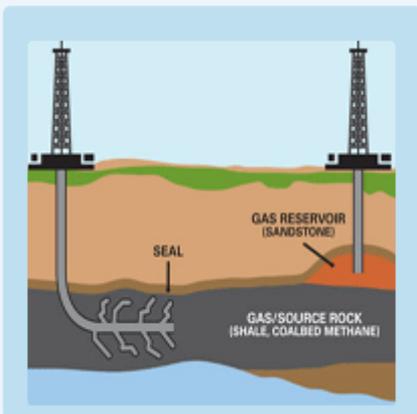
Member States are called to work with the High Representative and the Commission, which are asked to ensure the follow-up of the EU Energy Diplomacy Action Plan meant to diversify EU's natural gas supply sources. The Council also proposed a stronger collaboration with Mogherini's team, which should engage in regular discussion not only with the Council, but with its relevant preparatory bodies too. The Council, which is the EU institution representing the member states' executive governments, also outlined the key priorities for the follow-up of the Action Plan. 'On diversification of sources, suppliers and routes: diplomatic support should focus on the Southern Gas Corridor, the Southern Caucasus and Central Asia; the strategic potential of the Eastern-Mediterranean region; the Euro-Mediterranean energy cooperation in the Southern Neighbourhood; the wider Middle East region; new energy sources in the Americas, Africa and Australia, including the potential of Liquefied Natural Gas (LNG)' reads the document released on Monday. The focus is mainly on general ideas, with little reference to specific countries. While not mentioning Libya or Egypt, the document briefly discussed the next moves with its Eastern partners.

According to the Council, foreign policy instruments should be used to open up opportunities for cooperation with producing and transit countries, including Ukraine. However, the document fell short of explaining how Mogherini could do so. It simply reported that the EU should ensure the long-term energy transit through Ukraine, reiterating the position expressed in May by Maroš Šefčovič, Vice-President of the European Commission (EC) in charge of Energy Union. On the other hand, as reported by the System Development Map 2014 released by EntsoG and GIE on Monday, Ukraine's role as a transit country will shrink. According to the two organisations, the import capacity from Ukraine will decrease in the next 5 years by 2,678 GWh/d. The Council conclusions are also vague with respect to Russia. 'When the conditions are proper, the EU will proceed accordingly in reframing the energy relationship with Russia, based on a level playing field in terms of market opening, fair competition, environmental protection and safety, for the mutual benefit of both sides' the Council said. The organisation did not shed light on the timing nor the conditions that would allow Brussels to reconcile with Moscow. It only underlined that energy partnerships and dialogues should be coherent with foreign and external policy goals, including climate change. 'Foreign policy efforts should also focus on creating business opportunities in and with third countries, including by raising the awareness of third countries to the EU's leadership in energy technologies and assisting in the promotion of export of energy technology and know-how, particularly safe and sustainable low-carbon technologies contributing to reducing greenhouse gas emissions of the world economy.' At the moment, it seems clear that one of the main priorities is to strengthen ties with Georgia, which is a key player in the Southern Gas Corridor project. "Georgia really matters a lot to us. Maybe Europe is not giving you everything you would like to get but it is nevertheless giving, especially when you compare Europe to others" Donald Tusk, President of the European Council, said on Monday following his meeting with the President of Georgia Giorgi Margvelashvili.

According to the Council, European institutions could resort to financial resources such as the European Neighbourhood Instrument, the Instrument for Pre-accession Assistance, the Partnership Instrument and the Development Cooperation Instrument/Global Public Goods and Challenges. Doing so, the European Union should also bet on multilateral energy institutions. 'Particular support should be given to strengthening the existing multilateral energy institutions and initiatives with significant foreign policy impact. These efforts could include support to the modernisation of the Energy Charter, the association initiative of the IEA, the reform of the Energy Community, the further growth of IRENA as well as the relevant initiatives within the G7/G20 and UN (e.g. SE4ALL) frameworks including the post-2015 sustainable development goals.' This attempt seems to be a good proposal and it could potentially set the tone for further discussions. Europe's diplomatic partners did indeed repeat several times they would prefer to deal with more agile and dynamic organisations, and the document goes in this direction. "In certain areas where the EU is engaging with the rest of the world, these mechanisms, consultations should be speeded up so that you respond to the reality on the ground before it changes" Mehmet Ögütçü, chairman, Global Resources Partnership, recently told Natural Gas Europe. The Council's message remains one full of ideas, and perfectly depicts the complexities, but is not equally able to sketch out a practical strategy. In other words, despite a quick reference, the document did not clarify which should be the competences of the High Representative, and the European Commission. 'The Energy Diplomacy Action Plan should be implemented by the High Representative, the Commission and the EU Member States, in accordance with their respective roles and mandates as determined by the Treaties,' the 8-page note concludes.

# What ever happened with Europe's fracking boom?

Deutsche Welle, 20.07.2015



While The Netherlands has banned fracking until 2020. Over the past several years, a number of other European countries declared a ban on exploiting new natural gas deposits. So, is the apparent European shale gas boom over? One more country has decided to put a halt on exploiting shale gas reservoirs.

The Dutch government last week placed a five-year ban on commercial fracking. A final decision on the future of fracking in Holland is expected at the end of this year. Hydraulic fracturing - commonly known as "fracking" - is used to get natural gas out of mineral deposits like coal beds or shale.

Fracking uses water pressure to crack underground rocks. The technology of fracking isn't new - it's been around for decades. New are the sources that companies want to exploit. Fracking is going through a boom in the United States, where mining companies say high energy prices are forcing them to look for more unconventional deposits of gas. About five years ago, a shale gas boom started in Europe, with countries looking into the potential of this new fossil fuel source. Natural gas from fracking was initially advertised as "green" and "environmentally-friendly" energy. Many countries, particularly in Eastern Europe, hoped that shale gas would make them energy-independent from Russia. Nowadays, these high expectations have more or less faded in most parts of Europe. Environmental concerns. When shale gas is being "fracked," high-pressure water is injected into the rock at depths of 1,000 to 5,000 meters below the earth's surface. Sand is then sent down to fill up the cracks and make sure they stay open. Later, natural gas passes through the sand to reach the surface. Because sand and water do not mix well, drilling companies have to add chemicals to turn this into a homogenous, viscous fluid. Other chemicals are to break up the water-sand mixture again, stop rocks from clogging things up, and to stop bacteria and yeast from contaminating the fluid. Activists fear that this "chemical cocktail" could contaminate the groundwater. And if not the chemicals, then the natural gas itself could cause pollution: In 2010, a documentary about fracking in the US claimed that methane water had polluted waterso heavily through the process that it was possible to set fire to the water.

Another fear is that fracking may cause earthquakes. In the US and northern Germany, some earthquakes over past years are suspected to be linked with natural gas drilling. Activists fear that fracking for shale gas might cause even more tremors. Banning fracking Environmentalists and concerned citizens in many European countries went on the defensive when it became known that companies were eyeing potential new shale gas deposits. France is apparently one of the countries with the highest potential for developing such unconventional hydrocarbons. However, a fracking moratorium has been in place since 2011. Bulgaria, the Czech Republic and others followed France's example when environmental concerns became overwhelming. Even in those nations where the technique isn't banned, such as the United Kingdom and Spain, regions of these countries - like Scotland and Wales in the UK, or Catalonia in Spain - still decided to ban fracking regionally. Germany continues its moratorium on exploiting shale gas deposits. A new law in Germany - which will probably be decided on after the summer - is not likely to impose an outright ban on fracking, but will restrict it heavily. It will only allow scientific test-drilling under strict conditions while assessing the risks and environmental impact.

## San Leon reduces polish exposure to focus on appraisal, production

Natural Gas Europe, 21.07.2015



Ireland-based San Leon Energy announced a reduction in its licences in Poland, in line with its new long-term strategy to reduce the exploration component of its portfolio and focus on appraisal, development and production.

“As part of the company's new strategy to focus on development and production, enabling San Leon to transform into a near-term cash-generating producer, the company has made the decision to remove some of its Polish acreage. The decision is also required as a result of the introduction of significant yearly licence fees in Poland over the past couple of years.

The company remains committed to its remaining acreage in Poland, which includes the Baltic Basin shale licences and the recently announced gas discovery at the Rawicz field' Oisín Fanning, San Leon Executive Chairman, commented in a note released on Tuesday. San Leon decided to remove from its current portfolio the following Polish licences: Czersk (relinquishment), Budzów (relinquishment), Ilawa (relinquishment), Praszka (relinquishment), Bieszczady area (Blocks 437, 438, 456, 457, 458 and the Company's interest in partial Blocks 416, 417 and 436). The last blocks have been taken on by Polish PKN Orlen, who have assumed past and future benefits and liabilities. Referring to the blocks 437, 438, 456, 457 and 458 and also partially on blocks number 416, 417 and 436, PGNiG wrote a communiqué explaining that new technical expertise could open the doors to new opportunities. PGNiG and Orlen Upstream did indeed sign a Joint Operating Agreement. The companies aim to jointly conduct analytic and research works in eight concession blocks in Podkarpackie Voivodeship grouped under the joint name 'Bieszczady' Project.

“The Carpathian Foredeep is, historically speaking, one of the most prospective areas when it comes to concentration of hydrocarbons. For years we have been systematically documenting deposits in Bieszczady area. I believe that gaining a new partner who offers both co-financing and experience in acquisition and interpretation of geological data, will open for us new perspectives in this area”, said Zbigniew Skrzypkiewicz, Vice-President for Exploration and Production, PGNiG. According to PGNiG, Orlen Upstream will offer both co-financing and experience in acquisition and interpretation of geological data. The two companies are already working together in the Międzychód-Gorzów Wielkopolski concession and in Wronki concession, where they are preparing for hydraulic fracturing. In February, San Leon Energy announced its first commercial gas discovery in Poland, saying that the field can be developed as a “conventional” resource. On Tuesday, General Electric (GE) and Statoil’s Sustainability Collaboration announced the five winners of its inaugural Open Innovation Challenge that focused on addressing the use of sand in unconventional operations. Three winners are American, two are Canadian.

## Edison comes up dry in first well in Norway’s PL 616

Natural Gas Europe, 22.07.2015



In Edison Norge AS has failed to discover any exploitable gas reserves after drilling seven kilometres southwest of the Valhall field and about five kilometres west of the Hod field in Norway’s North Sea. ‘This is the first exploration well in production licence 616. The licence was awarded in APA 2011’ reads the note released by Edison on Wednesday.

The primary exploration target for the well was to prove petroleum in Upper Cretaceous chalk rocks (the Hod formation). Well 2/11-11 encountered about 330 metres of reservoir rocks in the Hod formation with poor reservoir quality. The well is dry.

‘Well 2/11-11 was drilled to a vertical depth of 3388 metres below the sea surface and was terminated in the Hidra formation (Upper Cretaceous). Water depth at the site is 68 metres. The well will now be permanently plugged and abandoned.’ In January, Edison announced the execution of a put&call option agreement with Apache Beryl, which will allow the Italian company to reach an overall UK production of 6,500 barrel of oil equivalent per day.

## Oil & gas UK releases updated guidelines for well operations best practice

Natural Gas Europe, 23.07.2015



Oil & Gas UK released updated guidelines for the abandonment of wells together with accompanying guidance on generating cost estimates to support this activity.

“Oil & Gas UK developed this fifth issue of the guidelines with well-operators from member companies and other stakeholders to clarify good practice. These guidelines represent just two of over thirty peer-reviewed guidelines published to date by Oil & Gas UK to raise the professional standards of the industry” Oonagh Werngren, Oil & Gas UK’s operations director, said. The purpose of the publications is to lower costs and make UK operations more efficient.

“As the sector steps up its effort to tackle its cost base and improve efficiency, the guidelines on well abandonment cost estimation provide industry with a common framework in which to generate more consistent and complete cost estimates” Werngren added.

## Fracking industry needs to engage with affected communities, say North East academics

Natural Gas Europe, 23.07.2015



With the UK shale gas industry stuck in the starting blocks a team of North East academics is calling for a new approach which aims to break down the barriers between supporters and opponents. The new Government is expected to unveil measures to support the development of a UK shale gas industry after previous attempts were scuppered by well-organised protests and nervous local politicians.

Despite getting the approval of planning officers, Cuadrilla’s proposals for a test well at a site in Preston New Road Lancashire, was thrown out with councillors saying it would lead to the ‘industrialisation of the countryside’.



Condemning a two-metre high shale gas well-head as industrial may well be a moot point, says Prof Richard Davies of Newcastle University, who is the lead in the ReFINE (Researching Fracking in Europe) project which is an independent consortium focusing on research into fracking for shale oil and gas. After papers which considered some of the technology aspects of hydraulic fracturing - and found it on the whole safe (see panel) - the ReFINE team has now shifted focus to some of the social impacts. "Framing 'fracking': Exploring public perceptions of hydraulic fracturing in the UK" was published last week in the academic journal the Public Understanding of Science. It says that rather than seeking to persuade the public of the benefits of fracking, policymakers should engage in dialogue, allowing both sides to learn from the others' viewpoint; exploring a concept known as 'responsible innovation'. One of the world's leading expert on this is Professor Phil Macnaghten. He was one of the original drivers of the ReFINE project at Durham and is now Professor of Technology and International Development at Wageningen University in Holland. He was corresponding author of the latest paper. Speaking to Journal Energy he said: "People want to know why it should take place and under what conditions it will succeed. Not just how it's going to happen. This is a different kind of conversation to the ones that we are currently having. "These are very important decisions which impact on community life and the landscape and should be handled in a mature way. "It's not just about emotions and passions. There are good reasons for the passions. Responsible innovation is about assessing more than just risk and requires a mindset change in how these issues are approached. "There has to be an inclusive element to all of this. We have to create a situation where we align the technology with social values and look at the social need and not just the economic need. "Our research show that people resent being told this is the right way, and that there is no choice."

ReFINE's latest research was carried out by experts from Newcastle, Durham and Wageningen universities. The study was led by the Science Policy Research Unit at the University of Sussex in 2013 and included six focus groups comprising eight people, in potential shale gas areas in the North. Prof Macnaghten added: "Our findings highlight a clear disconnect between how fracking policy is portrayed by Government and policymakers and perceptions amongst members of the public. "A key lesson for policymakers is that whilst assessment of the risks and rewards is important, a much more open approach towards public engagement is needed to ensure that the debate is not confined to such limited scope. Only on this basis can a more inclusive approach to policymaking be achieved." However Ken Cronin, chief executive of the UK Onshore Operators Group (UKOOG) said prospective UK shale drillers have adopted an 'engagement charter' which ensures discussions with local people are initiated long before planning applications are lodged. He said that in the last year it had had contact with 16,000 members of the public and had established an online platform 'Let's talk about shale' in September last year, which has handled over 1,500 questions. Mr Cronin added: "There are a lot of people out there who don't know what natural gas from shale is and have questions about how it's extracted. 'Let's talk about shale' offers the public an opportunity to get to know the facts, rather than being forced into listening to what others think they should hear." However Simon Bowens, North East and Yorkshire regional campaign coordinator for Friends of the Earth, condemned the research and said gas should be left in the ground. He said: "There are significant risks to people's health and the environment from fracking and, in the face of this, it should not be the role of public bodies to engage in PR for the industry to mislead the public that fracking is safe."



“The report confirms what many others have said: people in the UK don’t believe the hype put out by the fracking industry and its supporters in our ‘all out for shale’ Government. They know that fracking threatens local pollution and public health, and that it is crazy to be digging up more fossil fuels when we need to leave four-fifths of reserves in the ground to avoid runaway climate change. “Polls show that the public wants renewable energy, not fracking – and the clean energy and long term jobs it provides. The fracking industry and its supporters in Government must not try to force fracking on local communities that don’t want it.” Mr Cronin believes much more needs to be done to inform people of the importance of gas to UK energy security and industry. He said: “Gas provides over 80% of heat in our homes and businesses, and provides vital feedstocks for our industries that produce products ranging from toothpaste through to plastics for day to day items.” To this end the shale industry received a boost recently when it announced the agreement of a joint charter with the GMB union which will focus on shale gas safety, skills and supply chain development. Professor Davies, added: “With energy being such an important issue these are very important discussions to have. “There are ways in which the operators can bring people together and discuss these issues in relation to the country’s energy needs and climate change.” He said objections on the perceived industrialisation of the countryside - and risks associated with fracking - demonstrated the disconnect between policymakers and the public in the way the industry is portrayed and discussed.

With Cuadrilla set to appeal and further applications due to be considered over the coming months, the industry is hoping 2015 will see the first well drilled for four years. But it remains to be seen if the public will be brought on board and there is some speculation the Government plans to take the final decisions out of the hand of local people by deeming applications strategic important national energy projects. Researchers at Durham University are currently leading the biggest European-wide project of its kind into the risks associated with fracking for shale oil and gas. In partnership with other national and international bodies, including Newcastle University, its ReFINE (Researching Fracking in Europe) project aims to create a library of independent research to help inform public awareness of the relative risks associated with the industry. To date ReFINE has published a number of papers on the risks of water contamination, earthquakes, well integrity and the disposal of fracking fluid. They researched hundreds of thousands of fracking operations and found that the process only caused earth tremors that could be felt on the surface in three places (including Preese Hall, Lancashire in 2011). Its findings for the ReFINE project say the size and number of felt earthquakes caused by fracking is low compared to other manmade triggers such as mining, geothermal activity or reservoir water storage. It went on to say the energy released in a fracking event is usually “roughly equivalent to, or even less than, someone jumping off a ladder onto the floor”.

The ReFINE research has also concluded that it is “incredibly unlikely” that fracking at depths of 2km to 3km below the surface, where most operations take place, would lead to the contamination of the shallow water aquifers which lie above the gas resources. One area of keen focus for the ReFINE projects is the integrity of the wells. Prof Davies says that if the UK shale industry gathers momentum hundreds of wells will be drilled every year and there is scope to improve regulation here. Last week the Task Force on Shale Gas expressed similar concerns. Lord Smith, the chair of the task force, said ministers had implemented most of the Royal Society’s recommendations but for one “glaring exception” - compulsory independent monitoring of wells after fracking takes place to check for potential leaks.

Leading UK bodies have said a well-regulated industry will have little impact on the environment, these include; The Royal Society, the British Geological Society, the British Geological Survey, WaterUK, the Chartered Institute of Water and Environmental Management (CIWEM), Public Health England and Durham University. Mr Davies said: "The publication of ReFINE's first social science research paper provides an important insight into our understanding of public perceptions on fracking and demonstrates the wide ranging nature of the debate. "With fracking being pursued worldwide, lessons learnt from ReFINE's research are not just for UK policymakers but are relevant to governments and institutions across the world. On our part, ReFINE will continue to connect our research to these international audiences to ensure policymakers and the public have the best information available to inform their decisions." He added: "We can never say there will not be a black swan event but the research so far has busted a lot of the myths surrounding the topic. "We have been drilling onshore in the UK for over 200 years and there is not a lot of difference between fracking and non-fracking. A lot of it is not new. "It's fair to say that any such process has risks attached to it, but what we need to do is to ensure there is an open and open discussion on the pros and cons of shale gas and fracking."

## Engie takes diversification seriously: Bets on LNG, CYGNUS, service

Natural Gas Europe, 23.07.2015



The latest industry developments proved that Engie's new gas strategy relies on LNG projects - in collaboration with Russian, American and Japanese players - and a renewed focus on services. the France-based company (formerly GDF Suez) completed the the purchase of IMA Chile.

'Thanks to this acquisition, Engie energy services in Chile will represent the Chilean leader in energy services with 65M€ of yearly revenues and 1,700 employees, serving more than 200 customers in all sectors' reads a note released by the company. it also entered into a partnership agreement on LNG with Japan's Kansai Electric.

'Engie and Kansai Electric, a Japanese power production company, have agreed to enter into a partnership agreement on liquefied natural gas (LNG). This agreement will provide shipping optimization and other commercial and marketing opportunities in Europe and in other LNG markets to the benefits of Kansai and Engie' it wrote on its website. Engie made the headlines last week, after Gazprom said Engie could be interested in the Nord Stream II project.'The number of participants in the Nord Stream II project may increase in the near future. Engie Group shows interest in this project and ready to start talks on working out legally binding documents' Gazprom's Alexey Miller said last week. Last month, Novatek announced a 23-year deal for one million tons of LNG a year with Engie for the supply of LNG from the Yamal LNG project.

Finally, on Thursday, GDF Suez E&P reported positive developments toward the development of the Cygnus field. 'The 4600 tonne Cygnus accommodation module, together with a 3400 tonne wellhead jacket and piles, are now en route to the Cygnus gas field located 150 kilometres off the Lincolnshire coast' BiFab, which won contracts for all the Cygnus jackets and the Alpha complex accommodation module, wrote on Thursday referring to the Cygnus field - the largest discovery in the Southern Gas Basin in the last 25 years.

## Estonia to tap fully unused oil shale output quotas

Natural Gas Europe, 23.07.2015



Estonia set to ramp up oil shale production after the country's parliament has passed legislative amendments allowing to retroactively tap unused oil shale production quotas from the past seven years.

Behind only Brazil and China in oil shale global production, Estonia in 2008 set an annual quota of 20 million tons. However, the Baltic country with a population of 1.3 million, which makes it one of the least-populated member states of the European Union, has been able to use only around 70 percent of the given volume through 2009-2014, averaging 14.7 million tons per year throughout.

Now Estonia eyes use of the remainder, roughly 24 million tons of oil shale. With four Estonian companies: Eesti Energia Kaevandused, Viru Keemia Grupp Kaevandused, Kivioli Keemiatoostus, Kunda Nordic Tsement - all lined up for the work, Natural Gas Europe spoke with each of them about oil shale mining, the prospects and challenges it brings along.

Of the annual quota, currently at 20 million tons, 15 million tons belong to Eesti Energia, the key player in the Estonian hydrocarbons and power market, 2.77 million tons to Viru Keemia Grupp, the share of 1.98 million tons goes for Kivioli Keemiatoostus and Kunda Nordic Tsement was given 0.24 million tons. The Riigikogu, Estonian Parliament, has passed the amendments to the Act on Amendments to the Estonian Earth's Crust Act and the Environmental Charges Act in mid-June. "They were initiated by representatives of four factions and the amendments are expected to allow the miners that have extracted oil shale less than the prescribed annual rate during seven years to extract the remaining oil shale retroactively," Gunnar Pal, a representative of the Riigikogu, told Natural Gas Europe. Kaarel Kuusk, the Eesti Energia Media Relations Manager, explained that Eesti Energia has used more than 85 percent of the mining limit allocated to the company in the past years. But as it has the potential of extracting up to 15 million tons of oil shale annually, the Estonian energy holdings is eagerly looking forward to the opportunities that the use of untapped quotas will provide.



The company produces ca 1,5 million barrels of shale oil annually and exports ca 70-80 percent of shale oil, mostly as marine fuel. “We do not export oil shale itself, but products produced from oil shale...Shale oil and electricity will remain as the main products of our export. Our strategy is co-production of oil, gas and electricity from oil shale, we have developed a unique technology called Enefit (that is also how Eesti Energia is known beyond the Estonian borders), which allows us first extract oil from oil shale and then produce gas and electricity as byproducts of oil production. This doubles value of the oil shale we extract. Our first Enefit280 plant is expected to reach full capacity this year and we are planning to make an investment decision to construct another one next year,” the Eesti Energia official told Natural Gas Europe. He added: “Today, 70 percent of our revenues come from open markets, so the market influences the volumes that we produce.” Eesti Energia is expected to add a 300 MW oil shale power plant to its line already next year. “We are ready for the work,” says Kuusk.

With the oil prices plummeting about 50 percent at the last year and the price of wholesale electricity on the Nordic power exchange Nord Pool Spot hitting historically low levels this half-year, the dips have been beneficial for consumers, insists Kuusk, but notes the situation for energy companies has been “complex.” “In the current rather difficult conditions, flexibility is very important, and the strategy for the co-production of oil and electricity in Eesti Energia will give us just that what we need. The increase in the production capacity of liquid fuels allows us to produce energy from oil shale at a rate that is almost two times as efficient on the volatile energy markets,” Kuusk told. The holding’s sales revenues have dropped insignificantly over the last years but EBITDA has grown. In 2014, Eesti Energia earned a net profit of 159 million euro, he says. Eesti Energia also runs Narva power plants, which provide over 90 percent of the domestic power generation. The company, notably, has also made strides internationally, in Jordan and the United States, to be exact. “In Jordan, Eesti Energia has a 65 percent share of company Attarat Power Company, which is developing a 554 MW oil shale power plant. We are finalizing financing procedures and first power should reach to consumers in 2018,” Kuusk told. Eesti Energia also has access to 30,274 acres located in the US’s Utah. “These lands contain an estimated 2.6 billion barrels of recoverable oil from oil shale. Since we purchased the project in 2011, we have been redeveloping the project, that involves permitting, geological studies, water supply study, mining study, engineering and etc,” he said. The Eesti Energia strategy, Kuusk emphasizes, calls for the share of oil shale used by the oil industry to increase in the future and the share of electricity produced by direct burning of oil shale to be cut. “We will produce an increasing share of electricity from retort gas, a by-product of shale oil production. Such combined production is both efficient and environmentally sustainable, as it allows us to increase the energetic value obtained from oil shale from the current 40 percent or so to nearly 70 percent,” Kuusk said. Mine waste and the crushed stone produced from the excavation are used on cycle and pedestrian tracks, forest roads, road bases, squares and parking lots. “The scale that the company addresses the environmental aspect of the production is overwhelming,” he notes.



The transportation of mine waste and crushed stone is fairly expensive though and how much of it is used has so far directly depended on the road construction and other projects carried out in Ida-Virumaa County, Estonia. The re-use of oil shale ash by the Estonian company has slowly increased over the past years. "In 2009, we re-used 81,000 tons of ash and in 2014 we re-used 128,000 tons. Nearly 70 percent of the re-used ash is used in Estonia. Most of the ash from Eesti Energia is used in construction, where it is a component in the production of Portland cement," the company official told. Oil shale ash is also used in the production of ash blocks with the autoclave method. The use of ash as a construction material helps save non-renewable resources such as sand, limestone and gypsum, while increasing the value obtained from oil shale. The use of retort gas, a by-product of shale oil, has also increased year by year. For example, 181 GWh of net electricity was generated from retort gas in 2009 and 254 GWh in 2014, the Estonian says. "This type of combined production is efficient as well as environmentally sustainable – it allows nearly 30 percent more energetic value to be obtained from oil shale than in the direct production of electricity from oil shale," he notes. Reforestation has been the most widely used method of recultivation for opencast mines. Former opencast mines are continuously being reshaped in the smallest Baltic country and are now covered with forests ranging from 5 to 50 years of age. "We have planted over 14,000 hectares of forest since 1960. This is almost the size of Tallinn, the Estonian capital," Kuusk takes pride. The former Kohtla underground mine was redone back in 2001 in a museum, which now offers the visitors, he says, "the deepest experience" in Estonia and the neighboring countries.

In the past years, Kivioli Keemiatoostus, the other Estonian hydrocarbons miner, has increased the annual oil shale mining volume from 755 thousand tons in 2013 to 1058 thousand tons in 2014. "For this year we plan to mine about 1500 thousand tons of oil shale. Out of the mined oil shale we have managed to refine shale oil for 56 thousand tons in 2013, 62 thousand tons in 2014 and we plan it for 76 thousand tons this year," told Norbert Kaareste, the head of public relations for Alexela Group, which is a subsidiary of Kivioli Keemiatoostus (KKT). The significant drop in oil prices has had a big impact on the company's performance, with its owner Alexela Group's biggest challenge in 2015 being to maintain the profitability of the company, he admits. "The situation is direr, as the market price has at one point this year declined by 54 percent while the governmental taxes have risen 35 percent," Kaareste, told Natural Gas Europe. KKT owns about 10 percent of the Estonian oil shale market, with the gross output of the sector being 750 thousand tons, he pointed out. "The current global oil price is definitely a challenge to Estonian shale oil companies, but we see that the market has become somewhat stable in the current price level - \$60 USD per barrel - and we hope it can slowly grow from that level. Domestically we repeat the wish for a strong dialogue with the government, giving oil shale sector stability in governmental taxation and environmental principles," Kaareste says.

Viru Keemia Grupp AS, known as VKG, processed about 2.8 million tons of oil shale in 2013, and in 2014 the relevant amount made up about 3 million tons. According to Irina Bojenko, a VKG Public Relations representative, in 2013, ca 700,000 tons of shale oil was produced in Estonia with VKG's share amounting to 400,000 tons, i.e. 60 percent. Last year the total amount of shale oil was ca 770,000 tons, and VKG's part was 433,000 tons, i.e. 57 percent. VKG has only left unexcavated 6 million tons from the state-allotted quotas through 2009-2014. "The changes in the legislation allow us extract post factum the reserve that was excavated in the amount less than the annual rate and provide both VKG and all of the other oil shale consumers. The legislation also obliges to pay the resource fee in advance if the company wants to extract the unused quota, i.e. the companies have to submit applications, proceeding from their actual production capacity," Bojenko said.



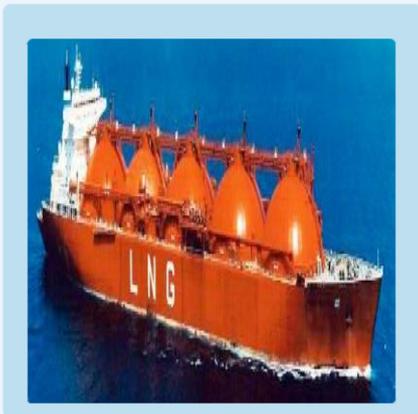
“VKG operates within the entire oil shale processing chain, from the mining of oil shale to marketing fine chemicals. The main share of oil shale what is used in production is supplied by the company’s own Ojamaa mine with the reserve of 60 million tons. The output capacity of the mine corresponds to the limited amount specified in excavation permits which is currently 2.772 million tons per year, but it is possible to boost the output capacity within a short period of time to satisfying the increasing demand of oil plants,” Bojenko told Natural Gas Europe. Because of the crisis in the oil market that broke out at the end of last year, the company, she admits, was forced to reduce production volumes down to the relevant level. “In order to maintain efficiency and sustainability, the industry was forced to response fast and adequately, in the result of which two Kiviter oil plants, which belong to Viru Keemia Grupp, were closed down temporarily last December.

It saw 250 employees cut from the payroll and the state budget lost about 15 million euro as a result. The crisis has also affected the company’s bottom line: VKG earned about 10 million euro in net profit last year, while in the year before last the relevant amount was almost 20 million euro. The turnover, meanwhile, has decreased by 11 percent, or 194.5 million euro. VKG’s oil shale share of the market is ca. 17 percent, but the Group has larger mining capacity, Bojenko says. “That is why we have to buy part of the missing raw material from state-owned Eesti Energia. Last month parliament made a change in mining law which gives us a possibility to expand our own mine and start mining in a full scale,” she pointed out. “As the improvement of the entire oil shale value chain is an extremely promising field of development, which would allow one to use the resources more efficiently, with that in mind, VKG in 2014 has built the pilot equipment for liquefying the oil shale gas, and a series of successful tests was held. “On the basis of the results of the tests, a technological solution was developed for the purposes of the industrial application, and the relevant stepwise investment plan for the next few years was prepared,” she underlined. The VKG official notes that there high taxes for oil shale production companies in Estonia. “Although we have zero incorporate income tax, we, however, have high labor, environmental, excise taxes etc. We expect more stable tax system from the government,” Bojenko pointed out. The hydrocarbons potential, she insists, cannot be overlooked, and moreover: VKG, as the other miners, believe Estonia has potential to secure 100 percent of the necessary energy supply from oil shale over the next ten years. “We do believe that it is possible. It is a fact that today Estonia is the only one of the two countries in Europe, which exports more energy than consumes,” she told. VKG exports its technologies to China, Jordan and Russia, but the company had to freeze its hydrocarbons project in Ukraine due to the unstable political situation.

Meelis Einstein, of Kunda Nordic Tsement, the fourth in the line of the Estonian oil shale producers, told Natural Gas Europe the company’s oil shale production has been about 100 – 150 kt/a, or some 1 percent of the market. “The State of Estonia is increasing the mining fee year by year and that pushes the oil shale price more than normal the inflation rate, which will harm the oil shale industry in long term,” he explained. The smallest Estonian oil shale miner, Kunda Nordic Tsement, might be the most vulnerable, but it is set to hold the grip of the lucrative hydrocarbons market.

## Companies interested in FLNG as early as 2018, says Golar LNG

Natural Gas Europe, 23.07.2015



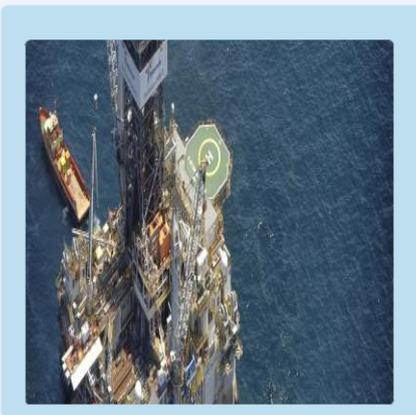
Golar LNG executed agreements for conversion of the 126,000 m<sup>3</sup> LNG carrier Gandria to a Golar floating liquefaction facility, giving the green light to the third conversion project. The third FLNG will be the result of a cooperation with Singapore's Keppel Shipyard and Black & Veatch. The decision to go ahead with the third conversion project was taken following a thorough review of the growing portfolio of business development opportunities for GoFLNG.

This has shown potential demand from several possible customers for delivery of floating liquefaction facilities as early as 2018' reads a note released.

According to the Bermuda-based company, in the current low oil and gas price environment, the use of the FLNG to develop stranded and associated gas on a fast-track basis has gained momentum as a solution with potential to provide early and robust returns for resource developers and host governments. 'In parallel with this decision to commit Gandria to the Ophir project, Keppel and Black & Veatch will now update their FEED study, accommodating the deep water operation in Equatorial Guinea on the basis of Gandria. This move will release the Gimi to cover the potential emerging demand for a 2018 GoFLNG project' explained the company. In March, Rosneft and Golar signed a Memorandum of Understanding. 'Within the ambit of the memorandum the parties will analyze the possibility of employing Golar's advanced FLNG (Floating Liquefaction of Natural Gas) commercialization technologies at Rosneft projects, potentially opening new markets to Rosneft, one of the leading gas producers in the world' Rosneft wrote. Earlier this month, France-headquartered Technip said it is anticipating 'an even more challenging environment in oil & gas', launching its restructuring plan to save approximately €830 million while confirming its focus on LNG.

# Shell, Conocophillips cut costs in deepwater business

Natural Gas Europe, 20.07.2015



**U.S.** The next hours could witness more bad news for difficult and expensive projects, as Shell could further cut its capital expenditure for the year, while Halliburton already voiced its intention to reduce future deepwater exploration spending following ConocoPhillips' example.

“Our decision to reduce spending in deepwater will further increase our capital flexibility and reduce expenses without impacting our growth targets. This strengthens our ability to achieve cash flow neutrality in 2017 even if lower commodity prices persist” ConocoPhillips wrote. Adding to that, Halliburton reported weak results for the trimester.

Q2 revenues dropped from \$8,051 million in 2014 to \$5,919 million, with total operating income plunging by 78%. Things are going worse than the previous trimester too. ‘Primarily as a result of the recent downturn in the energy market and its corresponding impact on the company’s business outlook, Halliburton recorded approximately \$258 million, after-tax, or \$0.30 per diluted share, in the second quarter of 2015, as compared to \$823 million, after-tax, or \$0.97 per diluted share, in the first quarter of 2015, in company-wide charges related primarily to severance costs and asset write-offs’ Halliburton wrote.

Despite saying it remains committed to research and innovation, Halliburton decreased its capital expenditures from \$1,375 million in 2014 Q2 to \$1,223 million in the trimester ended on June 30. Similarly, Shell could soon revise its plan too. ‘Royal Dutch Shell expects billions of dollars more in savings from its proposed £55bn takeover of BG Group than previously disclosed as it uses the enlarged company’s scale to slash costs in its deepwater oil business and natural gas trading arm’ the Financial Times wrote.

# Soft on Russia? Italian paper accuses UK of hypocrisy over energy deals

Sputnik News, 20.07.2015



U.S. “Hardly a day goes by without some British politician or journalist pointing at Italy as the weak link in the western front against the Kremlin,” - the *Corriere della Sera*, with an op-ed signed by its diplomatic correspondent Paolo Valentino, complains.

Italy, the “weak link”, has lost South Stream, courtesy of the EU confrontational policy with Russia. And Italy’s farmers have been badly affected by the embargo Russia enacted in July 2014 and extended, early this month, in retaliation to EU sanctions. And yet, “Britain feeds a narrative that sees Rome as anxious to safeguard its business interests with Moscow,”

Paolo Valentino — who recently interviewed President Putin in Moscow for the *Corriere* newspaper — explains, before taking a stab at British hypocrisy. On the surface, “[the] British government is harsh in demanding sanctions against Russia,” but this harshness gives way to a more pragmatic, business-is-business approach whenever British economic interests are involved. The BP-Rosfnet deal is a case in point. On June 19 BP had paid Rosfnet — Russia’s largest oil company — \$750 million cash for a 20% stake in Taas-Yuryakh, an East Siberian oil producer. The deal was signed during the Berlusconi: Anti-Russian Sanctions ‘Unjust, Counterproductive, Harmful’ his was not only “the first contract of its size between western investors and a Russian group since the beginning of [the] sanctions,” points out Valentino. By paying cash, BP allowed Rosfnet to circumvent sanctions denying Russian companies access to western capital.

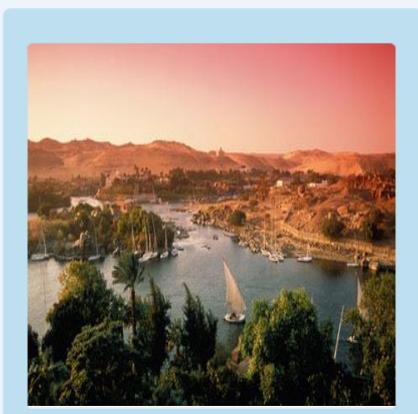
What’s more, “BP and Rosfnet will jointly explore two new areas in Western Siberia and Yenisey-Khatanga.” This means that sanctions preventing Rosneft from acquiring western technology will be circumvented by BP. And it is not just BP either. Another example, the *Corriere* point out “is the sale, again by Rosfnet, of a 29% share of the Taas-Yuryakh oilfield to Skyland Petroleum, a mysterious company registered only in January this year in the Cayman Islands by, surprise-surprise, another British company, Vazon Energy, owned by David Robson.” Paying the Sanctions Lip Service According to Sergey Pikin, Director of the Energy Development Foundation: “BP obtained the permit to sign the deal with Rosfnet from the British government.” The same government, which has often criticized Italy for being “soft” on Russia. A government that “does not comment on private corporations,” Valentino explains somewhat ironically, “limits itself to ensuring that the contracts are compliant with the sanctions regime.” David Campbell, CEO of BP Russia, recently announced: “We will continue to search for attractive investment opportunities to develop Russian resources [...] while respecting international sanctions.”

Italy Feels cheated The St Petersburg International Economic Forum had already seen “the signing of a memorandum for the realization of two additional lines for the North Stream between Gazprom, Germany’s E.ON, Austria’s OMV and Anglo-Dutch Shell,” Valentino recalls. This was “a real surprise after Gazprom CEO, Alexey Miller, announced in January that no new pipelines were planned because of political tensions in Europe.” So, it is not just BP that keeps business channels open with Russia? Other big companies do that too. However, “it is London,” Valentino says, “that has been sternly warning against excessive dependency on Russian gas, repeatedly attacking the South Stream project which would have brought Russian gas to Europe via Greece and Italy.” Following repeated attacks by the EU, the US and the British government, Gazprom eventually replaced South Stream, in which Italy had a major stake, with Turk Stream. Thus Italy’s Saipem, of the ENI’s group, lost its contract to lay down the South Stream pipelines under the Black Sea bed. Now, with North Stream about to double its carrying capacity, and BP to reap the fruits of its joint-venture with Rosfnet, Italy begins to feel cheated. In the City It’s Business as Usual If we move from energy to other business sectors, British attitudes towards sanctions do not change. A measure of double standards is always detectable.

Last year, when pressure began to mount on France not to deliver the Mistral warships, and the UK was — together with Poland and the Baltic countries — pushing for an arms embargo on Russia, “Paris,” wrote the Financial Times, “argued that an arms embargo would unfairly hit France while leaving other EU economies relatively unscathed.” FT quoted a French official who said that: “UK sanctions on Russian business interests in London would be much more important financially and economically against Moscow.” A year later, the situation is the same: “The City [...] actually protects dozens of Russian oligarchs who have invested their wealth in London,” writes the Corriere.

## ENI reports 15 bcm gas discovery in Egypt’s Nile delta

Natural Gas Europe, 20.07.2015



Iranian Italy’s ENI wrote on Monday it made a gas discovery in the Abu Madi West license in the Nile Delta, Egypt, saying that the preliminary estimates of the discovery indicate a potential of 15 bcm of gas in place with upside, plus associated condensates.

‘The new discovery will be put into production in two months’ time through a tie-in to the existing Abu Madi gas treatment plant, located 25 kilometres south-east’ the company wrote in a note. The six-legged dog, which holds a 75% working interest through a subsidiary, is the first hydrocarbon producer in the country.

Despite the current tensions in the region, ENI and BP (which holds 25% of the West Abu Madi lease) bet on Egypt. In particular, the Italian company is trying to remain committed, and increase efficiency. 'This discovery is the result of the new ENI's strategy to re-focus its activity on near field and incremental exploration opportunities with high potential value, which allow in case of success their quick exploitation through the already existing and synergic nearby infrastructures.' Meanwhile, the business environment in Libya keeps deteriorating. Italy's Foreign Ministry reported on Sunday that four Italians had been kidnapped in Mellitah. The four Italians are reportedly workers from the construction company Bonatti. After the closure of the Italian Embassy in Libya on February 15, the Foreign Ministry had invited all the Italians to leave the country.

## China-Russia second gas deal could be delayed indefinitely

Natural Gas Asia, 23.07.2015



Implementation of China-Russia second gas deal could be delayed indefinitely, Russian officials told. With Chinese economy slowing, Beijing is revising its energy policy, the officials said.

In May, Gazprom and CNPC signed the heads of agreement for pipeline gas supply from Russia to China via the western route. The western route envisages gas supply to China from Western Siberia's fields. On November 10, 2014 Gazprom and CNPC signed the framework agreement related to the pipeline. Gazprom representatives declined to comment on the story, Vedomosti said.

In addition to western route, Russian and China have also signed a deal for supply of Russian gas via eastern route (Power of Siberia). Work on the eastern route pipeline has begun. The Power of Siberia is a gas trunkline intended for natural gas delivery from the Irkutsk and Yakutia gas production centers to the Russian Far East and China (eastern route). On May 21, 2014 Gazprom and CNPC signed the purchase and sale agreement for gas supply via the eastern route. The 30-year contract provides for Russian gas supplies to China in the amount of 38 billion cubic meters per year.

# Public acceptance: How to get the “buy-in” for natural gas

Natural Gas Europe, 21.07.2015



In his intro to an interactive session on public acceptance at the World Gas Conference in Paris France, Dimitri Schildmeijer, Partner in WPNT Communications Europe, pointed out that while the topic is important to the gas industry, it is not always the center of attention.

Citing Qatar Gas’ estimate of \$45 trillion worth of investment from the gas industry, he offered, “We know that a lot of that money is going to go to building new infrastructure, whether it’s LNG terminals or gas pipelines, a compressor station or maybe a CO2 storage facility – that’s really what’s going to help the gas industry grow.

“But we also know that wherever we build there’s going to be neighbors,” he continued, “there’s going to be communities and worry and anxiety, maybe some anger or high expectations. There’s going to be stakeholders that we need to engage with as an industry.” It is a question, Mr. Schildmeijer said, of how to get “buy-in” from those stakeholders. In the start to his talk, Chris Glerum, Communications Manager, Gasunie, opined that public acceptance is all about people. He explained: “The gas industry is a technical business and, depending on the country or region you are from, it is developing into a more human and value-driven business.

Citing the statistic that 73% of 190 costly, important projects in the gas business experienced big delays. “And these were ‘non-technical’, as they call them,” he added. “It was the human factor – the stakeholders. It is about people.” The industry, he said, tends to send out technical messages, the values behind which should be sought. “It is important to reach people and connect with them.” With that in mind, Mr. Glerum said he had sought cooperation with the University of Groningen on researching the topic of public acceptance. When establishing a product image, for example, the industry states that it is the cleanest fossil fuel. “A few minutes later we say ‘we are a pretty green fuel’. So, what are we? What do people believe?” he queried. Communicating in policy terms, the gas industry says gas is affordable – a value that is important for people. He continued, “We are available – we give security of supply. “And we say it is sustainable or clean, or cleaner. There’s a bit of a problem: Are you clean or cleaner than coal?”



According to him, what the gas industry is communicating is generally accepted, but is under pressure in places like the Netherlands and various other places for different reasons. “In Holland, for instance, because of earthquakes in the famous Groningen field,” he recalled. Meanwhile, in the US shale gas has huge acceptability issues. Should the industry offer, ask for, or impose something? He commented, “Here lies an area of development. We mostly provide a rationale why we’re doing a project – we tell why. Mostly, this rationale is at a very high level. We say, at the highest level, ‘it’s good for the climate.’” But if one uses such an argument with a local affected by a gas project, he explained, that person likely won’t feel secure. The industry, he explained, is judged by how it does things, how it behaves and how it gives back, like building a swimming pool for a community. But companies may also immunize communities with the polio vaccine or provide education. Of the latter options, Mr. Glerum offered, “Think about the difference in value that they communicate by doing that; it’s not just giving money. They are showing what is important for them as a company and, in doing that, they are showing leadership, an identity: corporate values, leadership.”

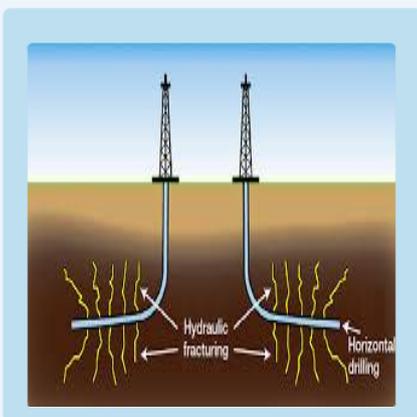
An oil and gas CEO expressing his reservations, though process and how he came to the realization that drilling in the arctic is acceptable can also help form perceptions. The three dimensions of communicating about natural gas, he said, are sustainable/clean, available, affordable. “Our claim in the gas industry is that we’re somewhere in the middle – we give it all. Herein lies our claim,” said Mr. Glerum. In the research conducted at the University of Groningen, researchers grouped around 50 values into four different categories, the classical values the gas industry uses in its communications: altruistic, egoistic, biospheric and hedonistic. For hedonistic value, he explained the comfort involved: “It’s easy to handle, it’s warm and nice.” Now, however, people have developed altruistic values (“Is gas good for the world?”). According to him, more emphasis is being placed upon such altruistic values by the industry, but it is a question whether or not such a strategy will work. “One of the results of the research is, if you claim that natural gas is biospheric – is green – because we develop green gas, or power-to-gas, people tend to say ‘I like that initiative on green gas,’ but the findings say it doesn’t change their general idea of natural gas. It’s acceptable, not too expensive.” He concluded that the human factor is gaining importance and can no longer be ignored by the gas industry. “It’s posing a challenge on us, and is placing limits on our business.”

Secondly, it’s important to understand people’s values, which determine the acceptability of gas or any other energy alternative. “When it comes to projects, it’s not the talk – it’s how we do things and how much time we spend together with people at their kitchen tables – that is the message.” Finally, Mr. Glerum said trust is everything, but belief in what someone says is only as good as belief in the messenger. The perception of gas is really just like a “bag of potatoes” when it is positioned as a green or relatively green source of energy, according to the University of Groningen’s Dr. Goda Perlaviciute. She explained: “At least in the Netherlands, gas has been a bag of potatoes for a long time – people use it for heating, for cooking their meals. They perceive it as a convenient energy source, while now the image is being changed from just a convenient bag of potatoes to something green.”

Public perceptions connected with shale gas, she reported, is an emerging field of study and a very controversial topic. “It seems that the evaluations of it are rooted in values. We already see that there is a strong group of opponents and a strong group of supporters. Opponents highlight the environmental risks, health risks and hazards, while the supporters emphasize the economic benefits and energy security. “The fact that these evaluations seem to be rooted in values can make it very difficult to communicate about costs and benefits,” said Dr. Perlaviciute, who added that communicating the benefit to energy security to someone rooted in biospheric values often results in a disconnect. One participant in the session asked whether it would be prudent for the natural gas industry, as a very rational, technical industry, to learn to communicate in a new way, to build trust. Mr. Glerum replied, “I think the gas industry did a good job in developing itself in the technical skills of communication: speak in short sentences, make nice presentations, to make comprehensible messages. But the next step to really gain something in the social license to operate is to see communication as just a dimension of relations. “We have to bring ourselves into the ring. You can send messages, but you don’t control the credibility that people have about you as a messenger. You can only change that by engaging with people,” he said. The next step, he concluded, might be in trying to make entire companies more communicative, to deal with people and enter relationships with local communities.

## Where is the global shale gas revolution?

Technology Review, 20.07.2015



At Despite massive resources all over the world, only three countries have managed to produce shale gas at commercial scale. The U.S. is not alone in having massive shale gas resources: shale formations rich in gas can be found all over the world. But so far no other country has come close to replicating the U.S. boom that has led to relatively cheap natural gas and helped curb yearly carbon dioxide emissions.

According to numbers from EIA, Canada and China are now producing commercial volumes of gas from shale formations, a process made feasible relatively thanks to the development of hydraulic fracturing and horizontal drilling technology.

Those countries lag far behind the United States in production, however. Though China, the world’s largest annual emitter of carbon dioxide, has nearly as much technically recoverable shale gas as the U.S. according to recent EIA estimates, challenging geology has been a major obstacle, and the country has had to scale back its near-term goals dramatically (see “China’s Shale Gas Bust”). According to the EIA, recent developments indicate that China is on schedule to produce some 17 million cubic meters per day by the end of this year. By comparison, current U.S. production is roughly 1.3 billion cubic meters per day. Canada, the second-largest shale gas producer, produced roughly 113 million cubic meters per day last year. Mexico has begun to produce a very small amount of the gas, and Poland, Algeria, Australia, Colombia, and Russia are all exploring the potential for developing oil and gas resources from their own shale formations.



# Announcements & Reports

## ▶ *The Role of Gas in UK Energy Policy*

**Source** : OIES  
**Weblink** : <http://www.oxfordenergy.org/wpcms/wp-content/uploads/2015/07/NG-100.pdf>

## ▶ *Prime Supplier Report*

**Source** : EIA  
**Weblink** : <http://www.eia.gov/petroleum/marketing/prime/>

## ▶ *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/>