

# TURKEY'S LNG FUTURE & EXTERNAL THREATS TO DERAIL ANKARA'S STRATEGY?

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## INTRODUCTION

Turkey's ongoing national and international gas adventures are until now a success story. The dream to become an energy hub has been positively supported by ongoing large-scale LNG import facility projects, gas storage expansion and the already well-known Turkish gas-pipelines, which are partly built to link up to the European markets. Russia's renewed interest to use Turkey as one of its main transit routes to the European Union has been the main basis for the success until now. Central Asia, the Caspian and Iran, are the main other pipeline gas exporters, which have supported Turkey's energy hub strategy as well. President Recep Tayyip Erdogan has been pushing for these intraregional energy links since the start of his political reign. Bringing in a combined pipeline and LNG gas supply to Turkey, partly to supply the growing local gas demand, also has been material to the increased interest of the European Union in the country's gas strategies.

In stark contrast to Western European countries, Turkey (Erdogan) has, from the start, understood that diversification of supply is necessary not only to increase overall competitiveness in the market but also to be sure that security of energy supply is guaranteed. From the start, Turkey has been mainly looking to the former Soviet Union region, as this still is the main onshore gas supply route.

Other gas supplies have been out of reach until recently, due to the geographical position of Turkey or regional instability. Iran, as one of the world's largest gas producers, holding the second largest gas reserves in the world, always has been on the mind of Turkey as an additional supply route. A main gas pipeline system has already been put in place, supplying Iranian gas to the Turkish markets, but a potential expansion of volumes has been until now constrained by financial and political issues.

## CURRENT POSITION

The last years, Turkey's gas consumption has risen fast and sharp seasonal demand swings and limited storage mean supply is tight over winter. The latter has led to the deployment of FSRU's as a solution to Turkey's problems. With demand growing from 27bcm in 2005 to 48bcm in 2016. About 70 per cent of this demand growth has come from increased gas use in power and industry, of which 70% has come from Turkey's

robust economic growth and a 30% hike in winter demand for heating demand in the residential and commercial sector. The expansion of the natural gas grid to more consumers also has led to a larger penetration of gas as energy source the last years.

The difference in demand between peak and through month has grown from 1bcm 10 years ago to almost 3.5bcm last year (2016). Seasonal supply, in turn, is limited by import capacity. Flows through congested pipelines from Russia, Iran and Azerbaijan are already operating at, or close to, maximum capacity during peak winter months.

Increased flexibility needs, constrained by limited storage capacity, new supply options such as LNG are needed. Most analysts are very optimistic about the impact of LNG in the Turkish markets, due to the global oversupply of LNG which is expected through 2024. The latter has and will have a positive economic and commercial impact on Turkey gas prices, as Ankara and all involved partners will be able to renegotiate current long-term pipeline contracts. Most of them will mature in the 2020s. Large scale floating LNG imports have now been chosen to address Turkey's fluctuating demand. To boost its position, Turkey already has announced plans for a possible two more FSRUs, one in Iskenderun on the south coast and/or Saros close to Istanbul. Main targets for them will be to increase buffer capacity to cope with very high daily demand.

The Aliaga FSRU can accommodate opportunities that arise in the oversupplied LNG market for the next five to ten years. Without contracted volumes, the FSRU can find the best deals in the market, which should lower Turkey's average gas-import price. Until December 2016, Turkey imported its gas via pipeline from Russia, Iran and Azerbaijan and under long-term LNG contract from Nigeria, Algeria and Qatar. However, the new FSRU will be able to source LNG from anywhere, and could even develop a regular supply from a new source country such as the US. At present, Turkey sources about 80 per cent of its supplies under long-term oil-linked contracts. Contracts for some 20 bcm are due to mature by 2025. The recent example of Lithuania suggests that the Aliaga FSRU will boost Turkey's bargaining power in its contract renegotiations.

## **TURKISH ENERGY STRATEGY**

Even that global LNG market fundamentals are very promising, due to increased production and somehow fledgling demand growth, Turkey's LNG strategy is still very ambitious. To diversify its current and future gas supplies, Ankara has decided to contract additional volumes with increased flexibility.

The global LNG market is one of the strongest growing sectors, as more than 150 million tons of LNG per year are expected to enter the market between 2015 and 2020. The latter, which is a 50% volume increase, is largely coming from new entrants, such as Australia or Mozambique. Additional volumes could come also from Russia, Iran or even Qatar after that the latter has ended its production moratorium on the North Field. Unexpectedly, due to the ongoing shale gas (and oil) revolution in the USA, the latter is also entering in force the global market. First volumes have already arrived in the European market and even Turkey.

Increased volumes are very positive for current and future customers, but dramatic

changes in the market could put severe constraints on the overall commerciality of these projects the coming years. Due to increased volumes and slightly lacking demand for natural gas (and LNG), price levels have plummeted, almost on the same level as crude oil and petroleum product prices. These commercials have however increased overall LNG importing countries from 18 in 2005 to more than 35 at present. Reports have already stated that 20 new importers could enter the market by 2025.

Since several years, Turkey has been a growing LNG importer. A real important market position has been acquired in September 2016, when its first FSRU was available. With two main LNG terminals, Aliaga which is fully operational to gasify 16.5 million cubic meters (mcm) of LNG per day, and the Marmara Ereğlisi to the west of Istanbul where three tanks can gasify 22.5 mcm a day at full capacity, but the terminal is currently only processing 18 mcm a day, LNG has become a part of the country's energy mix.

After decades of focusing on assessing pipeline gas projects, largely from Russia and Caspian-Central Asia, Turkey has stepped up its supply diversification. Based on normal market fundamentals, additional LNG volumes will put pressure on existing Russian pipeline gas, and indirectly increase also gas supply (Russian-FSU) to Europe.

Still, Turkish energy situation still is different from the European markets, where a lot of spare capacity exists and competition can be played against each other. Turkey still lags import capacity to have a real open market situation. At the same time, most pipeline and LNG contracts currently in place are long- or midterm contracts, leaving not a lot of room for a competitive market approach. Possible ideas to liberalize the gas market in Turkey are still in their infancy stage, while a spot market discussion is still far away.

As a trading hub, Turkey is geographically and physically very well placed. Turkey could for sure, *ceteris paribus*, take a European energy hub position, in the same way that has been targeted for decades by the Dutch (NW European Gas Roundabout). The availability of different gas supply options, Russia-Caspian-Iran (pipeline), Qatar-Algeria-US (Iran) LNG, and in future Egypt-Cyprus-Israel or even Lebanon offshore pipeline gas, is a substantial pre-requisite to become an energy hub. This should and could be enhanced by an increased amount of market players on the trading level.

The future from a Turkish standpoint is clear, diversification of natural gas supplies, combining traditional pipeline gas with LNG, while at the same time assessing and opening up possible local gas reserves on- and offshore. Still there are a growing amount of possible threats to the gas strategy, especially LNG supplies, as geopolitical issues and regional instability are increasing.

Looking at the economics first, threats have emerged to Turkey's energy hub targets. The Turkish energy market has been largely based on natural gas pipeline supply. The last decades, Turkey has been expanding its natural gas pipeline infrastructure, with the announcement of the Trans-Anatolian Pipeline (TANAP) and the Turkstream Project. TANAP is currently the keystone in Ankara's ambition to become an energy hub. When becoming operational in 2018, it will connect Azerbaijani production via the Southern Gas Corridor to Greece and the European markets.

At the same time, Moscow and Ankara have revitalized Turkstream, which is a 910-kilometer natural gas pipeline, circumventing Ukraine and bringing gas to Turkey and the

rest of Europe. The project features construction of two lines, each with a capacity of 15.75 billion cubic meters of gas a year. The first is scheduled to be completed in 2018, with the second due to come on line the following year. Both pipelines will be available soon, supplying an increased volume to Turkey within a year.

These two new pipelines will increase competition of existing supply but also constrain possible discussions with new onshore suppliers, such as Iran or Iraq. Since years, Turkey is vying for Iranian gas supply, largely via existing pipeline infrastructure. The latter is available but flows are regularly interrupted.

Ankara is also still in discussions to access the developing gas projects in Kurdistan (Northern Iraq) and Israel (offshore). Both are available but political infighting and regional military-political issues are major stumble blocks for the foreseeable future.

Taking all of this into account, the most flexible gas supply is still LNG. This has been understood by Turkey to the fullest. However, project decisions and choices have been made without taking into account geopolitical and financial issues.

## **LNG DYNAMICS**

When talking about LNG supply to Turkey, the usual suspects are on the table. Qatar, Algeria, Egypt, Nigeria and since short the US. After first choosing for the Nigeria-Algeria option, as the Arab Spring removed Egypt LNG, Qatar has popped up lately, even that its LNG was available. A growing bilateral relation between Turkey (President Recep Tayyip Erdoğan) and Qatar has been laying the groundworks for this interesting option. The long-term LNG supply contracts have been a result of the latter. During President Recep Tayyip Erdoğan's visit on Dec. 2, 2015 to Qatar, a preliminary memorandum of understanding was signed between Turkey's Petroleum Pipeline Corporation (BOTAS) and the Qatar's national oil company to ensure Turkey's long-term and regular LNG imports from Qatar.

Qatari Energy and Industry Minister Mohammed al-Sada said the last months that within the framework of its two existing agreements with Turkey, Qatar is ready to ship LNG at any requested amount. There are at present restrictions on quantities. Recalling that their relations with Turkey have continued in accordance with such an understanding in the past, he confirmed that the relations will continue in the same way in the future. Al-Sada said: "Qatar always prioritizes Turkey. This prioritization is based on our excellent relations in every area not only in energy." The share of Turkey's total spot LNG imports in total natural gas imports is around 5.15 percent. While Turkey imports spot LNG from seven different countries, it supplies 68.5 percent of these purchases from Qatar.

## **QATAR CRISIS & POLITICS**

This situation could however become extremely constraint by ongoing regional intra-Arab power politics. The ongoing isolation by its main neighbors, Saudi Arabia-UAE-Bahrain, in combination with Egypt, is presenting Qatari LNG future prospects with a dilemma. A political and economic isolation of Qatar, due to its relatively friendly relations with Iran and others, in combination with perceived pro-Muslim Brotherhood

support, could lead to a deterioration of Qatar's LNG and gas export potential the coming months and years. Turkey's reliance on a Qatari LNG supply could be hit very hard, taking into account the continuing power play in the Gulf region. This could directly and indirectly put Turkey under pressure, as Arab countries could be increasing pressure on Qatari LNG clients too.

At the same time, the Turkish gas market (and energy hub) will also need to reassess part of its current strategies if East Med gas projects are coming online and will target European clients. As Egypt already has stated lately new gas discoveries will be announced in H2 2017. Cairo has already reiterated that it plans to restart major gas exports in 2019. Part of these new volumes are based on the Zohr natural gas field discovery in 2015 (ENI) offshore Egypt. With around 850 bcm in natural gas reserves, Zohr has been the largest find in years. From the start it was clear that a large portion of the new discovery would be meant to supply local Egyptian gas demand. Exports could be feasible but would be reasonably small. Several new finds have popped already in the Shorouk Concession, large enough to supply existing LNG plants. A combination of Egypt offshore and gas supplies from Cyprus and Israel, will push Egypt back into the major league of LNG exporters. For Turkey this would have been a boon, if politics and regional conflicts would not have taken a turn for the worse. Egypt LNG as an option for Turkey to access is at present out of reach. As long as the Turkey-Egypt relationship is under severe pressure, Cairo's LNG volumes will be heading directly to Europe. Ankara will need to take this into account, as it is going to have an impact on Turkey's energy hub position the next years.

To make things worse, Egypt's rapprochement with Turkey's main gas supplier, Russia, also will have an impact. At the end of 2016, Russian gas company Rosneft acquired a 30% stake in the Zohr field from ENI. The latter is seen by most as a major sign for an in-depth cooperation between Putin and Egypt's president Sisi. The latter already stated that this would be in all fields. A full-fledged Russian-Egyptian LNG approach towards Europe will result in negative repercussions for Turkey's energy hub position. As one analyst already stated, "Russia's growing involvement in an expanding Egyptian natural gas industry will likewise impact a range of thorny issues from the Turkish Stream project to the Cyprus reunification negotiations".

Looking at the current regional situation, the Turkish energy position, especially its LNG supply options, are under threat. Even that Russian president Putin has stated that Russia will not be forced to take a position in the ongoing political crisis between Qatar and the Saudi-Egypt-led Sunni Arab coalition, it will be having an influence on Turkey also. Putin's MENA strategy is based on playing a chess game, in which he will be willing to offer pawns or even queens to gain the upper hand in the end. The brewing confrontation in the Gulf Arab region has also pulled in Turkey already. Due to the perceived positioning by Turkish president Erdogan as an ally of Qatar, a negative reaction of the others has already been clear. The leading anti-Qatar front members have already cut part of their discussions with Turkey in several fields, especially security and finance related sectors. Analysts are now looking at the options that the anti-Qatar coalition are going to use to put pressure on Doha's allies. Qatar's LNG supplies to Europe and Turkey have not yet been affected. Egypt even still has kept its Suez Canal open for all Qatari vessels. However, this could change due to the confrontational course being

taken by both sides. A possible shipping blockade on Qatari LNG would directly affect Turkey.

## RESULTS

Potential other restrictions to Turkey could follow, if the anti-Qatar coalition will heat up the conflict further. Other LNG exporters, such as Algeria or Nigeria, would be pushed by their OPEC compatriots to support the Saudi-Egyptian position. Turkey itself could also become a target. Saudi and Emirati investments or defense contracts could become a major pressure instrument to be used. Without using a bullet, Turkey's security of energy supply could be hurt immensely.

Ankara also should not be looking at Moscow to get them out of this rough spot. Russia's current economic situation has become extremely intertwined with the future strategies of OPEC (Saudi Arabia) and Arab sovereign wealth fund investments (QIA, SAGIA, ADIA). Saudi Arabia and the UAE have become major investors in the Russian economy, including the latter's oil and gas sectors. Qatar has done the same, taking a major stake in Rosneft, but geopolitically Saudi Arabia – UAE are more important. Moscow also has stakes in Libya, Egypt and even Israel.

Looking at the current situation, Ankara still holds a pivotal role in the energy future, not only of its own country, but also of Europe in the end. The specific position available for Ankara's energy hub dreams, partly being supported by LNG projects, is however under threat. A chess-game is being played at present, in which Turkey will be asked not only to secure its own energy future, but also to still be available as an energy hub between East-West and the Middle East.