

## Sanctions against Turkey to fuel inflation in Russia

AA Energy Terminal, 15.12.2015



Sanctions against Turkey are expected to further increase Russia's inflation rates, which are currently high at around 15 percent, experts recently predicted.

Due to oil prices losing more than half of their value since last year and the imposition of western sanctions against Russia because of the crisis in Ukraine, inflation in Russia has soared this year, increasing hardship for an economy deep in recession. Following Turkey's shooting down of a Russian military jet over the Turkey-Syria border last month; Russia imposed a range of unilateral sanctions on Turkey, including a ban on food imports.

"Unfortunately, additional increases in fruits and vegetables prices are likely in the coming months due to anti-Turkey sanctions," Marcel Salikhov, the head of the economics department at the Moscow-based Institute for Energy and Finance, told the Anadolu Agency.

Underlining that the banned products from Turkey are mostly fruits and vegetables, Salikhov said that the most sensitive categories that Russia banned are tomatoes, cucumbers, apples and other fruits.

"While these values are not large in terms of Russian consumer expenditure, we think there will be non-negligible additional inflationary pressure," Salikhov said. Various estimates on the impact of anti-Turkey sanctions on the Russian economy have been forecast. Salikhov predicts that additional inflation from anti-Turkey sanctions could be in the range of 0.4 to 0.5 percentage points in the coming months, whereas, the Central Bank of Russia estimates that the increase could be around 0.2 to 0.4 percentage points.

Alfa Bank, the largest private commercial bank in Russia, anticipates that a hike of up to 1.5 percentage points could be seen. Konstantin Korishchenko, chairman of the Stock Markets and professor of the Russian Presidential Academy of National Economy and Public Administration (RANEPA), said in consideration of the majority of estimates from Russian experts, the result does not differ very much from the average of 0.5 percent. "Is that much? No, compared to the expected inflation for 2015 at 13-14 percent, but it is still an increase," Korishchenko asserted.

# Oil Minister: Treating Turkey as enemy does not benefit Iraq

AA Energy Terminal, 14.12.2015



Iraq's Oil Minister Adel Abdel Mahdi said Sunday that treating Turkey like an enemy, due to its military presence in northern Iraq, will not benefit his country.

Approximately 150 Turkish soldiers and about 25 tanks were sent to a camp near the town of Bashiqa - located northeast of Mosul in Iraq's northern Nineveh province - to provide training to Iraqi volunteers as part of the fight against the Daesh group. The deployment led to the current tension between Ankara and Baghdad, with the latter asserting that Turkey violated Iraqi sovereignty. Baghdad demanded that Ankara withdraw the recently-deployed troops.

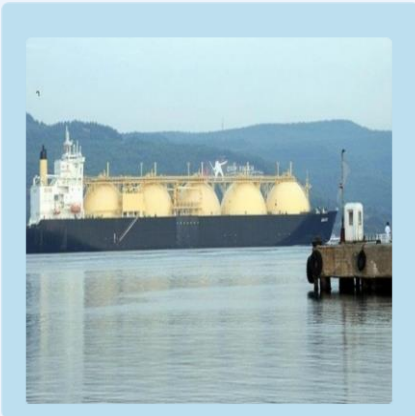
"Due to its presence in Mosul, treating Turkey like an enemy state, suspending political and trade relations, is not right. This will not help Iraq defend its sovereignty," Mahdi said. Since March, Turkey has been operating a training program in the camp. Turkish troops currently deployed in the camp have not been assigned combat duties.

Defining Iraqi government's steps towards Turkey as "stable," he described Turkey's military involvement in northern Iraq as "complicated." "We have to handle this situation with great care, and solve the issues without deepening them. We shouldn't shift the direction of Iraq away from the ongoing fighting against Daesh," Mahdi added.

A Turkish military source said Monday that some of the Turkish troops and an unspecified number of tanks that were deployed at the Bashiqa camp have been withdrawn to another part of northern Iraq.

# Turkey to secure interim gas supplies with FSRU

AA Energy Terminal, 15.12.2015



Floating storage and regasification units, known as FSRU, offer short term alternative supplies to diversify Turkey's energy resources and allow flexibility in meeting the country's demands, experts said.

There are 18 FSRUs in 11 countries including the US, Brazil and Italy. Capacity in FSRUs range from 500 mcm to 1 bcm while the costs of the units can be in the range of \$500 million to \$1 billion. Mehmet Ogutcu, head of the Bosphorus Energy Club, stated these units create mobility because they can be used in line with the volume of energy consumption in any region of the country.

"You can use it in the Marmara region, or the Mediterranean region according to the energy consumption. However, investors are waiting for a 'signal' from the government. If LNG usage is encouraged in the government's policy, investors will act quickly," Ogutcu explained, and added that Jordan is an example of this success with the use of units which helped the country with allowing flexibility of supplies in a speedy way.

Ogutcu highlighted interest from Turkish companies who want to enter this business, but also explained the barrier to doing so with current legislation. "Therefore, regulations are needed at this stage to mobilize these investors," Ogutcu suggested.

Another expert, who wishes to be anonymous, said that Petroleum Pipeline Corporation (BOTAS) is considering options to develop a project to bring FSRU to Turkey adding that this could firstly be used in the Bandirma and southern Marmara region of the country - a region which has high energy demand.

In that way, the expert underlined that the intensive energy consumption in the Thrace region and particularly in Istanbul may be more easily met. "A FSRU is also a very significant alternative to meet the peak demand in the winter time," he emphasized.

# Turkey a possible route for Iranian gas to Europe

AA Energy Terminal, 12.12.2015



Turkey could well be chosen as a route for exports of Iranian gas to Europe in the post sanctions era, according to Javad Amin-Mansour, director for trade and energy negotiations at Iran's Ministry of Foreign Affairs.

Iran eyes the total removal of international sanctions so it can gain access to European markets. "I think transferring gas through Turkey is possible. We don't have direct access to the European market. There are some countries in between, and access depends on their position," Javad Amin-Mansour, director for trade and energy negotiations told Anadolu Agency.

Speaking on marketing natural gas to Europe, the director said that after the Implementation Day, which will occur once the International Atomic Energy Authority verifies that Iran has implemented key nuclear-related measures described in the Joint Comprehensive Plan of Action, details on routes and markets will be considered.

He also emphasized that Iran may export more gas to Turkey should it be required. "I don't see any problem basically, because Iran has the second largest gas reserves in the world. So potentially it has enough reserves for that purpose, but by that time, it will depend on contracts between the two countries," he asserted.

Iran produced around 173 billion cubic meters of natural gas in 2014, according to BP's Statistical Review of World Energy 2015. In addition, Tehran aims to nearly double its gas production in the coming years, if sanctions on the country are removed next year. Annually, Iran sends an average of 10 billion cubic meters of gas to Turkey. Current shortages in gas transfer from Iran to Turkey have been caused by severe weather conditions in Iran, Mansour said.

# Decreasing Turkey's gas bill: "It's a family affair"

Natural Gas Europe, 14.12.2015



Hours after Turkey shot down a Russian plane that allegedly violated Turkish airspace, Turkey's President, President Recep Tayyip Erdogan, approved a new cabinet that includes his son-in-law, Berat Albayrak, who was appointed Energy and Natural Resources Minister.

Aaron Stein, Nonresident Senior Fellow at the Atlantic Council's Rafik Hariri Center for the Middle East, recalls that the 37-year old businessman, Mr. Albayrak, has been focusing on the Eastern Mediterranean and on the price Turkey pays for natural gas, both from Iran and from Russia, in his capacity as CEO of Çalık Holding.

Of Mr. Albayrak, Aaron Stein offers, "I think you have a new Turkish Energy Minister who is very close to Erdogan, speaks for Erdogan, coming into the cabinet, who may take a very hard line on Turkey's push to decrease the cost of the country's gas import bill, from Iran and Russia."

A similar sentiment was expressed by Mr. Albayrak's predecessor. In his appearance at the Atlantic Council Energy & Economics Summit, Turkey's outgoing Minister of Energy and Natural Resources, Ali Riza Alaboyun, unveiled the country's plans to reduce significantly his country's share of natural gas used for power generation. He also said that Turkey is planning to invest \$125 billion into the energy sector by 2023.

Turkey, said Minister Alaboyun, will have doubled its power generation capacity by 2023, the centennial of the Turkish Republic, to 130,000 megawatts. He offered, "We are planning to diversify our energy mix and are determined to reduce our dependency on natural gas for electricity generation. Although the share of natural gas in our installed capacity will stay 29%, its share in electricity generation is almost 50% - a clear indication of our dependence upon natural gas to generate electricity."

Renewable energy, presently comprising 4,200 megawatts, should total 20,000 megawatts by 2023, according to him. "Utilizing all the potential of renewable energy is at the top of our agenda," he stated. Additionally, Mr. Alaboyun said Turkey is also constructing two new nuclear plants, and planning a third one, to reduce the proportion of natural gas in the country's energy mix.

He said, "In order to provide sustainable energy to our people, we have to install base load power plants like nuclear, coal-fired power plant using clean coal technologies. Energy demand in Turkey, increases 7%/annum, he reported. Noting that climate change and clean energy technology would also be focal points at the Atlantic Council Energy and Economics Summit, he offered, "Energy security is a multi-dimensional topic.

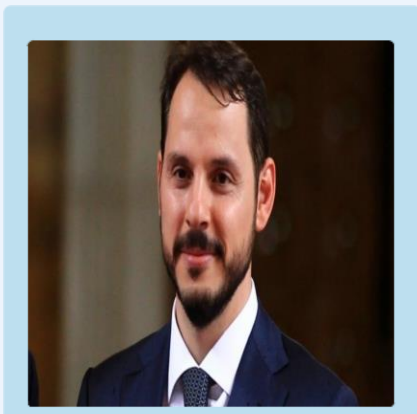
And, in this respect, the need for energy increases the inter-dependency among countries. From this respect, I believe that sharing mutual resources will provide mutual prosperity for both supplier and consumer.”

Energy issues, explained Mr. Alaboyun, should be leveraged from promoting peace and open dialogue. Of Turkey’s energy outlook, he admitted that Turkey does not have its own energy resources, such as natural gas or oil. “But 70% of the energy resources are located in the east of Turkey; 60% of consumers are located in the west of Turkey. Those figures provide a geostrategic location of Turkey between supplier and consumer,” he explained.

The Trans-Anatolian Pipeline Project (TANAP), he said, a fundamental part of the Southern Gas Corridor, is an example of Turkey’s geostrategic location. “In addition to that, gas potential in Iraq, Iran and the Eastern Mediterranean may be new future opportunities for buyers finding the energy resources for Turkey and Europe.”

## Turkey to start tender for 3rd nuke plant in 2016-17

AA Energy Terminal, 17.12.2015



Turkey wants to make headway in developing Turkey’s third nuclear power plant by completing the tender process in 2016-17, Turkey’s energy minister said.

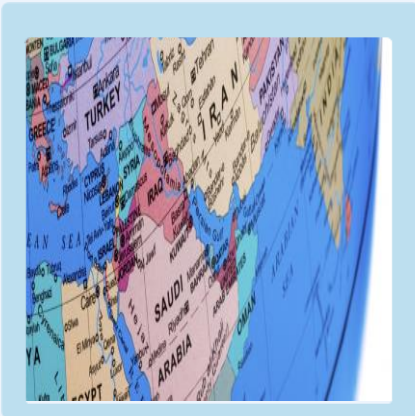
Turkey’s Energy and Natural Resources Minister Berat Albayrak said that he does not see any problem with the tender process for the third nuclear power plant that plans to be constructed in the northern region of Turkey. “We also want to finalize the tender process for the third nuclear power plant in 2016 or by 2017 at the latest. Work on finding good companies and a suitable geographical location for construction is still ongoing.

Igneada, [in the Kirklareli province of Turkey’s Thrace region] as mentioned before, is one of the possible locations for the project,” Albayrak said. Turkey’s first nuclear power plant Akkuyu, in the province of Mersin in the Mediterranean region, is under construction and its four units will have a capacity of 4,800 megawatts.

He underlined that Russia and the responsible company for building the Akkuyu plant, Rosatom, are currently working on the project. “We hope that the plant will be built and be a model plant in nuclear energy for Turkey,” he stated. Turkey’s proposed second nuclear plant in Sinop in northern Turkey is planned to have 4,480 megawatts in a four unit structure.

# TANAP and the semi-encirclement of Iran: progress and paradoxes in Turkey's energy diplomacy

Natural Gas Europe, 17.12.2015



The TANAP is a cornerstone of Turkey's energy diplomacy and Ankara's answer to the strategic paradox that 56.7 percent of Turkey's natural gas comes from one of its principal geopolitical rivals: Russia.

The central pillar in Turkey's plan to diversify its natural gas supply, is slated to transport natural gas from Shah Deniz field across the length of Turkey for sale in both Turkey's market as well as in the EU. TANAP will initially transport 16 bcm annually from the Shah Deniz field's second phase of development via the expanded SCPX extending across Azerbaijan and Georgia to the Turkish border.

However, TANAP will ultimately transport 60 bcm annually, with capacity expansion and the inclusion of additional suppliers. Building on its energy partnership with Azerbaijan, Turkey's efforts to secure other suppliers for TANAP has also succeeded in creating a framework to contain the influence of Ankara's other principal geopolitical rival: Iran. Paralleling the strategic paradox with Russia, Iran constitutes Turkey's second largest supplier of natural gas, accounting for almost 20 percent of Turkey's import supply mix.

Turkey's efforts to secure natural gas supplies from the Kurdistan Regional Government (KRG) in Iraq and Turkmenistan for TANAP has resulted in the creation of an arc of strategic energy relationships with states and political entities bordering Iran, effecting the virtual encirclement of Iran north of about 35 degrees north latitude. For Turkey, this is an important strategic gain in light of the expected expansion of Iranian regional influence with the anticipated lifting of international sanctions against Iran in 2016.

Although Turkey has made significant strategic progress against its two main geopolitical rivals through its energy diplomacy based on TANAP, this article suggests that paradoxes remain. Its geopolitical analysis of the proposed pipeline projects with Turkmenistan and the KRG reveal that Turkey's gains are fragile and susceptible to interference from Iran as well as Russia. Turkey's long term interests in supply diversification would be best served by using its temporary strategic advantage to mitigate the risk posed by Iran through measures aimed at reducing Iran's threat perception of Turkey's TANAP diplomacy.

The article concludes that aside from engaging new potential suppliers (such as Israel), Turkish energy diplomacy is confronted with the strategic imperative to encourage some form of Iranian participation in TANAP.



Against the backdrop of Russia's 2014 annexation of Crimea, continued sponsorship of low-intensity conflict in eastern Ukraine, Black Sea naval build-up, and ongoing presence in the Georgian breakaway regions of Abkhazia and South Ossetia, the creation of a Baku-to-the-Bosphorus energy transportation corridor has assumed a new strategic urgency. With the September 2015 advent of Russia's direct intervention in the Syrian conflict, placing a significant Russian combat presence on Turkey's southern border in addition to its northern maritime border, this strategic urgency has become even more heightened.

This is particularly the case as Russia's gas exports to Turkey have become part of the diplomatic tug-of-war between Ankara and Moscow resulting from Russia's military presence in Syria. At the time of writing, Turkey shot down a Russian fighter jet and the issue of Turkey's Russian gas imports is likely to be at the forefront of the ensuing tensions. The gas supply diversification provided by TANAP, which will become operational in 2019, will ultimately allow Turkey greater freedom of maneuver in its energy policy options toward Russia.

In addition to the progress made in creating the opportunity to ease Turkey's dependency on Russian natural gas, Turkey's energy diplomacy based on TANAP has also achieved the significant strategic gain of creating an arc of energy relationships with the frontline states and political entities spanning Iran's western and northern borders – the KRG, Azerbaijan, and Turkmenistan. Demonstrating a forward-leaning posture in its energy diplomacy, Ankara's outreach will serve to curb the expansion of Tehran's influence in the post-sanctions environment.

While Turkey's "frontline" energy diplomacy has accrued several advantages for Ankara; it has also led to a fundamental strategic paradox: More than Azerbaijan, Turkey's leading alternative suppliers for TANAP are vulnerable to Iranian and even Russian interference.

TANAP's long-term viability requires the participation of other states. TANAP's export volume is expected to increase at least 1 bcm per year. Slated to transport 23 bcm by 2023, 31 bcm by 2026 and, with infrastructure expansion, ultimately 60 bcm, TANAP's increasing capacity has important geopolitical ramifications as the pipeline will need to transport gas from other regional producers besides Azerbaijan.

If Baku continues to exploit its existing gas reserves at the current pace, it will completely deplete its reserves in 40 years. Therefore, despite facing price competition from additional suppliers in the short term, transporting gas from other nations via TANAP is in Azerbaijan's long-term economic and strategic interests. Likewise, expanded gas deliveries to Turkey via TANAP are important for the Turkish economy, as Turkey's consumption rate will likely continue to increase over the next decade.

Geopolitically, Turkey and Azerbaijan consider TANAP's success a matter of vital national interest, albeit for different reasons. For Turkey, TANAP, as the transit route for new sources of natural gas to reach the EU, forms the foundation of Ankara's strategic policy to become an international energy transportation hub. For Azerbaijan, TANAP is the foundation of Baku's strategic policy to develop international stakeholders in Azerbaijan's political sovereignty through the construction of energy infrastructure.





Among Azerbaijan's neighboring Caspian littoral states, Turkmenistan is an essential additional supplier, particularly if Iran does not transport gas through TANAP. With the world's fourth largest proven reserves, Turkmenistan represents an important alternative source of natural gas for both Turkey and the EU as they seek to alleviate their dependency on Russia.

Thus, Turkmen gas exports via TANAP form a critical policy objective for Turkey and Azerbaijan. Ankara has declared its intention to incorporate 5-6 bcm of Turkmen natural gas into TANAP.

The export of Turkmen gas exports to Turkey and the EU via TANAP involves the construction of a 5 billion dollar, 300 km undersea Trans-Caspian Pipeline (TCP) between Turkmenistan and Azerbaijan. The TCP's construction requires a political reconciliation between Turkmenistan and Azerbaijan, divided over the disputed Serdar (Turkmen)/Kyapaz (Azeri) hydrocarbon field located 145 km from Azerbaijan's coast. Absent a boundary settlement, Baku and Ashgabat would need to either compartmentalize the issue or expediently agree to joint development terms.

An additional hurdle to the TCP's construction is Turkmenistan's traditional policy commitment to avoid involvement in external pipeline projects or assume any obligations for gas disruptions abroad. With Turkmenistan willing to do little more than deliver gas to its border, the TCP's construction has required concerted effort from the other interested parties to advance the project.

To this end, Maroš Šefcovic, the European Commission Vice President in charge of Energy Union, participated in the 1 May 2015 Ashgabat quadrilateral summit of the EU, Turkey, Azerbaijan, and Turkmenistan. Resulting in the Ashgabat Declaration outlining the parties' next steps for bringing Turkmen gas to Europe, the European Commission Vice President emerged from the summit asserting "Europe expects supplies of Turkmen gas to begin by 2019." The summit also empowered the W-Stream Company, a reconfiguration of the White Stream Pipeline company, to carry the TCP project forward as the parties search for IOCs join a TCP consortium.

The advances made toward the TCP's realization, to a large degree, have been facilitated by Turkey's continued mediating role between Baku and Ashgabat, which witnessed a major breakthrough with the convening of the first ever trilateral meeting of the foreign ministers of Turkey, Azerbaijan, and Turkmenistan on 26 May 2014. Focused on enhancing energy and security cooperation, the foreign ministers agreed to hold trilateral meetings biannually and develop a two-year "action plan."

Indicative of the effect on Ashgabat's policy orientation, one month later Turkmenistan's President Gurbanguly Berdimukhammedov signed a decree to open an embassy in Georgia. With the declared goal to promote the further development of their Turkmenistan-Georgia relations, the action was an acknowledgment of the increasing importance of TANAP for Turkmenistan, as Georgia constitutes the critical transit state with the SCPX traversing Georgian territory to connect the western Caspian shore and TANAP. From the development of high-level ministerial cooperation between Turkey, Azerbaijan, and Turkmenistan and the development of stronger diplomatic relations between Georgia and Turkmenistan in 2014 to the Ashgabat Summit in 2015, the TCP project has witnessed important diplomatic advances.



Nevertheless, the greatest obstacle to the TCP's construction remains Iran's and Russia's consistent opposition to the project. Iran has offered itself as a transit state for Turkmen gas to reach Turkey and the EU market.

Presently, Iran lacks sufficient capacity to transport commercially significant volumes of Turkmen gas and would have to undertake a massive infrastructure expansion requiring a minimum of five years, assuming Tehran obtained the prerequisite financing. While Iran may be incentivized to acquiesce to the TCP's construction, it remains unclear whether Russia will relent in its opposition to the pipeline, particularly in the current climate of diplomatic confrontation with Turkey.

In contrast to Turkmenistan, a contractual agreement already exists for Turkey's importation of natural gas from the Kurdish Regional Government (KRG) in Iraq. On 25 March 2013, Turkey concluded a commercial framework agreement for the minimum annual import of 10 bcm from the KRG.

Depending on the ultimate gas supply agreement to be concluded between Ankara and Erbil, the annual volume may reach as high as 20 bcm. The signatories to the commercial framework agreement were the KRG and the "private" Turkish Energy Company (TEC) that is wholly owned by Turkey's state-owned gas company BOTAŞ. Construction on the Turkish segment of the pipeline, which will run from Bismil to Mardin and then to Silopi, located on the Turkish side of the border, has already been undertaken by BOTAŞ.

However, the gas pipeline faces severe security challenges on both sides of the border. Along the Turkish segment of the route, Silopi and other locations in the Kurdish-dominated Şırnak province, such as Cizre and Uludere, have been sites of severe civil unrest and Kurdistan Workers' Party (PKK) militancy.

On 29 July 2015, PKK militants bombed the Kirkuk-Ceyhan oil pipeline in the Cizre district near Silopi. The financial loss resulting from the attack on the pipeline, which transports oil from the KRG to the Turkey's Mediterranean Ceyhan port, is estimated at 250 million dollars.[21] During the period from 1 July to 17 August 2015, the Kirkuk-Ceyhan pipeline suffered a total of 501 million dollars in losses due to ongoing sabotage and theft. [22]

Unrest in the region is ongoing. In August 2015, Turkish security forces battled to wrest several of Silopi's districts from the control of PKK-affiliated urban youth militias barricaded with homemade trenches laden with improvised explosive devices. In September 2015, Mardin witnessed a PKK bomb attacks against police. In October 2015 in the run-up to Turkey's November 1 parliamentary elections, both Mardin and Silopi had been placed under curfew.

The intensification of civil conflict after the elections suggests that additional measures to secure the gas pipeline will be required and Turkey needs to factor these measures into the overall cost. Similar measures will need to be taken by the KRG along its segment of the pipeline. The 492 km highway route from Erbil to Bismil passes through Mosul. While the KRG segment of the pipeline will presumably circumvent areas controlled by the Islamic State of Iraq and the Levant (ISIL), the pipeline's safety will be affected by the overall security environment in northern Iraq.



The institutional coherence of the KRG has also come into question as President Masoud Barzani has continued to remain in office beyond the KRG constitution's two term limit. The two-year extension to Barzani's second term granted by the KRG parliament dominated by Barzani's Kurdish Democratic Party (KDP) expired on 19 August 2015.

According to KRG law, the speaker of the Parliament, currently Yousif Mohammed Sadiq from the Gorran (Change) party, is supposed to become acting president. In October 2015, the ongoing peaceful protests against the KDP in Gorran strongholds turned violent with arson attacks against KDP offices. Sadiq has been prevented from attending Parliament sessions and social media was temporarily shut down.

At the time of writing, protests have become more widespread and reflect a general discontent with the functioning of the KRG. Both the main opposition party the Patriotic Union of Kurdistan (PUK) as well as Gorran maintain strong relations with Iran. Should the Barzani-led KRG not sufficiently accommodate Iranian interests, Tehran could shift the political balance in the KRG through increased support of the PUK and Gorran or by augmenting its military presence in regions controlled by the PUK.[26]

Perhaps, the most important concern for Turkey is the 260 dollars per 1,000 cubic meters price it will pay for natural gas from the KRG. When BOTAŞ, through TEC, finalized its commercial framework agreement with the KRG, the average monthly price for crude oil was 102.61 dollars per barrel and BOTAŞ' average gas price was approximately 435 dollars per 1,000 cubic meters.

However, the average monthly price for crude oil in September 2015 was only 46.29 dollars per barrel. Consequently, Turkey should be able to renegotiate a lower price. Given that the KRG's energy relationship with Turkey provides the KRG with vital revenue for its survival, it is likely that Turkey and the KRG will arrive at a mutually acceptable accommodation.

## Concluding Remarks

In seeking to diversify its import supply mix of natural gas through TANAP, Turkey has conducted some deft energy diplomacy with potential suppliers in addition to Azerbaijan. Ankara has facilitated the advancement of gas pipeline projects in Turkmenistan and the KRG. Through its energy diplomacy based on TANAP, Turkey has created an arc of strategic energy relationships with the KRG, Azerbaijan, and Turkmenistan that is tantamount to the semi-encirclement of Iran. While an important geopolitical gain for Turkey in advance of the expanded regional influence Iran is likely to exert with the 2016 lifting of international sanctions, these pipeline projects are subject to Iranian, as well as Russian, interference.

Because of the vulnerabilities inherent in the Turkmenistan and KRG pipeline projects, Turkey faces two strategic imperatives for its future energy diplomacy. To ensure its security of supply and diversity of import routes, it is in Turkey's interest to pursue – if it can achieve a sufficient level of strategic confidence with Israel – the development of an undersea pipeline from the Leviathan natural gas field to Turkey. At the same time, to ameliorate the possible threat Iran poses to the realization of the Turkmenistan and KRG pipeline projects, Turkey has an interest in encouraging Azerbaijan to sell an equity stake in TANAP to Iran.

In April 2015, after the five permanent members of the United Nations' Security Council plus Germany (the P5+1 nations) and Iran announced the Comprehensive Framework Agreement in Lausanne, Rovnag Abdullayev, the president of TANAP's lead stakeholder the State Oil Company of the Azerbaijan Republic (SOCAR), acknowledged SOCAR was prepared to consider an Iranian bid for an equity share in TANAP after sanctions end.

SOCAR previously announced its willingness to sell up to eight percent of its 58 percent stake in TANAP to a new shareholder. Iran's Ambassador to Azerbaijan Pak Ayeen indicated Iran's interest in acquiring an equity share in TANAP. Turkey's then-Minister of Energy Taner Yıldız subsequently declared Ankara's openness to Iran joining TANAP.

Engaging either Israel or Iran, and especially both concurrently, will pose exacting challenges for Turkey. However, the strategic logic of Ankara's heretofore successful energy diplomacy based on TANAP has made the option of engagement almost ineluctable.

## Breakthrough in Israel-Turkish relations; natural gas negotiations expected

Natural Gas Europe, 17.12.2015



After a 5-year diplomatic crisis, Israel and Turkey are about to normalize their diplomatic relationship and exchange Ambassadors, according to reports by Israeli media.

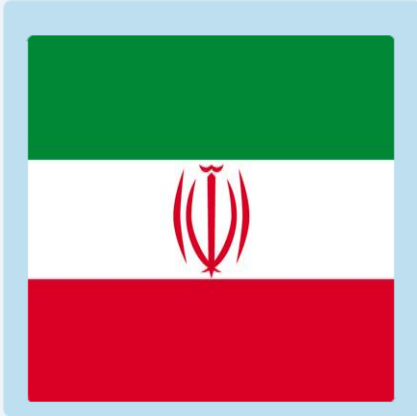
The breakthrough was achieved during negotiations. The two countries reached a tentative agreement according to which Israel will pay Turkey \$20 million in compensation for the Turkish citizens killed on the Mavi Marmara boat, which led a flotilla that tried to break the Israeli siege on the Gaza Strip and was overtaken by Israeli commandos. Turkey will ban Hamas' activity in its territory and will expel a senior military operative that operates from Istanbul;

And the Turkish parliament will pass a law that will annul legal claims against IDF personnel who took part in the flotilla incident. After the understandings are translated into a signed agreement, Israel and Turkey, according to the report, will start negotiations on natural gas cooperation.

According to the report, Israel will seek to export natural gas to Europe through Turkey via a pipeline from Israel to Turkey and from Turkey to Europe. Local Turkish market was not mentioned in the reports. However, that is only a preliminary report and its accuracy, regarding natural gas cooperation, is questionable.

# Iran starts gas exploration near Turkmenistan border

Natural Gas Europe, 16.12.2015



Iran has begun exploration operations at Sufikom region, located in the Gorgan plain, neighbouring Turkmenistan, aiming to find new gas reserves, a company has said.

Yousef Etemadi, director for exploration at Iran's Khazar Oil Company, said exploration operations officially kicked off by the drilling rig number 56 of the National Iranian Drilling Company, Shana reported. Two years ago, Khazar Oil Company conducted seismic operations across 1,200 square kilometres, he added. "According to the plan, we have planned to conduct drilling down to 2,400 metres depth and to complete the operations within 130 days," he explained.

"However, there is no certainty of discovering new reserves. This is just a probability and we should wait to see the results." Iran imported some 6.5 million cubic metres of gas from Turkmenistan last year, according to BP.

Hamid Reza Araqi, managing director of the National Iranian Gas Company, said on December 12 that by producing 173 billion cubic metres of natural gas and consuming the same amount, Iran was the fourth biggest producer and consumer of gas in the world in 2014.

"There are 10 gas refining complexes operating in the country with an annual output of 260 billion cubic metres. Meanwhile, over 10 cross-country pipelines, totalling about 36,000 kilometres, are transferring gas nationwide," he explained. Iran plans to boost its gas output to 1 billion cubic metres per day within the next 2 years. Iran's current raw gas output stands at 700 million cubic metres per day.

# Turkmenistan: The diversification of gas export market

Natural Gas Europe, 16.12.2015



Among the Central Asian countries, Turkmenistan has the largest natural gas reserves and the world's sixth largest reserves that amount 13,7 tcm. In 2015, Turkmenistan expects a total 48 bcm of natural gas exports comparing to 2014 figures of 45,1 bcm.

At the same time, the country forecasted a 9 percent increase in natural gas production to 83,8 bcm in 2015. That means that Turkmenistan would have 35,8 bcm of natural gas for local consumption. That amount of gas might be too high for Turkmenistan's domestic consumption, because the country burned roughly 22,3 bcm in 2013.

Therefore, the margin between the production, consumption and export demonstrates that Turkmenistan has a significant potential to increase the export of its energy source. To export natural gas to different markets, Turkmenistan needs to improve its pipeline infrastructure. At the time, there are two pipeline routes; one going to China with the current capacity of 55 bcm per year and another going to Russia with a capacity of 80 bcm.

The main natural gas field that will drive the country's gas production in the future is the Galkynysh field. The Galkynysh project started the production in 2013 and will add roughly 20 bcm per year of natural gas by 2020. By increasing its gas production, Turkmenistan is looking for export markets that would secure its infrastructure routes to different markets, because it is not in the country's interest to be dependent only on one market, which is China at the time.

As part of its Silk Road Economic Initiative, China invests in energy-rich Central Asia. Since Turkmenistan is the richest country on natural gas in Central Asia and China plans to increase its gas consumption due to environmental issues, China and Turkmenistan have been expanding their pipeline infrastructure to send the blue fuel to the Chinese Xinjiang province.

According to BMI Research, China will increase its gas consumption from 171 bcm in 2013 to 283 bcm by 2020. Turkmenistan might play a significant role as Chinese gas supplier. Turkmenistan's geographical location allows the country to build pipelines to China and to deliver gas on competitive price basis. Already in 2012, China imported 60 percent of natural gas from Turkmenistan, and BMI Research forecasts that Turkmenistan will maintain this share in Chinese gas market, despite China's projects with Myanmar and Russia.

The Central Asia – China pipeline connects Turkmenistan and China via Uzbekistan and Kazakhstan. This pipeline consists of four lines. Line C with an annual capacity of 25 bcm went on stream in May 2014. Line A, B and C has a total capacity of 55 bcm per year of natural gas.



Turkmenistan plans to increase the capacity to 80 bcm per year by 2020 by constructing Line D that is projected to go on stream by 2020. The multilateral agreement between China and the Central Asian countries foresee 85 bcm of gas exports to China by 2020, where Turkmenistan will deliver 65 bcm of the total 85 bcm per year.

In 2014, Turkmenistan delivered 25,9 bcm of natural gas to China, even though the agreement between the two countries foresaw 30 bcm in 2014. China expects to receive 40 bcm of Turkmen gas in 2015. Obviously, China is Turkmenistan's main client for natural gas, but Turkmenistan plans to diversify its gas export market to reduce the reliance on one market. The diversification will improve energy security and will give Turkmenistan more political and economical freedom to maneuver and to pursue its national interests.

## Russia

The second largest importer of Turkmen gas is Russia. The Central Asia – Center pipeline sends Turkmen gas to Russia. In its turn, Russia either sells it to Europe or consumes it domestically. However, the fall of gas prices that are oil-indexed reduced the volume of gas that Russia purchased from Turkmenistan in 2014. The volume of purchased gas dropped from 10,5 bcm in 2014 to 4 bcm in 2015.

The reason was high prices for natural gas that Russia had to pay to Turkmenistan, because the long-term agreement was signed in 2010 when natural gas prices were at a high level due to the oil-indexation. Since the gas prices decreased, it became less profitable to buy Turkmen gas at the price of \$240 per thousand cubic meters. Therefore, Gazprom tried to negotiate with Turkmenistan to reduce the price, but the country didn't agree to Gazprom's terms. Despite the disagreement, Russia continues to buy natural gas from Turkmenistan. According to Gazprom, the Russian gas company will not break the agreement with Turkmenistan.

Taking into account that Russia sees Turkmenistan as its sphere of influence, Turkmenistan might encounter geopolitical challenges to use the Central Asia – Center pipeline to increase its gas exports of gas to the European market. Considering an economic perspective, Turkmenistan is a competitor to Russian gas, and so it is in Russia's power to control the flow of Turkmen gas through Russia to Europe. Therefore, the Central Asia – Center pipeline will not be a game changer for Turkmenistan's diversification strategy.

Iran is the third export market for Turkmen gas. However, the lifting of sanctions against Iran transforms two countries to competitors rather than to trade partners. Brussels forecasts that Iran will become a major gas supplier to the European Union by delivering 25-35 bcm per year by 2030. Iranian gas is expected to reach the European gas market as LNG via Spain. Instead of linking Iran to the Southern Corridor, the EU needs to improve the gas pipeline network with Spain. Nonetheless, sanctions against Iran need to be lifted before that project can take place.

Iran does not plan to construct a pipeline to the EU. According to National Iranian Gas Export Company, the construction and transit costs of a gas pipeline would be too high. The pipeline would be roughly four-five kilometers long.



Since the pipeline would go through multiple countries, that would lead to the rise of transit costs. In this case, LNG from Iran would be more economically feasible. Therefore, it might be difficult for Turkmenistan to reach the European gas market via Iran. The lifting of the Iranian sanctions will give Iran an opportunity to finally profit from its vast reserves of natural gas. Turkmenistan would be a competitor in this regard.

Iran and Turkmenistan also had talks regarding sending Turkmen gas to the Persian Gulf. However, swaps and a pipeline via Iran to the Persian Gulf will not be profitable. According to Iran's Oil Minister, Iran and Turkmenistan will not build a gas pipeline or swap deals to deliver Turkmen gas to Persian Gulf.

The future lifting of Iranian sanctions will transform Iran and Turkmenistan to competitors. Most likely, we will not observe large breaks through in the negotiations between these two countries in the near future.

Brussels is interested to diversify its large natural gas supplier Russia, and Turkmenistan represents an alternative with large gas reserves and a geographical location that allows building an economically feasible pipeline. The Trans-Caspian Pipeline (TCP) would connect Türkmenbasy, a Caspian port city in Turkmenistan, and Sangachal Terminal located at the Caspian coast in Azerbaijan. The TCP would be able to connect Turkmenistan to the TANAP pipeline, which has a capacity of 16 bcm per year. This way, Turkmenistan would send 10 bcm per year to the EU, which is still significantly low in comparison with the gas exports to China.

The European Union has also increased official visits to Turkmenistan in recent years. The EU stated that the TCP pipeline could be built by 2019. However, this project has received a disagreement from the Caspian countries Russia and Iran because of the undecided legal status of the Caspian Sea. Apart from the legal issue, TCP requires Turkmenistan and Brussels to undertake commercial arrangements. Even though it is uncertain, whether the construction of the TCP pipeline will start any time soon, Turkmenistan is building its East-West pipeline.

In 2012, Turkmenistan started the construction of the East-West Pipeline with an annual capacity of 30 bcm. This pipeline will deliver natural gas from the Shatlyk field to the Caspian coast. This pipeline will go online in December 2015.

Interestingly, the EU gas consumption has dropped since 2010. In comparison to 2013, the EU's natural gas consumption dropped by 10,7 percent to 16,046 thousand terajoules. Besides gas imports via pipelines, the European Union imported 14 percent of its gas as LNG in 2013 coming from Qatar, Algeria, Nigeria and others. Also more expensive LNG imports to the European Union decreased by 29.1 percent in 2013 comparing with 2012. However, Eurogas, an NGO based in Europe, forecasts a 7 percent increase of natural gas demand in the EU in 2015 compared to 2014. Taking into account the EU's energy targets such as energy security and reduction of CO<sub>2</sub> emissions, natural gas will play an important role in the European market, because the blue fuel is less pollutant than coal and is flexible to be used as back up for fluctuating renewables.





The gas demand in Europe depends massively on the weather conditions. Considering the energy security issue, the EU's gas imports from non-EU countries will increase, because the gas production of the European countries is in decline. Since the most competitive gas comes from Russia, Europe's energy security might be undermined, if the EU relied predominantly on Russia's supplies.

Consequently, Turkmenistan and the EU would mitigate their energy security, if they meet an agreement for Turkmen gas supplies to Europe. However, the legal status of the Caspian Sea and commercial arrangements need to be resolved first.

The most promising project for Turkmenistan now is the Turkmenistan-Afghanistan-Pakistan-India pipeline (TAPI). The Turkmen government will start the construction of TAPI in December 2015. This pipeline will have an annual capacity of 33 back of natural gas. The four countries expect the pipeline to go on stream in December 2018. The TAPI pipeline will cost approximately \$10 billion.

Although the four countries have reached an agreement, it is important to mention that the pipeline is facing security and economical issues. Since TAPI will go across Afghanistan's and Pakistan's provinces, where Taliban has its location, the building of the pipeline and its security might be endangered. Another challenge for the pipeline was the pricing issue. Nonetheless, the beginning of the TAPI construction demonstrates that parties have come to the agreement by mitigating the risks.

Diversification of gas export markets is crucial for Turkmenistan. Turkmenistan understands that it is dangerous to depend on one export market. The decrease of Russian gas purchases in 2015 demonstrated that dependence on one gas export market could hit the economy. In addition, the landlocked geographical location of Turkmenistan proves that there must be a pipeline infrastructure in different directions so that Turkmenistan can adjust to fluctuations of gas demand from its neighbors. The diversification of pipeline routes will prove a sustainable profit for the Turkmen economy.

The main gas export market for Turkmenistan is China at the time. China expects to increase its gas imports from Turkmenistan to 65 bcm per year by 2020. To meet this target, the Central Asian countries and China are building out the Central Asia – China pipeline.

Turkmenistan's gas relations are worsening with Russia. Therefore, Turkmen gas will not see an increase of its gas flowing to Europe via Russia. The same is with Iran. With the future lifting of sanctions against Iran, Turkmenistan will transform to a competitor. In addition, Iran plans to export LNG rather than to build new infrastructure.

Turkmenistan and the parties to the TAPI pipeline mitigated all risks and have announced the construction of the pipeline. In its turn, Turkmenistan has found a market that does not challenge Russia's geopolitical and economic power and at the same time diversifies Turkmenistan's gas export market. At the time, it is the most realistic diversification route for Turkmen gas.

## Greece's great gas gig

Natural Gas Europe, 16.12.2015



Greece's gas market is opening up, according to Dr. Kostas Andriosopoulos, Senior Advisor to the new CEO and the Chairman of DEPA Public Gas Corporation SA.

Dr. Andriosopoulos, who is also Director of the Research Center for Energy Management, explains that the opening of the Greek market could translate into big opportunities, both for Greece and for investors. He remarks, "In two-and-a-half years' time the gas market will be completely open, in the retail and wholesale. That brings new entrants into the market, new market opportunities, and more pressure on the company to protect its market share-its business in general."

Greece's gas market reform having recently been passed in parliament, he contends it is now in the best interests of Greece to go forward with a number of prospects envisioned and voted on by DEPA's Board of Directors. As part of DEPA's 5-year business plan, the company would like to pursue projects like a floating storage and regasification unit (FSRU) project in northern Greece. Dr. Andriosopoulos adds: "On top of that, we are looking at trying to gasify more of the country further, which means we want to enlarge and enhance the gas consumption in the country."

He says the only way of doing that is for DEPA to engage in partnerships, "by bringing, on one hand, foreign expertise and capital to invest in these type of projects with our position in the market and funds, to enhance consumption through gas-powered vehicles, via compressed natural gas (CNG), and supplying gas to remote locations via CNG and liquefied natural gas (LNG)."

Dr. Andriosopoulos reports that in some remote parts of Greece, where people rely on burning dirty fuels, there are market opportunities for natural gas. "We see a market there," he explains. "They tend to burn dirty fuels and it's more expensive."

He tells Natural Gas Europe that DEPA also envisions adding new regions for retail gas, and increasing the gasification of cities in Greece, considering that only cities like Athens and Thessaloniki rely on natural gas.

In addition to the 0.5 billion cubic meters (bcm) increase from adding new Greek cities to the system, Dr. Andriosopoulos contends that there can be an increase of 0.5 bcm for providing gas to remote areas and another 0.2 bcm for powering automobiles. "That would bring the market to a size of about 4bcm and if we see also alongside this a support for regulation, policymaking that allows for more generation of electricity through gas-so you increase the utilization rate of combined cycle gas turbine (CCGT) units that we have in the country as well-we might see a further increase of almost 1bcm.



“We see business that can generate almost double the existing volumes that exist at the moment in Greece,” he says, “from the current 3 bcm up to more or less 5bcm. “We used to be a 4.6 bcm market 4 years ago; now we’re barely a 3 bcm market,” he recalls.

Opening up the market, having more competition, he says he can see this doubling of the market in 5 years’ time. “It’s a big business opportunity for us, but, more importantly, the gas business and DEPA have a very strong role to play in this dire economic environment that we live in. Perhaps not the only one, but we are a business that can generate growth, a lot of jobs as well – in decentralized areas, not just in Athens,” he explains.

These are ambitious plans for a company that was almost privatized just a few years ago. Dr. Andriosopoulos recalls the attempts to privatize DEPA, but explains that Greece is now in an environment of low valuations for assets in Greece, not to mention the liberalization of the gas market there and increasing competition. “DEPA is still on the list of the existing structure of a ‘Type L’ fund for investment and development of Greek assets,” he explains, adding that today, 65% of DEPA belongs to the Greek state, while 35% of shares are held by Hellenic Petroleum.

“The Government’s intention, though still under negotiation with the institutions,” he explains, “is that DEPA is no longer to undergo privatization in this environment of low valuations for assets in Greece, due to the financial crisis, liberalization of the gas market, and increased competition that we might see.”

The best interests of DEPA and Greece, he says, are to pursue the natural gas projects outlined earlier. Moreover, Dr. Andriosopoulos contends that developing Greece’s gas business would generate a strong geopolitical, geostrategic leverage to the country via the projects being proposed.

He offers, “If we are talking about the FSRU in Alexandropolous, alongside the Interconnector Greece-Bulgaria (IGB) and Trans-Adriatic Pipeline (TAP) coming through it, for which we’ve booked 1bcm of capacity, thus making it a viable project, we think that we can definitely enhance the position of the country within the region and hopefully see DEPA becoming an energy leader, a trader not only as a national champion which we currently are, but as a regional champion in the Balkans and further on.”

According to him, DEPA could also play a key role in spearheading a vertical gas corridor all the way up to Ukraine if the European Union provides support for the various infrastructure projects that Greece is involved in like IGB. Moreover, DEPA diversifying its gas portfolio, he explains, will lead to better prices for retail customers – final consumers.

“By having the capacity to bring different sources of gas in different forms as well-piped gas or LNG- you can create a portfolio, a mix of gas in the system that could also be optimal in terms of average price to our end customers, who will benefit as well.”

Having booked 1bcm of capacity in the Trans-Adriatic Pipeline (TAP), Mr. Andriosopoulos says DEPA has shown its level of commitment to the project. He says, “It’s part of our portfolio to have long-term contract supply agreements with Gazprom for about 65-67% of the quantities that we’re buying today; we have an LNG contract with Sonattech for about 0.7bcm equivalent; and another 0.7bcm/year from Botas, which is Azeri gas.”

He reports that both the Botas and Sonatrach contracts are expiring in 2021, which offers the opening for gas flows from TAP to fill the bill. “If we are able to increase the size of the Greek market through the projects I’ve mentioned we’re not only adding value to the country and the company, but we’ll also be in a position to avoid any take-or-pay conditions for the long-term supply contract that we have with Gazprom to start with, and, while simultaneously honoring our contracts with others, we’ll be able to optimize the portfolio,” says DEPA Senior Advisor Dr. Kostas Andriosopoulos.

## Nord Stream-2 : A decisive test for EU energy diplomacy

Natural Gas Europe, 16.12.2015



At the upcoming European Council on 17 and 18 December, the Heads of States and Governments will once again debate a story of gas involving Russia: Nord Stream-2 (NS2).

What’s the rationale behind Nord Stream-2? In 2011, a new gas pipeline started to be operational, Nord Stream-1. It transports Russian gas, directly from Russia to Germany, via an offshore route crossing through the Baltic Sea and the Finnish, Danish, Swedish and German Exclusive Economic Zones. It has the potential to carry up to 55 bcm of gas every year and, at that time, was officially meant to meet the expected rise of gas demand in the EU.

In September 2015, major EU companies entered into an agreement with Russian gas provider Gazprom to build and operate Nord Stream-2: two new pipelines across the Baltic Sea, to increase by an extra 55 bcm the export capacity of Russian gas to Germany via the Baltic Sea.

Nord Stream-2 is still supposed to meet a hypothetical rise of EU gas demand, and also to deal with the abandonment of other projects, like the Nabucco project, which was largely abandoned in 2012, the South Stream project abandoned in December 2014, as well as the ill-fated Turkish Stream project, held hostage in the Russian-Turkish war of words that has followed the shooting down of a Russian warplane by the Turkish Airforce.

The European Union is now confronted with the challenge of Nord Stream-2; a project that can hardly be justified by a hypothetically increasing EU gas demand. It is a project that is already infuriating Central Eastern European countries, especially Poland and Slovakia, threatened by the drying up of their own pipelines. In addition, NS2 would bring major economic benefits to Russia at a time when the EU is renewing its sanctions against the country that invaded Ukraine. It would also be used to circumvent Ukraine, thus harming the Ukrainian economy and threatening the EU-supported-rehabilitation of the Ukrainian Gas Transmission System.

The project Nord Stream-2 – a test case for the EU Energy Diplomacy



Nord Stream-2 is sponsored by five major EU companies. Two of them were clearly invited to participate in order to protect their Russian assets: Anglo-Dutch Shell, in the case of Sakhalin, and the German E.ON with respect to its Russian power plants. Getting the German Wintershall and the Austrian OMV on board was not a surprise for any observer.

Getting the French Engie on board could appear logical given the participation of Engie in Nord Stream-1. A shareholder agreement signed in September 2015 gave Gazprom 51% of the shares (and the majority control) and each of the other shareholders 10%, with Engie getting 9%. Subsequently Engie's share was raised to 10%.

The official rationale is that NS2 is only a commercial project. But this project has been very well prepared by Gazprom and its main shareholder, the Russian Federation and its President, Vladimir Putin. Both its content and its timing clearly indicate the political backing that underpins the project. One of its (intended?) consequences is to divide EU Member States on a key issue, the role of Russian gas in Europe, while those Member States are attempting to build their Energy Union.

Given the context, it is clear that there are a lot of politics behind Nord Stream-2, as exemplified by the public support the project got from the German Vice-Chancellor, in Moscow.

For the EU Energy Diplomacy, Nord Stream-2 is a test case. The EU position has been consistent over the last years. The May 2014 European Energy Security Strategy, the February 2015 Energy Union Strategy and the July 2015 EU Council conclusions on Energy Diplomacy all point towards the same conclusion: the adoption of an European common position of the Member States toward any third country energy supplier, of which Russia is by far the most important. The European Council of December 2015 may be the place to test this ambition to speak with one voice, taking NS2 as a concrete test of what a genuine energy diplomacy could look like.

The Commission walks on eggshells while central-eastern member states infuriate

So far, the reaction of the European Commission is prudent. In its 18 November 2015 State of the Energy Union Communication, the Commission "takes note of the plans of commercial companies to build further pipelines connecting Russia and Germany through the Baltic Sea. If built, [Nord Stream-2] would not give access to a new source of supply and would further increase transmission capacity from Russia to the EU, while even now this is only used at 50% rate. These pipelines will have to comply fully with EU law. The Commission will assess any such project against the European regulatory framework on its own merits."

It added: "The EU will only support infrastructure projects that are in line with the core principles of the Energy Union, including the EU Energy Security Strategy".

On 30 November 2015, the Slovak Energy Minister wrote--in the name of Estonia, Hungary, Latvia, Lithuania, Poland, Romania and Slovakia--to the Vice-President of the European Commission in charge of the Energy Union (with a copy sent to the President of the European Council) a letter expressing those countries' serious worries about the negative impact that Nord Stream-2 could have on the security of the Central and Eastern European countries and requesting a debate at the December European Council.

Their concerns may also be seen in the light of the way Gazprom has managed its relations with them in the past as highlighted by the enquiry of the Commission's DG Competition, now negotiating with Gazprom.

The spirit of the Energy Union requires that the EU and its Member States support a more coherent EU foreign and energy policy that takes geopolitical developments into account. This is precisely what Europe's heads of state and government, meeting as the European Council, can do when they hold discussions on Nord Stream-2 at the same time as they consider the renewal of economic sanctions against Russia.

The likely impacts of Nord Stream-2

1. NS2 is useless as gas demand falls in Europe.

EU gas demand has fallen every year since 2010 while the European Commission has for 12 years consistently overestimated future EU gas demand. Let us moreover keep in mind that the EU wants to reach 20% of energy efficiency gains by 2020 and 27% by 2030. Those objectives, together with the use of the EU funding (e.g. Structural Funds, Juncker Plan, European Investment Bank) and energy efficiency legislation targeting the buildings sector (e.g. Energy Efficiency Directive), will lead to a further decrease of EU gas demand.

And those energy efficiency gains are unlikely to be offset by more gas into the electricity mix as the EU is still very far from fixing its ETS carbon pricing system in a way that would reach the level of around €30-40 per tonne of CO<sub>2</sub> required to ensure a switch from coal to gas in electricity generation.

2. NS2 would further increase the overcapacity of gas import infrastructures in Europe.

There are huge import capacities that are not used, starting with Nord Stream-1. EU gas demand prospects are not exciting, even with a decline in domestic gas production; the needs for additional imports are not that significant. Import capacities are today at 700 bcma, yet actual imports are around 250 bcma, of which 100 bcma comes from Norway--and Norwegian gas is the most secure gas you can have since Norway is both an ally and de facto a part of the EU internal market through the European Economic Area Agreement.

3. NS2 does not increase the EU energy security.

The EU energy security strategy rests on eight key pillars, and NS2 does not meet any of those. Most importantly for a gas infrastructure project, it does not diversify gas sources. It will still carry Russian gas; indeed, it will not even grant access to non-Gazprom Russian suppliers. Nor does it diversify gas routes.

4. NS2 would undermine Ukraine's security, and weaken its economic stability.

With a falling gas demand and overcapacity of gas import infrastructures, it becomes clear that the real aim of NS2 is to circumvent Ukraine, the Russian Federation having said that it will stop transiting gas through Ukraine by 2019, which is precisely the year when NS2 is supposed to become operational.



This would undermine Ukraine's security as it would allow Russia to cut gas supplies to Ukraine, but not to the EU, thus weakening the de facto solidarity that currently exists between the EU and Ukraine.

Ukraine would moreover see a loss of gas transit fees, accounting for roughly \$2 billion (USD); with a similar phenomenon occurring for Slovakia, Romania, Bulgaria, and Poland. As Ukraine currently is financially supported by the EU, its Member States and the IMF, it means that EU member states will have to provide fresh loans to Ukraine to cover at least part of this \$2 billion, but with Kiev's ability to repay such loans being far from entirely certain. In other words, NS2 will slightly increase the public debt of Ukraine and EU Member States.

NS2 would also reinforce Russia's negotiating power on the countries using the Yamal pipeline, i.e. Belarus and Poland. In other words, NS2 is not acceptable for these countries in economic and geopolitical terms. This is where the Energy Union and the solidarity it implies should play its full role, both to cement solidarity between EU Member States and to avoid increasing Russia's leverage over Belarus, Ukraine, and many EU Member States.

#### 5. NS2 divides the Europeans.

Nord Stream-2 cannot be described as a straightforward commercial project. It has been set up by the Russian Federation and constitutes one of its pieces in the vast geopolitical chess game it is playing. Bringing in some major players like Shell, which normally does not engage in pipeline construction in Europe, can only be explained in terms of Russian arm twisting.

Shell's interests in Sakhalin are big enough to make it necessary for the Anglo-Dutch company to accept the "invitation" to take 10% of Nord Stream-2. The interests of E.ON in Russia are similarly important to justify its entry in the same pipeline.

The final aim of Russia is therefore to apply the classic tactic of divide and rule, to split the Europeans (and Ukraine) and thus dominate them. Or, to use Jacques Delors' metaphor, to follow the example of the last of Ancients' Rome Horatii triplets, who, his brothers dead beside him, successfully took on--and killed--the Curiaces triplets one after the other.

Just like the last of the Horatii, Russia aims at politically defeating the Europeans by dealing with each individual Member State one by one rather than facing a negotiation with 28 united states and more if Ukraine and other Energy Community states are included.

The possible compromises to address Nord Stream-2 while building a genuine EU Energy Diplomacy

As there is a strong willingness from some parties to allow NS2 to proceed, a compromise has to be found in order to identify a win-win solution that is in line with both EU legislation, notably the third energy market package, and the EU Energy Diplomacy project. With this in mind, three potential compromises appear possible: First and foremost, this is an EU-Russia project, not a Russia-Germany one. The pipeline crosses EEZs of Finland, Sweden, and Denmark before landing in Germany, meaning that it directly concerns at least four EU member states. In other words, this pipeline is subject to EU as well as Russian law.



Establishing a legal regime for the pipeline--an issue not even yet resolved for NS1--can best be solved by an EU-Russia Treaty governing both pipelines in order to ensure that both Nord Stream-1 and Nord Stream-2 are compliant with the third energy market package.

Such a Treaty could also deal with other aspects of the project, such as the possibility for other Russian suppliers such as Rosneft and Novatek to use the line or even for Turkmen and Kazakh suppliers to access the system. Under conditions to be established in agreement with Russia, Ukrainian transit should also be maintained at a certain minimum level to supply Eastern European countries and the Balkans. Similar consideration should be extended to the Yamal pipeline. As a concession to Gazprom, the status of the Opal pipeline, which links Nord Stream with central Europe, could also be resolved.

In addition, the EU could guarantee a minimum level of import from Russia for the next two or three decades. Such an EU-Russia Treaty would require Member States to give the Commission a mandate to negotiate with Russia, something which has been done already for both the TransCaspian Pipeline (TCP) and for the Baltic States Electricity situation with Russia.

The European Parliament should also be involved in this process, to ensure more democratic legitimacy. This is by far the best solution that would guarantee that both Nord Stream-1 and Nord Stream-2 are treated as a matter for EU Energy Diplomacy, as they should be.

In the absence of an EU-Russia Treaty, which is our favourite solution, NS2 at least has to fully comply with EU rules, meaning that it is considered a transmission pipeline subject to the third gas directive. NS2 needs to be operated by a transmission system operator, which has to be fully ownership unbundled (no grandfather rights are allowed for a project developed post-2012 according to Article 9 of the Third Gas Directive), allowing third party access and being subject to proper tariff regulation. No exemption could be granted as the conditions for exemptions are simply not met.

A third solution, more radical but in line with the latest gas demand projections of the Commission and the International Energy Agency, is to say that Nord Stream-2 is not needed given both the EU's current and expected gas demand and the availability of sufficient import capacities.

But the counterpart should surely be to allow the full use of NS1 by removing current regulatory restrictions causing a bottleneck in Germany. There is also a need to enhance the conditions of transit in Ukraine, in association with Russia, in order to start building trust between Russian suppliers and newly unbundled Ukrainian transporters.

The upcoming European Council will therefore be a test for the consistency of EU policy choices, responding to Russia and helping to shape genuine European solidarity:

The EU has adopted economic sanctions on Russia as a response to its de facto annexation of Crimea and its illegal military presence in Eastern Ukraine. It would be inconsistent for the December 2015 European Council to renew those sanctions while letting the current version of NS2 go forward without any prospect for changes.



This European Council will deal with two policy areas linked with the issue of European solidarity: migration and energy. We may therefore witness a situation where Germany (and others) would ask Poland (and others) for more European solidarity in the face of the so-called “refugee crisis” while refusing to show solidarity on NS2. At the same time, Poland will most certainly make calls in favour of European energy solidarity, while its new government uses the pretext of the Paris attacks to give up on Poland’s promise to play its role in the refugee crisis.

It will thus be interesting to see whether European heads of state and government are ready to overcome the silo mentality and to start working on constructive win-win package deals. It is also a matter of mutual trust and the expression of the duty to cooperate as envisaged by the Treaty on the European Union.

NS2 is much more than a simple infrastructure project. It is a test for the Energy Diplomacy agreed upon by all EU Member States just five months ago. NS2 thus needs to be discussed at EU level on whether it is needed, in the light of the energy and climate objectives set for 2030, and, if so, it has to be fully governed by EU law.

As part of the EU energy diplomacy, the regulatory framework should be set in a bilateral agreement concluded between the European Union and the Russian Federation. This is the only way for the European Union and its flagship project of Energy Diplomacy to show credibility.

## Gazprom seeks gas talks with Turkish importers

Natural Gas Europe, 17.12.2015



Russia’s state-controlled Gazprom plans to renegotiate its gas sales price with Turkish private-sector importers. The firm has invited the private-sector companies to open a price review, although negotiations are yet to begin.

A total of seven private-sector importers take Russian gas through the Western Line pipeline, —Turkish firms Akfel, Enerco, Avrasya, Kibar, and Bati Hatti, Bosphorus Gaz, which Gazprom part owns, and Shell. Gazprom granted a price to the importers based on the oil-indexed formula used in its contract with Botas, with a premium added in the latter three quarters to offset a January-March discount.

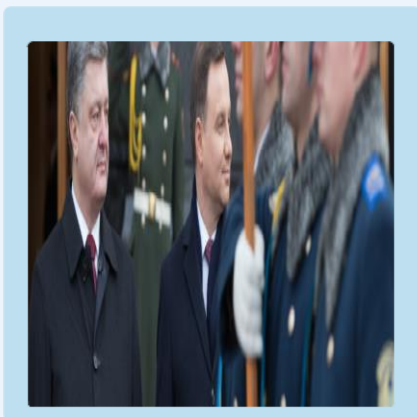
The premium was \$10.38/’000m<sup>3</sup> in the second quarter, \$18.38/’000m<sup>3</sup> in the third and \$14.38/’000m<sup>3</sup> in the fourth. Import prices were retrospectively discounted to a fixed \$290/’000m<sup>3</sup> for January-March. Botas has initiated arbitration proceedings with Gazprom regarding a 10.25pc discount that the firms had agreed would apply retrospectively from 1 January, but has never been ratified.

Ratification of the discount will be difficult, given tense relations between Moscow and Ankara, which have already led to the suspension of the Turkish Stream pipeline project. Turkish private-sector importers are understood to be paying just below \$213/000m<sup>3</sup> for Gazprom supply in the fourth quarter this year. Botas would be paying \$199/000m<sup>3</sup> if the discount was applied.

It is instead understood to be taking into account an undiscounted price of \$216/000m<sup>3</sup>, which leaves the private sector with a \$3/000m<sup>3</sup> discount this quarter. Prices next year are expected to be determined by the formula, rather than the continued addition of premiums. The return to a fixed-price system — as was used last year — is unlikely.

## Ukraine works for strong anti-Russian position at coming European Council

Natural Gas Europe, 15.12.2015



Presidents of Ukraine and Poland met on Tuesday, saying that the front of European countries opposing the Nord Stream II project could lead to a common European position during the Council.

“We [Ukraine and Poland] coordinate actions with Slovakia, the Baltic and Scandinavian states, Italy and other EU countries. We assure that this project has no economic sense. It is clearly a political project. We consider giving an opportunity for political pressure on the EU countries and Ukraine inadmissible,” Ukraine’s Petro Poroshenko said after the meeting with Poland’s Andrzej Duda.

Italy’s Prime Minister Matteo Renzi did indeed join the group of countries opposing the Nord Stream II project. Renzi wants the issue to be added to the agenda of the EU summit, which will take place in Brussels.

If Italy is siding with Ukraine and Poland on the Nord Stream II project, Rome has a different position on punitive measures against Russia. Renzi blocked a planned extension of the EU’s economic sanctions against the country led by Vladimir Putin. As a result, the relation between the EU and Moscow will be discussed by European leaders this week.

On the other hand, Poland and Ukraine calls for an extension of the measures, arguing that Moscow is not complying with the Minsk agreements. “I am really hopeful that the given decision would be adopted at the coming session of the European Council. I was pleased to hear the firm position of Poland on this issue,” Poroshenko said in a statement, referring to Duda’s commitment to prolong sanctions against Russia.

Also, Ukraine's Prime Minister Arseniy Yatsenyuk said that, after the launch of an interconnector between the two countries, Ukraine would be able to buy from Poland up to 8 billion cubic meters of gas: "Hence, together we will have high profitability and high energy independence" he said.

## UK offers shale licenses 1 day after fracking approval

AA Energy Terminal, 18.12.2015



The U.K.'s oil and gas regulator announced it offered 93 shale licenses on 159 onshore blocks on Thursday, one day after the British parliament ruled to allow fracking in the U.K.'s natural parks.

"Around 75 of the 159 blocks being offered relate to unconventional shale oil or gas," the regulator Oil & Gas Authority (OGA) said in a statement. "Alongside conventional drilling sites, we need to get shale gas moving... Now is the time to press ahead and get exploration underway so that we can determine how much shale gas there is and how much we can use," OGA added.

The U.K.'s Onshore Oil and Gas (UKOOG), representing the shale gas and fracking industry, said that the new license offers add to the existing 137 licenses across 360 blocks from the previous 13 licensing rounds.

UKOOG stressed that the new shale licenses and fracking will decrease the U.K.'s dependence on foreign natural gas sources, and will secure future domestic gas consumption. "At the beginning of this century, we were energy independent, producing enough oil and gas from the North Sea to provide for everyone in the U.K. Today we are dependent for nearly 50 percent of our oil and gas from overseas, and that is going to rise to over 75 percent in the next 15 years without further onshore production," it said in a statement.

"We need to ensure that 84 percent of our homes that use gas for heating can continue to do so and that 30 percent of electricity produced by gas can be met using U.K. sources," it added.

The British parliament authorized a regulation that allows fracking and horizontal drilling beneath national parks for shale gas production, according to the British media. Members of parliament approved the new regulation with 298 in favor to 261 votes against to allow drilling 1,200 meters below national parks in the country. The regulation was criticized by opposition parties and environmental groups in the U.K., since the British government had said in January this year that it opposed fracking. In France, Bulgaria, Germany, Scotland, the Netherlands, Belgium and Czech Republic fracking is still banned either entirely or partially for some areas.

The process of fracking, also known as hydraulic fracturing, requires ejecting huge amounts of water and chemical substances underground with high pressure in order to crack the source rocks that contain oil and natural gas inside. While some argue that the process pollutes underground water resources, others claim that fracking has no negative impact on the environment.

The U.K. has around 25.8 trillion cubic feet (730 billion cubic meters) of unproved technically recoverable shale gas reserves, according to the U.S. Energy Information Administration. The U.K. consumed 71.5 billion cubic meters of natural gas in 2014, according to Eurogas data.

## America's LNG pioneer is out -- but is the LNG dream dead for his start-up?

Natural Gas Europe, 11.12.2015



When in the coming month Cheniere Energy delivers its first LNG cargo from Louisiana's Sabine Pass LNG terminal in the United States, Charif Souki, whose vision made it possible, will not be at the LNG terminal to witness the historic event.

When Cheniere's board of directors, of which Mr. Souki was still the Chairman and CEO of the company, was convened at the company's headquarters in Huston, he was asked to leave the room. He left for home, in Aspen Colorado. Twenty-four hours later he was contacted by his lawyer who told him he had lost his job in the \$10 billion company, the first American LNG exporter.

His ousting could be anticipated from the moment it was announced that legendary American investor Carl Icahn bought into the company with about 8% of its shares last August. Mr. Icahn, a tough businessman, nominated two close associates as directors and last week upped his stake to 14%. The increase makes him the biggest shareholder in Cheniere--a company that in 19 years of existence has never posted a profit.

For Mr. Icahn, who according to reports was attracted to the company because of its list of big clients, each of them having already signed a 20-year contract for LNG purchase, it was clear that the company had to change course. Mr. Souki's fate was sealed. He was replaced as CEO by Neal A. Shear, on a temporary basis, while Cheniere is looking for a permanent replacement.

"There is no doubt that Charif Souki has proven that he is a talented entrepreneur but at this time there is also little doubt that the board wished to move the company in a direction that differed greatly from the path Mr. Souki wanted," wrote Mr. Icahn on his website, adding sarcastically, "It is also telling that Mr. Souki sold a great deal of his stock, which made it somewhat easier for him to 'swing for the fences' making it a win-win for Mr. Souki but not necessarily for the shareholders. I thank Mr. Souki for helping to build a great company."



Mr. Souki sold about one third of his shares in the company, worth \$118 million when the average share price was about \$67. Last week when he was sacked, the share price stood at \$41.07. (According to filings he also sold another 50,000 shares for about \$2.3 million.)

During his over 15 years as the company's CEO, Cheniere's share price was volatile. In 2008 it collapsed from \$40 to less than \$1 following the failure of the first import LNG terminal and the economic crisis. In August 2014 it completed a rebound to \$80 and remained at that level until February 2015 when the reality of the new energy prices began to hit and Mr. Souki, a Lebanese immigrant and a former investment banker and restaurateur, sold about one-third of his holdings in the company he co-founded almost 20 years earlier.

How great a company did Cheniere become during Mr. Souki's 19-year tenure as CEO? The answer to that will be decided only in the next few decades--when and if the American LNG revolution Mr. Souki dreamt of becomes a reality and American LNG becomes a major player in the natural gas market. Last weekend it didn't seem likely that that outcome would happen any time soon--hence Mr. Souki's dismissal. It is also telling that in the years 2010-2014 the company posted a cumulative net loss of about \$1.7 billion and in the first nine months of 2015 posted a loss of \$784 million.

In 2013, Mr. Souki's compensation package in 2013 was \$142 million according to Forbes, the highest for a CEO among U.S.-based publicly traded companies that year. The package was quite a handsome one despite the fact, as Mr. Icahn pointed out in his letter, that Cheniere Energy never made a profit during Mr. Souki's years at the helm, as the sole Chairman and CEO of the company.

Mr. Souki made two costly bets that failed during his time with Cheniere: the first one was to import natural gas to the U.S. and the second and more expensive one, exporting natural gas from the U.S. Unfortunately, because of the long lead times in the natural gas business, that are even longer than the energy price cycles, both bets failed spectacularly even before operation of the facilities had started.

In 2001, Mr. Souki took the decision to build an LNG terminal in order to import natural gas into the U.S. It was the first LNG terminal to be built in the U.S. for decades. Mr. Souki built his business plan on pricing arbitrage, exporting cheap natural gas from Qatar and other sources and selling it expensively in the U.S. It was a period when natural gas prices in the US were high and the logic of Mr. Souki's vision was convincing, at least if one ignored the mid-term future.

Luckily for Mr. Souki, he could get financing for only one LNG terminal, not the three he planned. In April 2008, after a \$1.4 billion investment, that terminal was inaugurated. A month later it was almost idle. The shale revolution in the U.S. was almost three years old and a glut of natural gas caused prices to collapse and doomed natural gas imports to extinction. Cheniere's business plan was in ruins and the stock crashed to \$2 from the height of \$40 in October 2007.

Mr. Souki wasn't deterred from a second attempt at the LNG business. This time around he engineered a reversed arbitrage with U.S. gas prices at historic low; he gambled on export of LNG to far away destinations. This time, he was luckier, finding more willing investors, like Blackstone Group LP, which was attracted to his vision and invested \$1.5 billion in equity.



His ambitious and much more expensive plans that included 2 liquefaction terminal with six trains in Sabine Pass and five trains in Corpus Christi, Texas began to take shape. However what hadn't changed in the natural gas business was the lengthy lead time--or Mr. Souki's run of luck. It took over five years to build the first train of the LNG liquefaction terminal in Sabine Pass and although local natural gas prices in the U.S. came down due to the continued natural gas glut, natural gas prices worldwide also fell dramatically, to a level not much above prices in the American market.

The arbitrage gambit lost its lustre. That's not to say that exporting LNG won't be profitable; what it does mean is that margins will probably be lower and profits smaller than forecasted in company's presentations. Now, the new CEO will have to give up on a few of Mr. Souki's ideas for further expansion and investment into creation of a large trading platform in energy and possibly investing in the crude oil export business when the export ban in the U.S. goes away. It also means that the company will have to reconsider adding planned trains in both terminals.

In a presentation to investors in 2013, Cheniere estimated, based on \$100 Brent, a \$15 MMbtu LNG and a Henry Hub price of \$4 MMbtu, a gross profit of \$6.65 MMbtu in export to the Americas; \$3.15 in export to Europe (based on \$12 MMbtu LNG); and \$4.40 in export to Asia. A year later the margins were lower at \$6.40, \$2.90 and \$3.90 respectively. In 2015 prices tumbled further and the company estimated an implied margin of \$2.50 when LNG is priced at \$7.00 MMbtu in Europe and an implied margin of \$3.25 MMbtu in Asia when LNG price at \$9.00 MMbtu.

Even the latest forecast, which was issued under Mr. Souki, is probably too rosy. In order to keep the company afloat, Cheniere's board of directors decided that the visionary Mr. Souki had to leave. The company currently carries \$24 billion in debt. The next CEO will have to concentrate his efforts on running the business as efficiently and as profitably as possible and service the debt: a credit facility of \$4.6 billion, due 2020, and a \$2 billion note due 2021.

Thereafter every year until 2025 either the notes mature or credit facility is due. And since today the margins in Cheneire's presentation seems to be imaginary, Mr. Souki's successor will have to make a few critical investment decisions in the coming months, in order to accumulate billions of dollars to serve the debt.

The Sabine Pass Liquefaction (SPL) is about to start production in train 1 out of six trains. Each train is designed for a production capacity of 4.5 mtpa (million tons per annum). Train 2 is expected to start operations by June 2016 and trains 3-4 are under construction and should be operational by mid-2017.

NTP for train 5 was issued to Bechtel in June 2015 and construction completion is expected by the end of 2019. This project might either be delayed or abandoned, though according to the latest presentation it has guaranteed annual fixed-fee revenues of \$588 million from two 20-year contracts, with Centrica plc. and Total Gas & Power N.A.

Train 6 is awaiting a Final Investment Decision (FID), dependent upon obtaining commercial contracts and financial arrangements. Overall SPL has long-term Sale Purchase Agreements (SPAs) for about 20 mtpa in take-or-pay style commercial agreements and annual fixed-fee revenues of about \$2.9 billion for 20 years, according to Cheniere's presentation. The overall investment in trains 1-5 is about \$11 billion with a production capacity of 22.5 mtpa.



The other LNG project, Corpus Christi Liquefaction (CCL) in Texas, is expected to have, when completed in 2021-2022, 5 trains, each with production capacity of 4.5 mtpa. Trains 1-2 are now under construction and should be operational by Mid-2019, as NTP was issued in May 2015. Those two trains have already guaranteed annual fixed-fee revenues of about \$1.4 billion from six customers who signed 20-year contracts, among them EDF, Woodside Energy Trading, Gas Natural Fenosa and others.

Train 3, although it has so far only one \$140 million 20-year contract with EDP Energias de Portugal S.A., still has to issue an NTP and might be a candidate for a cancellation. Trains 4-5 in CCL, which are planned to start LNG production in 2021, still have no commercial agreements and no financial commitment making those two also candidates for either a delay or a cancellation.

In 2025 the LNG demand forecast, according to Wood Mackenzie, as presented in Cheniere's presentation, is expected to reach 436 mtpa, an increase of 80% over the 2015 demand of 243 mtpa. Most of the production increase is expected to come from Australia, which will more than triple production to 81 mtpa by 2025 and from the U.S. where, if all projects will be materialized, though that now seems unlikely to happen, of 94 mtpa from just 1.4 mtpa in 2015.

Are those good numbers for Cheniere Energy? That is anyone's guess. The current expectations are for a long-term glut in LNG. Cheniere say that 87%, or 28.2 mtpa, of its LNG volumes from trains 1-6 of SPL and trains 1-3 in CCL, are already sold in long-term contracts. For the rest of the volumes, no long-term contracts are required, according to the company, and those will be sold either under short-term contracts or on a spot basis. That is another policy the new CEO will have to reconsider.

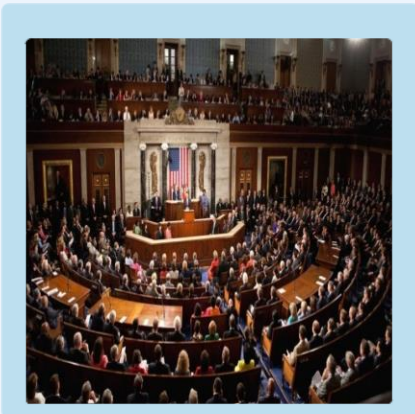
To date, Cheniere has been regarded as a start-up in the energy sector and the compensation for Mr. Souki was based on his success in promoting new initiatives, i.e. getting contracts, arranging financing, overcoming regulatory hurdles and progressing in the construction of new facilities. The bottom line was almost meaningless. All that changed when Mr. Icahn became the biggest shareholder in the company last August.

It is a common wisdom that there are two kinds of CEOs: one the visionary type, who can anticipate the future, lay down business plans and carry them out; and the second one the efficient operator kind, who can monetise the vision.

With the delivery of its first LNG cargo in the next month, Cheniere will be entering into the monetising phase, further accompanied by the unknowns of the energy industry. Mr. Souki, who said the board considered keeping him on until the Sabine Pass plant started processing LNG, will now follow proceedings from his Aspen, Colorado home--in among his time spent skiing on the Colorado slopes.

# US close to lifting 40-yr-old ban on exporting crude oil

AA Energy Terminal, 17.12.2015



The U.S. is only a few steps away from lifting its four-decades-old self-imposed ban on exporting domestically produced crude oil through its 2016 funding bill.

The \$1.15 trillion spending bill includes a provision that removes the ban on U.S. exporting crude oil, according to the U.S. Senator John Hoeven, a Republican from the oil-rich state of North Dakota. “Lifting the ban on crude oil exports is a triple win - it will create jobs and grow our economy. It will keep the price of gasoline lower at the pump for consumers because of more supply, and it will bolster national security through energy security,” said Hoeven in a statement.

With oil producers in the U.S. under pressure due to low oil prices, Hoeven underlined the benefits in his statement while referring to studies by U.S. institutions which claim that lifting the ban would benefit domestic crude producers.

“The drop in the price of oil this year has slowed domestic production...the latest study by the U.S. Energy Information Administration (EIA) concluded that lifting the ban will...encourage investment in domestic energy production,” his statement read.

“According to a study by IHS, a global provider of data and analysis, lifting the ban will attract an estimated \$750 billion in new investments and create nearly 400,000 additional jobs in the U.S. between 2016 and 2030,” the statement added.

The Senator said U.S. crude exports would also raise revenues and boost economic growth in the country by increasing wages, improving the country’s trade balance and lower the price of gasoline for American consumers.

Hoeven, who is a member of the U.S. Senate Energy Committee, added the ban’s removal would also strengthen the U.S.’ national security by saying “U.S. crude oil will provide our allies with alternative sources of oil and free them from their reliance on energy from unstable parts of the world.”

“We finally have an opportunity to curb the disproportionate influence OPEC has had on the world oil market for five decades, and we should take it,” he added. Joe Barton, a Republican representative from the energy-rich state of Texas, stated earlier this week that lifting the ban would take the U.S. to the top in global energy policies. He highlighted that the U.S. crude would force Saudi, Russian and Iranian oil out of the market.





However, in return for approving the bill and allowing the U.S. to begin exporting crude, some Democrats are asking for provisions, tax breaks and additional credits for renewable energy investments. Republican and Democratic lawmakers in the U.S. are expected to vote on the 2016 funding bill on Friday.

However, President Obama, environmental groups and oil refineries in the U.S. are against the removal of the ban. In 1973, when oil producing Arab nations had put an embargo on the U.S., this threatened American energy security and revealed the country's dependence on foreign oil resources. The U.S. Congress had placed a ban on exporting domestically produced crude oil during the 1970s with a series of legislation.

However, due to increased oil production and stocks in the U.S. since the 2008 shale revolution, some lawmakers in the U.S. argue that the country is less dependent on foreign oil resources and the ban is obsolete.



# Announcements & Reports

## ► *Has the North Sea Entered a Late-Life Crisis?*

**Source** : OIES

**Weblink** : <http://www.oxfordenergy.org/wpcms/wp-content/uploads/2015/12/Has-the-North-Sea-entered-a-late-life-crisis.pdf>

## ► *Natural Gas Weekly Update*

**Source** : EIA

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

## ► *This Week in Petroleum*

**Source** : EIA

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

## ► *Drilling Productivity Report*

**Source** : EIA

**Weblink** : <https://www.eia.gov/petroleum/drilling/>

# Upcoming Events

## ► *World Future Energy Summit*

**Date** : 18 – 21 January 2016

**Place** : Abu Dhabi

**Website** : <http://www.worldfutureenergysummit.com/>

## ► *2016 Exploration and Production Winter Standards Meeting*

**Date** : 18 January 2016

**Place** : Texas, The US

**Website** : <http://www.api.org/Events-and-Training/Calendar-of-Events/2016/epwinter>

## ► *European Gas Conference 2016*

**Date** : 19 – 21 January 2016

**Place** : Vienna, Austria

**Website** : [http://www.europeangas-conference.com/?utm\\_source=external%20&utm\\_medium=banner&utm\\_campaign=naturalgaseurope](http://www.europeangas-conference.com/?utm_source=external%20&utm_medium=banner&utm_campaign=naturalgaseurope)



### ► *Middle East Drilling Technology Conference and Exhibition*

**Date** : 26 - 28 January 2016  
**Place** : Vienna, Austria  
**Website** : <http://www.spe.org/events/medt/2015/>

### ► *Global Oil & Gas Conference*

**Date** : 27 - 29 January 2016  
**Place** : Cairo, Egypt  
**Website** : <http://www.global-oilgas.com/MENA>

### ► *Black Sea Oil & Gas Summit*

**Date** : 11 February 2016  
**Place** : Istanbul, Turkey  
**Website** : <http://www.theenergyexchange.co.uk/events/black-sea-oil-gas-summit-2015/>

### ► *Drilling Africa Conference*

**Date** : 15- 16 February 2016  
**Place** : Cape Town, South Africa  
**Website** : <http://www.iadc.org/event/drilling-africa-2016/>

### ► *Iran Oil & Gas Post Sanctions*

**Date** : 22 - 24 February 2016  
**Place** : London, UK  
**Website** : <http://www.iranoilgas-summit.com/>

### ► *Kazakhstan Oil and Gas Summit 2016*

**Date** : 22 - 23 February 2016  
**Place** : Almaty, Kazakhstan  
**Website** : <http://www.kazakhstanogs.com/>

### ► *Australasian Oil & Gas Conference*

**Date** : 24 - 26 February 2016  
**Place** : Sydney, Australia  
**Website** : <http://aogexpo.com.au/>

### ► *Global Oil & Gas Turkey*

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