Iran's potential as Europe's alternative for natural gas

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For more than a year, the European „energy community" has been focusing on the consequences the status quo in Ukraine had on the continental energy security architecture. The Ukrainian crisis generated a marked speed up in the energy integration processes at EU level and had its peak in the start up of the European Energy Union project. The diversification of the natural gas sources and routes for Europe's natural gas supply therefore became a politic and strategic priority for the EU. On the other hand, it was mandatory for the Russian Federation to develop an alternative natural gas supply route for its European customers, bypassing Ukraine. Both „energy blocks", namely the European consumers and the main supplier, the Russian Federation, are thus faced with the strategic conundrum of redesigning energy relations, being currently driven by conflicting feelings with long term irreversible consequences.

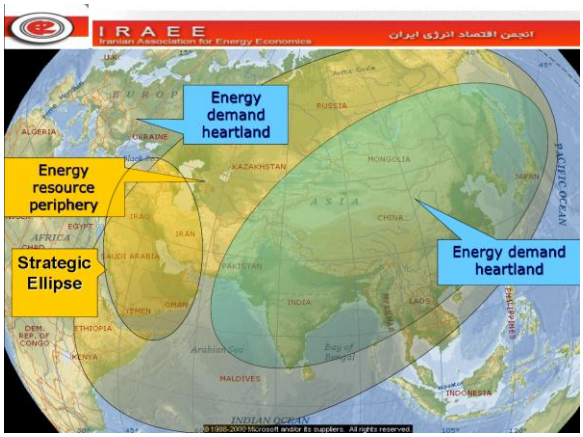
On this basically geopolitical note, the so-called „Southern Gas Corridor" acquired a crucial strategic relevance (see figure 1).

Figure 1: the Southern Gas Corridor

Source: *http://www.tap-ag.com/the-pipeline/the-big-picture/southern-gas-corridor*

The support for the Southern Corridor is manifested both inside the EU through policies linked to the development of interconnectors able to ensure the takeover and distribution of hydrocarbons in the „Magic Triangle" (consisting of the resource abundant regions in the basins of the Black Sea, Mediterranean and Caspian Sea) or otherwise known as the „Strategic Ellipse" (see figure 2) and by a projection of the increasingly active energy policies of various European state and non-state players in the „source" regions in the Middle East and Eurasia.

Figure 2: *the Strategic Ellipse*



Source: Iranian Association for Energy Economics, Vienna, 2015

Prior to drawing up a political denouement to what was described as the „Iranian nuclear crisis", the EU assigned Iran a special role in the European energy security configuration. In the European Commission (EC) communication to the European Parliament on May 28th 2014 regarding the European Energy security strategy (COM 2014) 330, Iran (conditioned by the lifting of sanctions), together with Iraq and Turkmenistan, were expressly mentioned as natural gas supply sources for Europe, the EC recalling an „active business agenda" in the Caspian area for the expansion of the Southern Corridor for supplier countries such as Iraq, Iran and Turkmenistan.

Although EU's framework Strategy for the Energy Union launched in 2015 no longer expressly mentions Iran, the series of political statements of several European and Iranian key factors towards an EU-Iran energy partnership, as well as the increasingly intense „fieldwork" of state and non-state players interested in Iran's potential as energy partner, reveals a serious interest.

The implementation of the Comprehensive Action Plan enacted on April 2nd, 2015 at Lausanne in P5+1 form (i.e. the permanent members of the Security Council of the UN plus Germany and Iran), based on the Regulatory Framework Agreement for the Iranian nuclear file and for lifting Iran sanctions (Interim nuclear agreement November 2013 – Iran and P5+1) could be regarded as a historical opportunity for Iran, for the security balance in the region and for the long and midterm European energy security.

About Iran as energy player

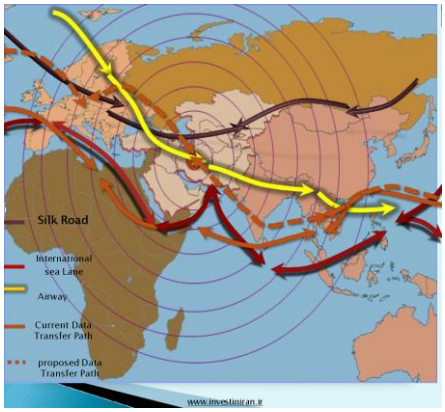
Iran/Persia can be categorized as being among the few countries and civilizations that managed to preserve their cultural essence and vocation as regional (and at some point continental) player over five millennia. A strong and long standing Persian tradition and cultural expansion to which one can add starting with 1901- at the time of Iran's most productive petroleum well discovery, known as the "D'Arcy Concession", by the cumulated efforts of pioneers William Knox D'Arcy, George Bernard Reynolds and Calouste

Gulbenkian, and of Anglo Persian Oil Company (BP) – Iran's strategic relevance as significant crude oil producer and exporter. [1]

This new status of Persia in terms of what can be known as pristine stage of the hydrocarbon era led to building up nationalist frustrations reaching a climax through the nationalization of the Iranian petroleum industry in 1953 and going further with the Islamic Revolution of 1978. Ever since, Iran's history experienced an intense and dramatic age, its energy industry taking the stage in the grand sweep of Iranian history and in terms of regional geopolitics.

On the background of several trends opening the path to a new international security and energy security order, the need for a tighter „interconnection" between the states and regions relevant in terms of energy capabilities (producing, consuming and transit states) is already self-evident. On this note we have for instance the debates on a „revival" of the Silk Road. However, any political-strategic Silk Road „revival" program would lack long term applicability in the absence of Iran as regional power on the strategic axis (see figure 3) of this economic route and as potential security landmark.

Figure 3: The Silk Road



Source: www.investiniran.ir

Moving on to why Iran is fundamental in the energy security global and regional scheme, there is, above all, its undeniable geostrategic positioning: the Persian Gulf and the Hormuz Strait, opening to Europe, Russia, Central Asia, China, South-Eastern Asia and Africa. Iran features a mostly young, educated, liberal and dynamic 77.5 million population (85% literacy level). Moreover, the country prides itself on a temperate climate, abounding in natural resources (largest zinc reserves in the world and second place in copper reserves, along with significant iron, chrome, lead, coal, mangane and gold deposits).

Although pretty harsh for Iran, the sanctions imposed by the international community, forced Teheran to distance itself from the petro state „curse", encouraging the development of a multifaceted economy oriented towards cement, steel, textiles, food, cars, electric and

[1] Daniel Yergin, The Prize: The Epic Quest for Oil, Money & Power, Free Press; Reissue edition (December 23, 2008).

electronic equipment (but as we will see, an electro-intensive economy) and manifesting growth potential in other areas (services, tourism, agriculture).

Iran takes first place in the world when it comes to its natural gas proven reserves (34 trillion cubic meters representing 18.2% of the world total as compared to Russia with 32.6 trillion cubic meters representing 17.4% of the total, as per the information in the BP Statistical Review of World Energy, 2015). The natural gas output reached 166 billion cubic meters/year in 2013 with a 0.8% increase representing 4.9% of the world total (while Russia gives 604 billion cubic meters/year, with a 2.4% increase representing 17.8% of the world total).

As for the proven crude oil reserves, Iran holds 9.3% of the world reserves (157 billion barrels), 4th place in the world, as compared to Russia which holds 6.1%. Iranian crude oil output reached 3.614 thousand barrels/day in 2014 (increased by 2% as compared to 2012), representing 4% of the world total, while Russia's output reached 10,838 barrels/day, increasing by 0.6%, representing 12.7% of the world total.

The analysis of statistical data shows that the natural gas and petroleum consumption in Iran reached significant proportions, going upwards as per the production levels. Thus, in 2014, the natural gas consumption was of 170 billion cubic meters increasing by 6.8%, representing 5% of the world consumption- same as China, an economy with a GDP significantly higher than Iran's; the Iranian GDP amounts to 368 billion USD with an annual 2.8% growth rate while China's GDP reached 9,240 billion USD and a 7% annual growth rate.

Over the last financial year, 40% of the natural gas consumption was registered in the household sector increasing by 2% as compared to the previous year. Natural gas holds 70% of Iran's energy mix, the main gas consumers being households (411 million cubic meters/day), power plants (76 million cubic meters/day), the industry sector (82 million cubic meters/day), and the rest being used for re-injection in hydrocarbon deposits to increase oil recovery.

Almost the entire natural gas output of Iran is oriented towards domestic consumption. By importing natural gas from Turkmenistan, Iran managed to export 9, 7 billion cubic meters of gas to Turkey (90% of the total Iranian natural gas exports and 25% of Turkey's demand). Nevertheless, Iran has been a net natural gas importer since 1997[2].

Teheran has the intention to increase hydrocarbon production (by increasing natural gas production in 2016 to 760 million cubic meters/day, targeting 250 billion for 2020), however such forecasts mainly depend on major foreign investments and technology inflows.

What needs to be highlighted is that approximately 85% of the Iranian natural gas reserves are not yet developed. 44 billion natural gas cubic meters are used in the industrial sector and the injection in petroleum deposits barely reached 34 billion cubic meters (insufficient, as the demand was of 175 million cubic meters/day). In 2025 consumption is estimated to

[2] David Ramin Jalilvand, Iran's gas exports: Can past failure become future success?; The Oxford Institute for Energy Studies, June 2013.

increase to 2500 cubic meters/day, which would mean a fourfold increase, Iran being thus forced to import natural gas to ensure domestic consumption.

Iran managed to speed up natural gas production by 100 million cubic meters/day in 2014 a similar growth pace being forecasted for 2015 so that in 2020 the production level will reach 1,100 million cubic meters/day as compared to 660 million cubic meters/day at present.

The largest natural gas deposit is located in the South Pars block in the Southern part of the country (shared with Qatar; it holds 47% of Iran's natural gas reserves and 17 barrels of condensed which represents 35% of the total Iranian output)[3]. Other major gas deposits are found in Tabnak, Forouz, Kish, North Pars and Kangan blocks. Significant reserve estimations are also alleged to be found in the deep area of Iranian territorial sea in the Caspian Sea. The proven and the potential onshore and offshore reserves in the Caspian basin of Iran would sum up to 50 billion cubic meters.

Iran has failed to significantly increase production in the South Pars block in 2009 (the production increase ranged from 485 million cubic meters/day in 2013 to 570 million cubic meters/day at the end of 2014), although this deposit is vital in ensuring domestic consumption and exports. The leadership of Iran is determined to increase gas output in general (1.100 million cubic meters/day in 2019), along with the output in the South Pars deposit specifically, to 800 million cubic meters/day which involves going through another 19 deposit development stages and requires a 43 billion USD investment[4].

As regards trade policies, the main business partners of Iran in the non-petroleum sector are Turkey, South Korea, India, China, UAE for imports and Afghanistan, India, UAE, Iraq and China for exports.

At present, over 90% of the Iranian gas exports are directed through pipelines to Turkey. Several swap agreements have been concluded with Armenia and Azerbaijan. Iran has no available LNG facilities. Rumor has it that Iranian private companies have been authorized to export gas to the UAE together with Iraq, Pakistan and Oman.

Iran also concluded natural gas delivery agreements with Kuwait (3, 1 billion cubic meters/year), Iraq (8 billion cubic meters/year)[5], Oman (8 billion cubic meters/year), Pakistan (8-9 billion cubic meters/year), Syria (5-7 billion cubic meters/year), which have not been commenced yet due to commercial, political and logistic grounds.

Iran imports more gas than it exports (from countries such as Turkmenistan and Azerbaijan), which makes Iran a small scale regional player on the gas market in the area. On the global gas market Iran holds a share of less than 1%.

As for industry modernization and increase in the rate of return, the Iranian authorities estimate that 30-40 billion dollars per year of investments in the upstream and downstream

[3] Reserves estimated to 50 trillion cubic meters ready to meet the European continental consumption for 100 years.
[4] http://www.naturalgaseurope.com/prospect-of-irans-gas-production-usage-and-export-23322
[5] Deliveries to Iraq have been postponed until completion of the 6th gas pipeline.

petroleum industry are required, namely 200 billion dollars in the following 5-10 years, from Iranian co-financing.

To sum up, Iran is a global scale energy player. Iran's high hydrocarbon potential turns the country into an alternative worth considering for the natural gas supply to Europe once the international sanctions have been lifted. The major challenges in terms of attaining such position are related to the wear and tear of technology in the petroleum industry in Iran, the low investment rate thereto, the high natural gas domestic consumption, the geographic distribution of resources in relation to the consumption areas and the export „outlets" (see Figure 4 on hydrocarbon blocks and the gas transmission network), energy inefficiency, the absence of both an appropriate infrastructure for natural gas production and export (pipelines/LNG) and of a marketplace, the sensitive and volatile geopolitical context in the region, strong competitors with big market shares (Russia and on LNG ,Qatar and possible in the near future USA and Australia), the preservation of a statist legal and institutional framework for investment (Iranian national companies being a mandatory partner for any project in the petroleum sector) and last but not least, the international sanctions.

One way to gain relevance and a good positioning in the European market is by a massive intake of investments in Iranian petroleum industry in the coming years.

Figure 4

Source: The University of Texas, Austin, Perry-Castañeda Library Map Collection

Despite such challenges, the part that Iran could play in the scheme of natural gas supply in Europe is worth analyzing by building potential scenarios and developing strategies. This is to be subject to a debate in the following.

Iran and the Southern Gas Corridor

From an EU perspective, „The Southern Gas Corridor" is today translated into the gas pipeline route (still in the development stage) represented by TANAP and TAP (and a network of interconnectors between the member states of the EU), having as supply source the natural gas in the Caspian area of Azerbaijan.

From the Russian Federation's standpoint as main gas supplier of Europe, the Southern Corridor could be seen as a competitor for the „fresh" Turkish Stream [6], designed by Moscow as an alternative to bypass Ukraine.

Considering that the Azeri gas intended to pass through the Southern Corridor will not be enough in the medium term to develop a competitive alternative to the Russian gas for the EU, it becomes pretty clear that the Southern Corridor concept cannot be assessed rigidly but by focusing on the dynamics of new potential sources and supply routes from and in the Eurasian space, Iran being among these sources.

Just before the sanctions in the nuclear file were imposed, Iran expressed its availability to supply natural gas to the European markets, by also taking into consideration the alternative of supplying Azeri, Iranian and Turkmen gas through the Nabucco pipeline, project in the meantime abandoned but likely to be revived. The regime of sanctions although leading to a withdrawal of international companies from Iran, did not hinder the participation of Iran to the Shah Deniz consortium in Azerbaijan with a 10% share (through Naftiran Intertrade, NICO), both Bruxelles and Washington accepting the idea of an exemption of certain „natural gas projects" from sanctions for natural gas transmission from Azerbaijan to Turkey and Europe.

Furthermore, in 2008, Turkey and Iran concluded an agreement which provided the development of a 5.000 km pipeline with a 35 billion cubic meters/year capacity, the so-called ITE pipeline, for the transmission of Iranian gas through Turkey to Europe- through Greece and Italy, then, by a Y pipe to the Northern and Southern areas of the continent). However, due to the sanctions, the completion of this pipeline was postponed and only the Tabriz-Ankara section became operational.

There is a salient endeavor as to building an energy bridge between Iran and the EU, on both sides. Was it for the Iranian gas to have Europe as destination, which would be the realistic transmission routes?

First and foremost, there is the geographic positioning of Iran and the country's compatibility with the various physical possibilities to supply gas. Iran can supply hydrocarbons both on land and at sea. Both alternatives can throw Iran in the realm of a strategic dilemma when it comes to selecting the most rewarding consumer market, which would be the regional market or, from a bolder perspective, the European or the Asian market. Being endowed with a long coastline in the Persian Gulf, as well as with significant offshore hydrocarbon reserves, Iran could therefore be anytime tempted to choose the LNG Asian market.

[6] Turkish Stream an alternative to South Stream, launched in December 2014, is a gas pipeline of 1,090 km in length which is to supply natural gas from Russia to Turkey, through the Black Sea and subsequently to the European markets, with a 63 million cubic meters capacity, of which 43 million will be directed towards the Turkish market. The pipeline is forecasted to become operational in December 2016.

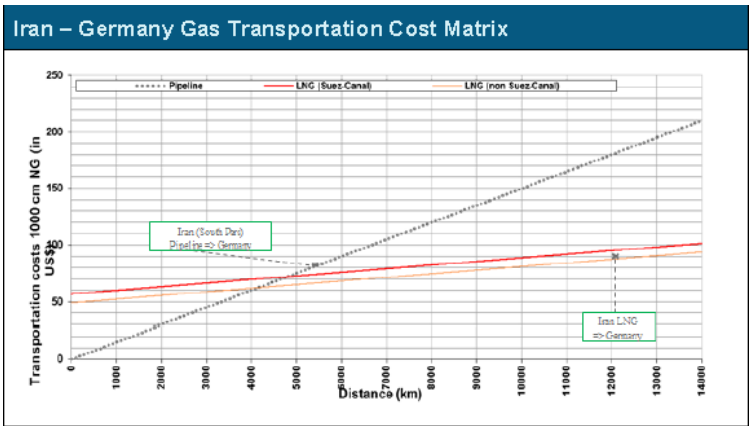
As for the supply of natural gas to Europe, Iran has several available options, both on land and at sea. For the sea transportation of LNG, a possible route could be through Hormuz and Bab el Mandeb Straits and then through the Suez Channel into the Mediterranean Sea– Figure 5.

Figure 5

Source: Pachiu

According to a study by Maximilian Kuhn, expert of the European Centre for Energy and Resource Security (EUCERS), the cost of natural gas supply through a LNG system exceeds the one involving a 5000 km pipeline (if we were to picture a gas supply from Iran to Germany-see Figure 6). Moreover, in terms of LNG supply, Iran would have to adapt to a particular background, which is represented by flexible, spot markets with prices unrelated to the price of petroleum, which may affect the resources obtained by Iran and consequently the financing of the mining industry's revival and of the Iranian economy in general. On the other hand, „The Pipeline Market" may provide Iran with long term agreements at prices resembling the Russian and Azeri ones.

Figure 6



Cost comparison of Pipeline vs. LNG	
	€/1000 m³ NG
Liquification	25,04
Shipping fix	10,09
Shipping variabel per km)	0,0023445
Regasification	6,62
Total cost	**70,18**
	€/1000 m³ NG
Cost variabel per km	0,011
Total cost	**57,70**

Source: Maximilian Kuhn, Enabling Iranian Gas Export Options, Springer VS, 2014,

At present, the most viable alternatives[7] for the transmission of natural gas through pipeline include transit through Turkey.

The first alternative would consider the transmission through the ITE pipeline-see Figure 7- partly built on the Tabriz-Ankara route, having a 16 billion cubic meters capacity/year (the total capacity of ITE would reach 35 billion cubic meters/year) and a Turkey-Greece-Italy interconnector, while the second alternative envisages the transit through TANAP (already under construction) and TAP at extended capacity[8] (see Figure 8), namely the interconnectors Greece-Bulgaria and the Ionian-Adriatic pipeline as well as a potential transit through Bulgaria and Romania following the route of the former Nabucco-West pipeline or through the interconnectors envisaged in South-East Europe.[9]

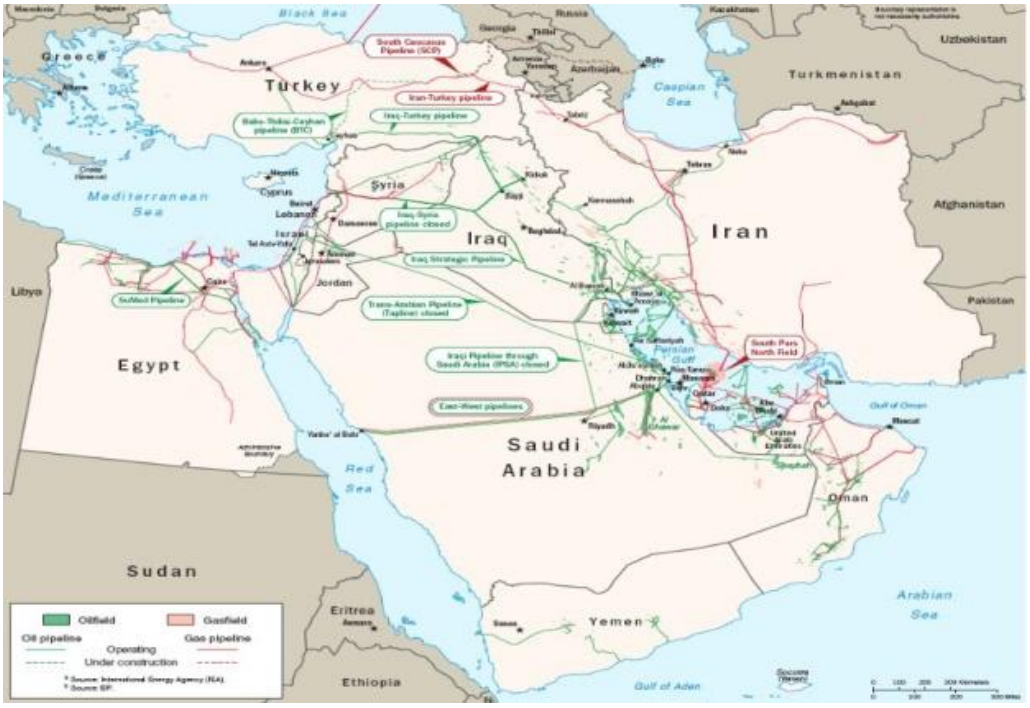
What is worthy of note is that Iran uses the ITE pipeline to only 70% of its capacity. More so, the financial and technical data related to the ITE pipeline have not been made clear yet (including the final route and destination); the overlap with the TANAP route would make it redundant. Moreover, there have been recent warnings from Turkey according to which this country could no longer financially support the project. To the extent that the Iranian gas alternative would be the TANAP-TAP route (extensive capacity), which is the most feasible in terms of trade and is also supported by the EU- then the ITE would no longer be rewarding on short and medium term.

[7] An ideal alternative would be the transmission of gas to Europe through an Iran-Iraq-Syria pipeline (already scheduled, the so-called "Friendship Pipeline") through the Mediterranean Sea, which would ensure hydrocarbon takeover in the Mediterranean area (except for Israel); the geopolitical unrest in the region and mainly the instability in Iraq and Syria fail to give a positive outlook on this alternative. There was also the construction of the so called "Persian Pipeline" (supported by Iran and Russia), through Turkey, as an alternative to the Nabucco project and as Iran's response to international sanctions. In terms of cost efficiency, any Iranian gas supply option towards Europe cannot exclude Turkey.

[8] The TANAP capacity may be increased to 23-24 or even 31 or 65 billion cubic meters/year provided that there is enough gas and demand for transit.

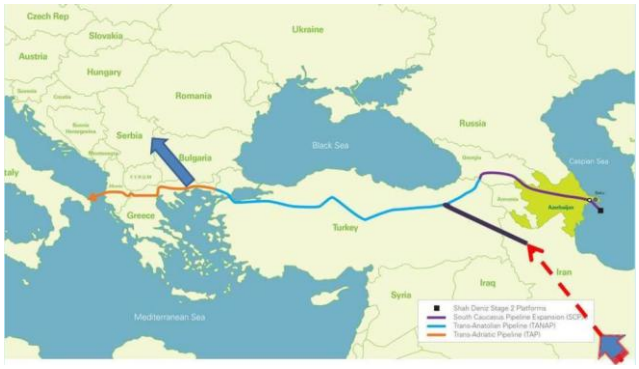
[9] Iran planned to develop the 9th trunk pipeline in a length of 1,863 km amounting to approx. 6 billion USD, for the transmission of 100 million cubic meters/day at its border with Turkey.

Figure 7



The Proposed Nabucco Gas Pipeline

Figure 8



As already shown, by taking part in the Shah Deniz consortium, Iran basically „stepped" in the Southern Corridor. Moreover, the Azeri and Turkish „in charge" factors stated (in response to an Iranian offer) that after lifting the sanctions and „meeting several business conditions", a participation share in the TANAP consortium could be sold to a third party,

probably to Iran (SOCAR announcing the potential sale of a 8% participation share in TANAP from its 58%).

However, as opposed to Azerbaijan, Iran neither has a „client portfolio" nor a clear projection on volumes and prices yet or the necessary interconnection grid in order to ensure gas reception. Therefore, there is likelihood for the Nabucco West project to be reconsidered in terms of takeover of Iranian gas (initial forecasted capacity of 20 billion cubic meters/year).

As a matter of fact, intense negotiations are currently carried between Iran, Turkey, Azerbaijan and Turkmenistan as regards the Southern Corridor (several voices speak of it as the „Trilateral Alliance" Turkey, Iran and Azerbaijan), for the takeover of Iranian and Turkmen gas. The EU and Russia go on stage to join this „concert". Also, Iran would need minimum 5 years to attain the best timing to commence the gas exportation projects.

Turkey, the key player

In the European energy equation, Turkey is a main stage performer, a power of regional tradition and vocation fuelling its geopolitical strength from the sensitive balance between Europe and Eurasia. What is fundamental for Turkey is to preserve and strengthen its position as regional player (energy „hub", by the import and transit of gas from countries such as Azerbaijan, Iraq, Iran, Turkmenistan and Russia and further on by the distribution of such to Europe), which should determine Ankara to tread carefully when it comes to dealing with any upcoming competitor. Any perspective on improving or mending Iran's relations with the West places Turkey in the middle of this geopolitical quandary. On the other hand, Iran cannot feel at ease while redesigning its energy security strategy, by increasing its dependence on Turkey, both as marketplace and transit route for gas exportation to the European market.

On the other hand, a too intense Turkish-Iranian alliance might turn the pace into the mermaid dance of Russia and the US towards the two regional powers, with strong implications as for the power balance and regional security.

Iranian-Turkish relations, although never devoid of strategic and political unrest, can be deemed as in full configuration and expansion process. In April 2015, Turkey and Iran concluded, except for the energy sector, neither more nor less than eight intergovernmental agreements. The cooperation relation between the two states increased gradually in fields such as commerce, energy and the fight against terrorism.

The current hotspots of the Turkish-Iranian relations are mainly related to the deviating policies in Iraq, Syria, Yemen and the energy „files".

The energy topic is mainly related to the prices of the gas imported by Turkey from Iran[10]. The Turkish imports of natural gas from Iran (10 billion cubic meters/year) are on second place, after Russia (27 billion cubic meters/year) and before Azerbaijan (6,6 billion cubic

[10] Iran holds a 20% share of the gas imports of Turkey; the absence of a transport infrastructure that would enable an increase in deliveries impedes any price discount practice.

meters), Iranian gas being however the most expensive, according to unofficial reports[11],- 490 USD/1000 cubic meters as compared to 425 USD paid to Russia and 335 USD paid to Azerbaijan.

The major concern regarding gas prices is subject to an arbitration dispute initiated by Turkey before the International Arbitration Court (there also being a dispute on the quality of the gas delivered). The proposals forwarded by Teheran on increasing (doubling) the amount of gas delivered, in exchange for a price cut, have been rejected by Ankara[12]. Moreover, during winter season, disruptions to supply are commonplace, Turkey managing to make up for this by importing from Russia.

The outlook on securing Turkey's natural gas consumption on short and medium term from sources other than an Iranian addition (Russia, Azerbaijan) shifts Turkey's interest in a gas pipeline project intended to supply Europe with Iranian gas from the need to ensure its domestic consumption towards the advantages that transit tariffs and the geopolitical and strategic relevance would bring.

Lately, Turkey has been vacillating between the two major geostrategic outlooks which mark its evolution, i.e. the EU and the relationship with the US/NATO and the Eurasian area. As for the energy area, several focus groups in Turkey are debating the alternative to connect to the Energy Community of the EU, where Turkey would remain a bystander and to create a Eurasian Energy Union[13] of 18 states[14] under the control of Turkey, Russia and Azerbaijan.

Also, what cannot be disregarded is that Turkey's relevance as strategic „energy hub" (both physical and virtual) and Ankara's decision to join the European energy family are likely to threaten Russia's dominant position on the European energy market. Therefore, Russia shall guide its efforts to „lure" Turkey by improving gas supply security and supporting its transformation into an energy hub. Turkish Stream is a clear example by which Russia manages to be at the forefront of European and Turkish energy calculations.

Turkey's role and position in the Southern Corridor equation is crucial, comprehensive and volatile. The importance of Turkey for the Southern Corridor is also a challenge for the EU. Basically, the EU replaces or rather adds the dependence on Turkey to the dependence on Russia. The EU shall have to cautiously manage the relationship with Turkey, both in terms of politics and compatibility of the Turkish legislation with the European one.

It is questionable whether the Thermopylae pass will still be a blockade for the army of Iranian gas molecules, this time conducted along the course of the Ottoman pipelines.

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[11] http://www.naturalgaseurope.com/removal-of-iran-sanctions-and-southern-gas-corridor-23389

[12] Gas consumption in Turkey was of 49 billion cubic meters in 2014. The International Energy Agency- IEA estimates that such could reach 50, 8 billion in 2015 namely 59 in 2019 and 70 in 2030. At the same time, Turkey intends to reduce its dependence on the hydrocarbon imports by developing new hydro and nuclear capacities (49% of the gas consumption is used to produce electricity). Along with the agreement of Azerbaijani to deliver an additional 6 billion cubic meters/year of gas through TANAP, as well as the potential perspective to import Russian gas through Turkish Stream, it goes without saying that a doubling of imports in Iran could not be commercially justifiable for Turkey.

[13] The International Association for Energy Economics (IAEE) initiative.

[14] Turkey, Azerbaijani, Turkmenistan, Kosovo, Macedonia, Albania, Montenegro, Bosnia-Herzegovina, Russia, Romania, Kazakhstan, Greece, Croatia, Serbia, Bulgaria and Slovenia

The relationship between Iran and other energy players

Turkmenistan is a country with tremendous hydrocarbon resources potential (4th place in the world in proven reserves: 7% of the world crude oil reserves and 9.4% natural gas). Turkmenistan has several features in common with Iran in terms of amount of reserves, low output and high consumption.

Turkmenistan was always seen as a potential gas alternative for Europe, the dilemma being the transmission route. The idea of a trans-Caspian pipeline ensuring the connection between Turkmenistan and Azerbaijani through the Caspian Sea was rejected following Russian and Iranian opposition, considering the blurry legal status of the Caspian Sea. For the time being, as a result of Russia's domination in the region, Turkmenistan will still be a significant exporter although mainly oriented towards China (agreement for the exportation of 65 billion cubic meters of gas by 2020), Russia and Iran (14 billion cubic meters of gas yearly out of which 6.5 billion was actually imported in 2014; there is the intention to conclude a barter agreement between Iran and Turkmenistan regarding the gas import from Turkmenistan in exchange of an export of goods, technologies and services by Iran, amounting to 3 billion USD annually). Best case scenario, the Turkmen gas will reach Europe after having been purchased by Gazprom– which is usually happening at lower scales. The widespread conclusion is that Turkmenistan chose China as favorite market on short and medium term, due to the complexity of the European route and to both the Russian opposition and the competing Iranian interests.

Although a potential Turkmen gas transit to Europe through Iran is no priority for the two countries, the bilateral cooperation relations have improved in the recent years; see 2015 when 19 agreements were concluded, some in the energy sector.

Iran enjoyed privileged relations with European states such as Greece, Bulgaria and Germany. Traditionally, Greece was Iran's gate to Europe and the US. Iran replied to this convenient position by significant discounts to the petroleum delivered to Greece during 2006-2011. The representatives of both countries consistently plead for the idea to create a strategic partnership. The partnership between Greece and Iran becomes even more relevant as Greece will have a decisive role in the European energy equation as gateway to the EU for the transit through the Southern Corridor (TANAP/TAP) and, maybe through the Russian gas pipeline Turkish Stream, and as regional gas „hub".

In terms of EU policy, the privileged relation between Iran and Germany will make a big difference, energy sector included. Once the sanctions against Teheran are lifted, Germany will undoubtedly be at the forefront of the foreign investors in Iran.

Last but not least, the idea of a Shiite Iran free of sanctions and with strong energy development perspectives could trouble the already problematic Sunni-Wahhabi relations with Saudi Arabia. Although in terms of population (80 million in Iran as compared to 28 million in Saudi Kingdom) and of an economy slightly different from the Saudi petrol based mono economy, Iran is ahead in its relation with Saudi Arabia, whereas in terms of GDP and of the capacity to influence global petroleum markets, Saudi Arabia is still in the lead.

Iranian gas competitiveness, once (and whether) ready to be delivered to Europe, might also reposition the Azeri competitor to increase its gas transmission capacity through the

Southern Corridor. In the same context, the strategic, conflicting position of Israeli, a country with strong regional energy perspectives (by the deposits in Eastern Mediterranean Sea) as to the lifting of Iran sanctions might gain new competitiveness proportions, once Europe would be regarded as harbor for the hydrocarbon in the two countries.

The relationship with Russia

In terms of a hostile relation with the US and of the sanctions inflicted in the nuclear file, Iran could easily seek a strategic outweigh by approaching Russia. However, Iran treated Russia quite cautiously.

Naturally, the relationship with Russia is still of utmost importance for Iran, by keeping the gates open to hydrocarbon exportation alternatives, both towards the West and the East. Inevitably, the two countries will become competitors in penetrating new hydrocarbon markets, in a tough but cool geopolitical game. Moscow is aware that by Iran's economic revival, it will have to face the challenge of losing a significant market share, first on the crude oil market and then on the gas market.

Further to the lifting of sanctions, to the extent it has the skills to provide a friendly environment; Iran will become a major target for investment. The well developed European economies, Russia and China will be in a competitive advantage in the „assault" on Iranian economy, as compared to the US, where the legislation on embargos only expires in 2016.

Russia will definitely take part in the Iranian „revival", in industries such as energy, the banking and military sector (where it is already present). Using the same scenario as Turkmenistan, it will most likely attempt to shift Iran's focus from Europe as potential gas market, towards the Asian area, more specifically the regional market represented by Iraq, Pakistan and India (China being „booked" for Russia).

A recent relevant example in this respect is the Russian-Iranian barter economic cooperation memorandum concluded in June 2015, the so-called „oil for cereals", providing Russia with the „agency" for placing Iranian oil on foreign markets, case which can be replicated by Russia for natural gas, once Iran can export significant amounts. Also, similarly to Turkey, Russia will provide beneficial conditions once with the Russian gas export for covering Iranian domestic consumption. There is also the possibility to address Iran proposals to participate to gas transit international projects controlled by Russia (thus keeping Iran trapped in the „gas pipeline market" and price policy thereto skillfully practiced by Russia), whether or not such projects are only on paper or are actually envisioned- meanwhile the legal status of the Caspian Sea remains ambiguous.

With a view to avoiding a serious competitor on the European market, Russia will make every effort for such market to seem unattractive to Iran so that the latter remains a regional supplier. No potential strategic approach between the US and Iran will appeal to Moscow for whom a stable USA-Iran relationship means letting Washington focus on the (degraded) scenario of Russian-American relations and in the strategic areas of interest of the two powers.

Conclusions (Romania included)

Iran can be a natural gas supply alternative for Europe in the medium and long run. At present, the low production level and the absence of transmission infrastructure rules out any possibility for significant exports to Europe or anywhere else. Once the regime of sanctions is lifted, the main challenges standing in Iran's way towards becoming a key player on the energy market reside in:

- Building the strategic options of Iran, i.e. Europe vs. Asia;
- Fighting the drive to re-enter a nuclear dispute following regional security challenges, once the Iranian geopolitical ascent is launched;
- Resisting the temptations associated to petro states, which lead to a lack of transparency, corruption, subsidizing energy consumption, using energy as a political and geopolitical weapon;
- Attracting major investment (according to Iranian estimations, approximately USD 150 billion in the short run) to re-launch hydrocarbon production (by developing new blocks and stimulating the existing ones);
- Increasing energy efficiency in assigning gas consumption and gas consumption in the domestic sector;
- Developing natural gas transmission infrastructure (pipeline and/or LNG) to ensure export;
- Engaging high performance technologies to increase production;
- Improving the legal and institutional environment for investments, ruling out corruption, ensuring transparency and predictability;
- Expanding alternatives upon exportation, considering the high dependence on Turkey);
- Drafting foreign policy strategies regarding the smart management of potential crisis generated by a reassignment of shares on the hydrocarbon export market (regional or global) in favor of Iran.
- Improving management in the national energy system;
- Using spot prices in gas trade towards Europe to the detriment of those linked to crude oil prices;

On the other hand, the European Union will need to send clear and consistent signals if it really intends to boost economic and political cooperation with Iran. The European political speech claiming reduction of natural gas dependency in general is likely to breach the trust of investors in energy and to affect the future hydrocarbon transmission routes.

Iran's goal for economic revival and for engaging foreign investments in the post-sanctions period can be definitely seen as an opportunity for any country, including Romania. In fact, as far as Romania is concerned, we may say history is repeating itself, considering that a similar background enabled Romania to boost its business relations with the Shah of Iran, Mohammad Reza Pahlavi, starting with the 6th decade of the past century. When it came to Iran's industrialization requests at the time, Romania responded by exporting tractors, agricultural machinery, freight trucks, electro technical equipment, chemical products, steel, including the establishment of a tractor factory in Iran as a joint venture, as well as other assets, in exchange for Iranian petroleum and cotton to be shipped to Romania. In a couple

of years, the regime of commercial exchanges was sharply accelerated (ten times), the trade balance tilting in favor of Romania.

After 1989 and up to the infliction of sanctions, the business relations between the two countries decreased gradually, reaching 158 million USD[15] in 2013. A 15% share of this volume was in 2012 represented by the Romanian export of equipment for natural gas and petroleum industry.

Iran has a twofold significance for Romania. Once the sanctions lifted, Romania should resume commercial exchanges with this state by promoting the products and services in competitive industries: information technology, infrastructure, automotive industry, spare parts for the automotive industry and rolling equipment, machines and electric devices, base metals. A key part in this would be the conveyance of skills and proficiency and investment capabilities of petroleum companies in Romania, regardless of the capital origins, both operators and service companies.

An active involvement of Romanian investors in Iran may come as a compensation for the dormant market in Romania and Europe. The Romanian government members stimulating the participation of Romanian companies (mostly petroleum companies and companies from industries serving the petroleum industry, such as IT) to investment projects in Iran (and abroad) along with an active involvement on the political and diplomatic stage may boost Iran's assertiveness towards the European and Romanian market in terms of achieving a solid Iranian-European energy structure.

An inflow of European investors in Iran (which would obviously not happen in the blink of an eye, Iran being first subject to a compatibility test) would also lead to highlighting Europe's relevance in Iran's strategic options and in terms of the country's potential as gas supplier to Europe and potential transit routes. Such a perspective would be of utmost importance for a country as Romania, a country with plummeting hydrocarbon resources and a chaotic energy policy, which has been bypassed by the major European plans to transit the Southern Corridor. Converting new political and commercial opportunities as those offered by Iran, represents a geopolitical prospect which must not be neglected by Romania.

[15] Source: www.mae.ro