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# Post-Sanctions Iran and Regional Energy Geopolitics





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*Serhan ÜNAL*

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## LIST OF ABBREVIATIONS

APOC	: Anglo-Persian Oil Company	mb/d	: million barrels/day
bbbl	: billion barrels	MW	: Megawatt
bcm	: billion cubic meters	NIOC	: National Iranian Oil Company
BP	: British Petroleum	NITC	: National Iranian Transportation Company
EIA	: Energy Information Administration	PKK	: Kurdistan Workers' Party
EPDK	: Energy Market Regulatory Authority	TANAP	: Trans-Anatolia Natural Gas Pipeline
EU	: European Union	tcm	: trillion cubic meters
GWh	: Gigawatt hours	TEİAŞ	: Turkish Electricity Transmission Company
IEA	: International Energy Agency	UK	: United Kingdom
IMF	: International Monetary Fund	US	: United States of America
kb/d	: thousand barrels/day	WTO	: World Trade Organization
LNG	: Liquefied Natural Gas		

## EXECUTIVE SUMMARY

Sanctions against Iran have been lifted partially following the nuclear agreement between Iran and P5+1 countries on July 14, 2015. Iran's return to global energy markets creates new rivalries and opportunities. However, because it is not yet certain that the agreement will solve the crisis permanently, the most probable scenario is that Iran will adopt a cautious policy in order to be prepared against a new wave of sanctions in the future.

Iran's significance to global energy markets is important in two major ways. First, Iran has 10% (158 billion barrels) of the world's oil reserves and 18% (34 trillion cubic meters) of the natural gas reserves. Thus, Iran has the fourth and second (the first, according to BP) largest reserves of oil and gas in the world, respectively. The second factor is the geopolitical position of Iran. Iran has the ability to use its geography in two very different ways: to facilitate energy trade in the east-west axis, and also to destabilize it by creating opportunities or threats.

While Iran's goal is to prioritize the economic benefits of energy trade in the short term, its strategic target in the long term is to exploit energy for political means. Within the framework of the "resistance economy" doctrine, Iran prioritizes the export of more value-added products, such as electricity instead of natural gas, or processed petroleum products instead of crude oil.

In the oil sector, after the EU tightened the US-led sanctions beginning in 2012 by stopping the import of oil from Iran and no longer investing in the country, Iran's oil production, which was 4 million barrels per day (mb/d) in the early 2000s, decreased to below 3 mb/d. Oil export fell to 1,25 mb/d in 2013, whereas it was as high as 2,6 mb/d in the pre-sanctions period. From a purely economic perspective, it can be said that low oil prices will contribute to attracting more foreign investment in the Iran oil sector. Due to oil prices as low as \$30 per barrel, many production fields elsewhere have lost their profitability, but the production costs in Iran, which are between \$5 and \$10 per barrel, are still profitable.

In terms of political feasibility, some uncertainties continue, and Iran's new petroleum contract system aims at attracting more foreign investment to the oil sector by resolving these uncertainties. Thus, Iran's daily oil production is expected to increase 1 mb/d prior to the middle of 2017. However, Iran's own consumption is too high. In 2014, Iran consumed 64% (1,8 mb/d) of its production domestically. Oil's share in the total primary energy resources consumption is 38%. If Iran consumes less oil domestically, it will have more to export.

The natural gas sector is likely to continue to be much more politicized than the oil sector. In natural gas, Iran will endeavor to increase both production and export in pipe gas and in LNG form. Although sanctions did not reduce Iran's natural gas production in absolute terms, they caused a relative decrease by preventing an increase in production. Therefore, despite its 18% share in global reserves, Iran's shares in global production and trade are 5% and less than 1%, respectively. Similar to the sanctions, high domestic natural gas consumption weakens the

country's gas export capacity. In 2014, natural gas had a 60% share (170 billion cubic meters) in the total primary energy resources consumption, and 50,3 bcm gas was consumed only by the power sector in Iran, where 67% of the total electricity supply was produced by gas plants. With the lift of sanctions, parallel to the increasing speed of economic growth in Iran, domestic energy demand will grow too. For this reason, Iran may need to gradually reduce subsidies on energy prices.

In order to increase natural gas production, Iran's main goal is to develop the South Pars field, which is shared between Iran and Qatar. Until now, Iran could develop only half of the 24 blocks in the South Pars, but in the post-sanctions period, this number will increase. An important part of Iran's natural gas export strategy is to obtain LNG (Liquefied Natural Gas) export capability, which has been Iran's target for more than 40 years. This would be beneficial for Iran in the diversification of its gas export routes and destinations, by providing it with a strategic flexibility during a possible new period of sanctions in the future. Hence, despite the low economic feasibility of Iran's LNG strategy, it is significant for its political yields rather than its economic ones.

Electricity export is another form of energy export. Iran sustains its target of becoming an electricity exporter for its neighboring countries and aims for a 5.000 Megawatt installed power increase annually. For example, in 2012, Iran, had a 15.000 GWh (Gigawatt hours) electricity foreign trade volume consisting of 11.000 GWh export and 4.000 GWh import. In 2014, Turkey met more than 1% of its aggregate electricity supply from Iran.

The relations of Turkey and Azerbaijan with Iran, within the framework of regional energy geopolitics, will mainly be affected by Turkey-Iran relations. In terms of present relations, these are likely to continue, since both sides benefit from ongoing electricity and gas deals.

In terms of prospective relations, the main issue is the transportation of Iran gas to the EU via Turkey in large amounts, which it seems unlikely for three main reasons. Iran transporting its own gas to the EU via Turkey is not rational, because it means giving Turkey a bargaining chip to be used against itself. Also, other countries in the area will resort to counterbalancing measures against Turkey to prevent a possible Turkish domination in the region. In this sense, the fates of the Iraq and Turkestan gases and of the Turkish Stream, which seems unfeasible now, are important. Additionally, Iran may opt to prioritize LNG export and eastward pipelines in order to obtain strategic flexibility and diversification in export destinations.

The main issues with the EU-Iran energy relations are Iran's recapturing its "lost" market share from Russia by restarting oil export to the EU market, investments of European companies in Iran, and transportation of Iran gas to the EU via Trans-Anatolia Natural Gas Pipeline (TANAP). Although it is possible that Iran may export gas to the EU via a TANAP connection, it is not likely that this amount will be as large as a possible alternative to Russia's gas.

It can be argued that Russia-Iran relations will continue to remain balanced thanks to

both countries' attitude of prioritizing politics. In the post-sanctions period, Russia can take part in Iran's large-scale defense projects, and some swap deals are possible. Thus, Russia may provide gas to northern Iran and in return, Iran may provide oil to Russia's customers from the south. However, there are some covert realms of rivalry in the relations, such as Russia's decreasing market share in the EU oil market due to Iran; Iran's gas as a future diversification asset for China against Russia's gas; and Iran's moves to gain influence in the south of Caucasia and southeastern Turkestan, to the detriment of Russia.

China-Iran relations have the same basis of anti-Western political convergence to develop. In oil, Iran's vision is in full accordance with China's strategy to increase its strategic petroleum reserves. In gas, both Iran's eastward pipelines and LNG export policies are compatible with China's target of importing Iran's gas via Turkmenistan and Pakistan in the long term. Besides, non-energy economic cooperation may facilitate a deepening of these relations.

In Iran's energy relations with Pakistan and India, the pipeline that Pakistan constructs is not only important for Pakistan's own gas demand, but also for China's long-term strategy to import gas from Iran. In the long term, Pakistan is likely to become a transit country for the Iran-China gas pipeline. India, since it is the fourth largest energy consumer in the world, needs Iran's gas, and this is intended to be transported via an Iran-Oman-India offshore pipeline. Nevertheless, India's strategic cooperation with Israel remains a parameter that could damage the relations.

## POST-SANCTIONS IRAN AND REGIONAL ENERGY GEOPOLITICS



### 1) INTRODUCTION

In the age of hydrocarbons that has marked the last two centuries, Iran has been one of the world's most prominent actors for much of the twentieth century. Thanks to the recent lifting of severe sanctions that were imposed based on perceived nuclear threats, Iran is yet again a top player in global energy mar-

kets. The crisis between the Western alliance and Iran that led to the sanctions by the US and Israel seems to have been mitigated based on the agreement between the P5+1 countries (the US, the United Kingdom, Russia, China, France and Germany) and Iran on July 14, 2015.<sup>1</sup> However, Iran's return to world energy mar-

<sup>1</sup> David E. Sanger, "Iran Complies With Nuclear Deal; Sanctions Are Lifted", *The New York Times*, <http://www.nytimes.com/2016/01/17/>

kets holds the potential for opportunities and threats to global energy geopolitics, which are already tense.

Masjed Suleiman was the region where oil was discovered in Iran, in the current Khuzestan province in 1908.<sup>2</sup> Iran's oil sector during both world wars was controlled by the Anglo-Persian Oil Company (APOC), forefather of today's British Petroleum (BP). Fifty-one percent of APOC's shares were held by Britain, and the rest by the British businessman William Knox D'arcy, who discovered oil in Iran for the first time. Iran's profit share of this discovery was less than 20% in the early 1900s, which started to cause problems between the two countries, especially in the aftermath of the Second World War. In March 1951, upon the decision of the Iranian Parliament under the leadership of the Prime Minister Muhammad Musaddeq to nationalize the oil industry in Iran, the United Kingdom imposed certain sanctions to prevent the sale of Iranian oil in international markets.

In 1954, following the foundation of the National Iranian Oil Company (NIOC), the shares were shuffled among BP (40%), Chevron, Exxon, Gulf, Mobil and Texaco, each had 8%, and the French Oil Company (6%). And the Iranian government, following lessons learned from the previous oil crisis, established the National Iranian Transportation Company (NITC) to be able to transport its own oil. This company significantly increased Iran's maneuverability in the face of US sanctions imposed since the Iran-Iraq War (1980-1988) until January 2016.

Following the Islamic Revolution in 1979, when the multinational structure was torn down, the NIOC's importance increased, as Iran exported its oil to Asian markets in increasing quantities every year due to the sanctions. From 2012, European Union (EU) too, has joined the US sanctions and halted investing in Iran and exporting oil from Iran, making the Iranian oil further dependent on Asian markets. With the sanctions in place, Iran's daily production of oil dropped from around four million barrels (mb/d) in the early 2000s to lower than the 3 mb/d.<sup>3</sup> Despite the nation's significantly dwindling oil production and natural gas resources that barely satisfy its domestic needs, Iran maintains its significance for global energy markets.

Iran's importance is for two main reasons. The first is the amount of Iran's oil and natural gas reserves. Iran holds about 10% of the world's oil reserves and 17% of its natural gas reserves. These figures make Iran the holder of the fourth-largest oil reserves globally, and second-largest of natural gas.<sup>4</sup> The second reason is Iran's potential to create both opportunities for and threats

to the Eurasia energy equation and to global energy markets as a result of its geopolitical position. From the threats perspective, Iran has the capacity to destabilize both an energy chokepoint like the Strait of Hormuz, where 30% of marine-transported oil passes through, and routes such as the Caspian, through which Turkistan's energy resources may flow out to Europe.<sup>5</sup> From the opportunities perspective, Iran, thanks to its proximity to big energy importers, has the capacity to lay the groundwork for a Western-axis cooperation involving Europe and Turkey as well as an Eastern-axis cooperation involving Pakistan, India and China. It is up to state actors and the policies they create as to whether energy will be a tool for cooperation or competition.

While Iran's goal is to prioritize the economic benefits of energy trade in the short term, its strategic target in the long term is to exploit energy for political means. The structure of Iran's natural gas trade with Turkmenistan and Turkey, and its target to become the main electricity exporter to countries around it in the mid-run are the two proofs-positive that Iran is thinking along these lines. Bilateral energy relations between Turkey and Iran confirm that Iran is trying to protect its economic gains from the energy trade from the consequences of a political rivalry that originated as a result of regional geopolitical competition.<sup>6</sup> With this situation as only one of the serious difficulties that Iran's economy is grappling with, we can assume that Iran will continue this approach given the lack of an alternative approach to its behavioral patterns in energy exports.

On the other hand, because both the agreement attained, as well as the political and military preferences of Iran and other states that are parties to the crisis keep the possibility alive of a similar crisis occurring again, as well as the possibility of re-imposing sanctions on Iran, the best possible scenario for Iran seems to prepare for 'the next' crisis. Such a strategy would have more consonance with Iran's doctrine of the economy of resistance, which basically has an import-substitution logic. The main objective is to become less dependent on imported goods, services and technologies by way of exporting processed domestic products to increase the value added. Yet another target is to reduce the almost addictive dependency of the Iranian economy on oil and natural gas exports, diversifying the economy as well as state revenues. In this way, even if there sanctions were to be reinstated or relations with some countries were to deteriorate, the damage to other sectors of the economy or to relations with non-sanctioning countries could be minimized. In this sense, the energy pillar of the economy of resistance doctrine prescribes that Iran's oil be exported not as crude but processed and its natural gas as electricity as much as possible.

The main reason why the nuclear agreement attained is likely an interim solution is Iran's motives to have a variety of developed nuclear capabilities. The motives driving Iran to develop

[world/middleeast/iran-sanctions-lifted-nuclear-deal.html?action=click&contentCollection=Middle%20East&module=RelatedCoverage&region=Marginalia&pgtype=article](http://www.middleeast/iran-sanctions-lifted-nuclear-deal.html?action=click&contentCollection=Middle%20East&module=RelatedCoverage&region=Marginalia&pgtype=article).

2 Mohammad Malek, "Oil in Iran between the Two World Wars", *Iran Chamber Society*, [http://www.iranchamber.com/history/articles/oil\\_iran\\_between\\_world\\_wars.php](http://www.iranchamber.com/history/articles/oil_iran_between_world_wars.php).

3 ABD Energy Information Administration (EIA), "Iran", [https://www.eia.gov/beta/international/analysis\\_includes/countries\\_long/Iran/iran.pdf](https://www.eia.gov/beta/international/analysis_includes/countries_long/Iran/iran.pdf).

4 ABD EIA, "Iran Overview", <http://www.eia.gov/beta/international/analysis.cfm?iso=IRN>.

5 ABD EIA, "World Oil Transit Chokepoints", <https://www.eia.gov/beta/international/regions-topics.cfm?RegionTopicID=WOTC>.

6 Serhan Ünal, Eyüp Ersoy, "Political Economy of Turkish-Iranian Relations: Three Asymmetries", *Middle East Studies*, Vol. 5, No. 2, pp. 141-164.

nuclear technology can be categorized mainly as internal and external political reasons and military reasons. Regarding internal political reasons, Iran’s rulers’ loyalty to the nuclear program began in the Shah era and continued after the 1979 Revolution. The dominant powers in the post-revolution era view the nuclear program as a tool to establish their legitimacy.<sup>7</sup> External political reasons relate to Iran viewing its nuclear program as a means to increase its prestige and influence in the region and the world so as to realize its foreign policy aspirations more easily.<sup>8</sup> Regarding military reasons, Iran believes that having nuclear weapons would allow it to defend itself against perceived threats and increase its deterrence.<sup>9</sup>

Since Iran has not actually changed its motivations in these areas, despite the recent agreement, it is difficult to claim that Iran’s nuclear program has been terminated. For this reason, the crisis may repeat itself. Ballistic missile tests that Iran carried out after the agreement and other incidents with the US in the Persian Gulf support such views.<sup>10</sup> Moreover, not all sanctions on Iran have been lifted; those that were tightened in relation to the nuclear crisis have only been lifted. Problems between Iran and the US have not been resolved; hence a ‘road accident’ between parties separated by an inherent distrust is a possible scenario.<sup>11</sup>

7 Mustafa Kibaroglu, “Good for the Shah, Banned for the Mullahs: The West and Iran’s Quest for Nuclear Power”, *Middle East Journal*, Vol. 60, No. 2, pp. 207-232 (Türkçe versiyonu için; <http://www.mustafakibaroglu.com/sitebuildercontent/sitebuilderfiles/Kibaroglu-IranNukleer-MEJ2006-Turkce.pdf>); Robert Reardon, “Iran’s Nuclear Ambitions: Motivations, Trajectory, and Global Implications”, Ashley Tellis ve diğerleri (der.), *Strategic Asia 2013-14: Asia in the Second Nuclear Age*, The National Bureau of Asian Research, 2013.

8 Kenneth M. Pollack, *The Iranian Nuclear Program: Motivations and Priorities*, <http://www.brookings.edu/~media/research/files/testimony/2006/5/17iran-pollack/20060517.pdf>; Ali Vaez, Karim Sadjadpour, *Iran’s Nuclear Odyssey: Costs and Risks*, <http://carnegieendowment.org/2013/04/02/iran-s-nuclear-odyssey-costs-and-risks/fvui>.

9 Mustafa Kibaroglu, “Iran’s Nuclear Ambitions from a Historical Perspective and the Attitude of the West”, *Middle Eastern Studies*, Vol. 43, No. 2, pp. 223-245; [http://cns.miis.edu/npr/pdfs/npr\\_19-1\\_sherrill\\_iran\\_bomb.pdf](http://cns.miis.edu/npr/pdfs/npr_19-1_sherrill_iran_bomb.pdf).

10 Jay Solomon, Gordon Lubold, “Iran Test-Fires Another Missile, U.S. Says”, *The Wall Street Journal*, <http://www.wsj.com/articles/white-house-backs-closing-u-n-probe-into-irans-nuclear-program-1449595905>; Louis Charbonneau, “Iran’s October Missile Test violated U.N. ban: expert panel”, *Reuters*, <http://www.reuters.com/article/us-iran-missiles-un-exclusive-idUSKBN0TY1T920151216>; “Iran demands apology after detaining US navy boat crews for ‘violating’ Gulf waters”, *The Guardian*, <http://www.theguardian.com/world/2016/jan/12/iran-detains-two-us-navy-ships-persian-gulf>.

11 Nahal Toosi, “Iran deal nears a turning point”, *Politico*, <http://www.politico.com/story/2015/12/iran-nuclear-deal-obama-argument-216865>.

## 2) IRANIAN ENERGY SECTOR

From the perspective of international geopolitical competition, where energy is increasingly politicized and exploited, Iran’s energy sector has an important place. Some assert that Iran has not the second- but the first-largest natural gas reserve in the world, at 34 trillion cubic meters (tcm) (with a share of 18,2%).<sup>12</sup> Regardless, Iran is a country of vital importance not only because of the size of its reserves but also in terms of its geopolitical position. With the sanctions lifted, Iran can now commission its dormant production capacity, swiftly market its stocks and try for quick oil-focused economic relief. Yet, things are a bit different in the natural gas sector. Although Iran will likely use its oil sector for short-run and long-run economic relief by creating mutual dependencies via foreign investments, it would likely use its natural gas as an extension of its foreign policy preferences to obtain some strategic maneuvering capacity. And the hinge between the two sectors is that the sanctions that were tightened between 2012 and 2016 dealt a serious blow to the nation’s production capacity, significantly diminishing the amount of energy revenues. For example, before the sanctions, Iran enjoyed a total foreign trade volume that reached some \$193,6 bn, exporting \$111,3 bn worth of energy and mining products; these totals decreased to \$139,8 bn and \$55,3 bn in 2015, respectively (see Diagram 1).

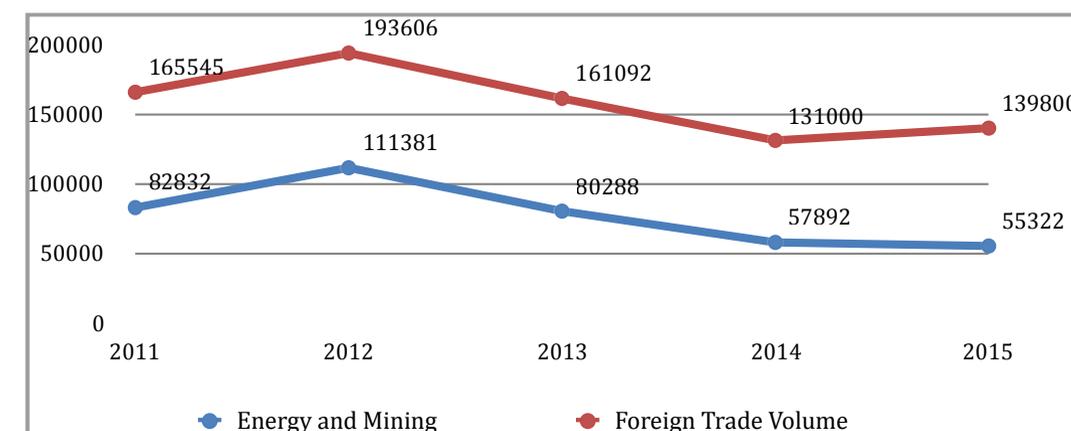


Diagram 1. Annual Change In Iran’s Foreign Trade Volume and Its Energy and Mining Exports Through the Years – Million\$ (Source: WTO<sup>13</sup>)

12 BP, *Statistical Review of World Energy*, 2015.

13 WTO, *Trade Profiles*, 2011-2015.

Following the lifting of the sanctions, it is almost certain that Iran’s economy will perk up and the country’s overall economic outlook will recover. The International Monetary Fund (IMF) estimates that Iran that has grown 0,8% in 2015 and will grow around 4,5% in 2016.<sup>14</sup> Parallel to this change, it is also almost certain that there will be a surge in Iran’s domestic energy demand, another important factor regarding Iran’s capacity of oil and natural gas exports.

### 2.A) Oil Sector

With 157,8 bbl (billion barrels) and a resulting share of 9,3%, Iran has the fourth-largest oil reserve in the world after Venezuela, Saudi Arabia and Canada.<sup>15</sup> Yet, because of the sanctions, in 2014 Iran was seventh in global oil production, with 3,6 bbl and a share of 4%, after China.<sup>16</sup> A study of Iran’s oil production per year demonstrates this fact (see Diagram 2). Iran’s oil exports, which were as much as 2,5 mb/d before 2012, fell as low as 1,25 mb/d in 2013 (see Diagram 3).

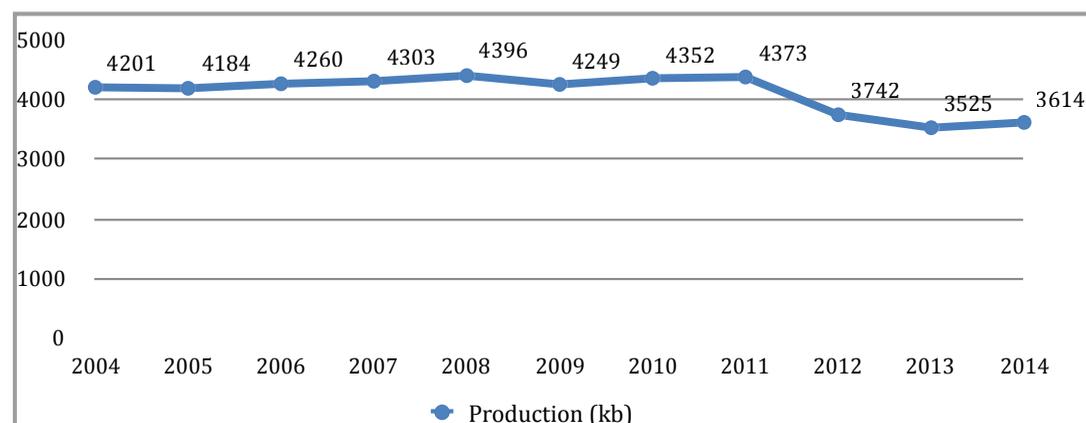


Diagram 2. Iran’s Daily Petroleum Production Per Year (Source: BP 2015)

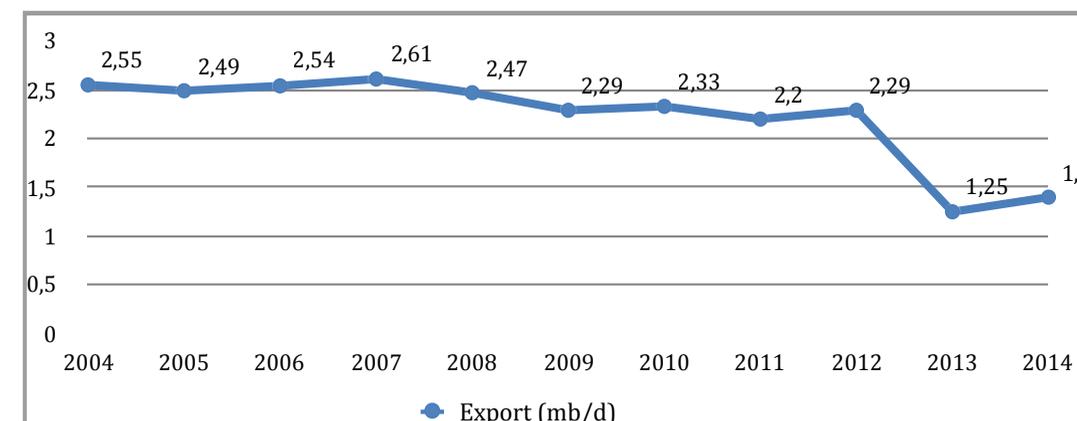


Diagram 3. Iran’s Daily Petroleum Exports Per Year (Source: EIA<sup>17</sup>)

While the sanctions directly contributed to Iran’s drop in oil production and exports, they involved two other main factors: lack of technology and lack of investment. The sanctions prohibited the export of technologies concerning the energy sector in addition to importing many goods and services.<sup>18</sup> Much-needed technology transfers direct investments did not occur because finance and energy corporations would not risk being ‘punished’ by the US and the EU.

Following the July 2015 agreement, we might assume that many international energy companies will flock to Iran’s dormant oil fields, leading to a surge in Iran’s oil production capacity. The first reason for this is the quick decline in oil prices that began in late 2014. Crude oil had a 2008 average price of \$100/bl, and it now hovers around \$30/bl; as of early 2016 this drop has inflicted a heavy blow on oil firms’ global profitability. Further, these companies have lost their production profitability in many fields.<sup>19</sup> Investment plans, many based on soaring prices, have been canceled, with some studies estimating the loss to be some \$200 bn globally.<sup>20</sup>

Based on economics, investing in Iran seems logical. The average cost of oil production in Iran is about \$5/bl according to Iranian sources, and around \$10/bl according to international sources.<sup>21</sup> Regardless, these numbers demonstrate that the probability that foreign energy

14 IMF, “Islamic Republic of Iran and the IMF”, <https://www.imf.org/external/country/IRN/>.

15 BP, Statistical Review of World Energy, 2015.

16 Ibid.

17 US EIA, “Total Petroleum and Other Liquids Production – 2014”, <http://www.eia.gov/beta/international/?fips=ir>.

18 US Treasury, “An overview of O.F.A.C. Regulations involving Sanctions against Iran”, <https://www.treasury.gov/resource-center/sanctions/Programs/Documents/iran.txt>; “Embargoes and Sanctions on Iran”, <https://www.gov.uk/guidance/sanctions-on-iran>; European Union External Action Service, “The European Union and Iran”, [http://eeas.europa.eu/top\\_stories/2012/130412\\_iran\\_en.htm](http://eeas.europa.eu/top_stories/2012/130412_iran_en.htm).

19 US EIA, “Petroleum and Other Liquids – Spot Prices”, [https://www.eia.gov/dnav/pet/pet\\_pri\\_spt\\_s1\\_a.htm](https://www.eia.gov/dnav/pet/pet_pri_spt_s1_a.htm).

20 “Oil groups have shelved \$200bn in new projects as low prices bite”, *Financial Times*, <http://www.ft.com/cms/s/0/d6877d5e-31ee-11e5-91ac-a5e17d9b4cff.html#axzz3vW8o5Ddm>.

21 “Iran producing oil in lowest costs”, *Mehr News Agency*, <http://en.mehrnews.com/news/105688/Iran-producing-oil-in-lowest-costs>; NIOC, “Iran Be Able to Produce Oil at \$1”, <http://www.nioc.ir/Portal/Home/>

companies would choose to invest in Iran is high. Similarly optimistic, Namdar Zanganeh, Iran's oil minister, stated that Iran's oil production will increase by 500 thousand barrels/day (kb/d) following the lifting of the sanctions and by 1 mb/d, within one year reach.<sup>22</sup>

Yet another factor that supports these changes is that the July agreement favors the 'carrot' and not the 'stick.' It is also possible that the Western countries would try to soften Teheran's position by encouraging their companies to invest in Iran, offering the latter some economic benefits that it would not want to lose. Political feasibility as much as economic feasibility is of concern here. As regards the former, the Iranian administration has taken two significant steps. First, Zanganeh, who is seen more positively by the Western governments and energy companies, was appointed as the Oil Minister in 2013, when the sanctions climaxed.<sup>23</sup> Second, the new agreement format that Iran developed to encourage foreign oil companies to invest seems promising.<sup>24</sup>

Regarding the second step, the new agreement provides opportunities for foreign companies not only in exploration and development but also in continuing production. Along with the positive economic inputs this would create for expedient development of Iran's oil sector, one could expect similar positive effects from the political perspective. As the government of Iran and the governments of countries of companies investing in Iran will see economic interest in maintaining the investment climate and economic stability, we can assume they will be careful not to ruin these new relationships.

Despite the positive factors, many significant obstacles are also in store for Iran's oil sector. The most important is whom Iran will sell its oil to, especially when there is abundance in the global oil supply. Especially in a market where producers such as Saudi Arabia have significantly increased the amount of oil they sell through long-term agreements, Iran will either have to sell to a limited number of spot markets or drop prices to achieve the market share it targets. Another problem area for the Iranian oil sector is its soaring internal demand. There is more than one reason behind this increase, the most important being that the Iranian state subsidizes the prices of petroleum products used by the public and that oil is extensively used in the

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22 "Iran's return to market not to reduce oil prices", *Mehr News Agency*, <http://en.mehrnews.com/news/111511/Iran-s-return-to-market-not-to-reduce-oil-prices>; Hashem Kalantari, Golnar Motevalli, "Iran Oil Minister Says Output to Rise a Week After Sanctions", *Bloomberg*, <http://www.bloomberg.com/news/articles/2015-08-02/iran-s-oil-minister-says-output-to-rise-one-week-after-sanctions>.

23 Iran's new president to return Zanganeh to oil ministry-source", *Reuters*, <http://www.reuters.com/article/iran-oil-minister-idUSL6N0FY05W20130728>; Bijan Khajepour, "Iran's Petroleum Industry Welcomes Zanganeh's Return as Minister", *Al Monitor*, <http://www.al-monitor.com/pulse/tr/originals/2013/08/iran-petroleum-sector-veterans-zanganeh.html>.

24 Sara Vakhshouri, "Iran offers new terms for oil contracts", *Al Monitor*, <http://www.al-monitor.com/pulse/originals/2014/02/iran-oil-contract-sanctions-energy-nuclear.html#>.

generation of electricity. Iran's crude oil production in 2014 was 2,8 mb/d and its consumption 1,8 mb/d; that is, Iran consumed 64% of its own production.<sup>25</sup> The level of oil in Iran's primary energy resource consumption, is around 38%.<sup>26</sup> Comparatively, this figure is 26% in Turkey, 33% in the EU, 20% in China, 22% in Russia and 60% in Saudi Arabia.<sup>27</sup>

As Tehran will face higher costs to sustain its existing oil consumption policy when the amount of oil subsidized for domestic consumption increases, the above problems will become even more critical in the near future. Now that Iran has the opportunity for fast growth because the sanctions have been lifted, both problems could become even more pressing. Another high probability is that Iran will depend even more on the petrochemical sector to secure a solution to the first problem as well as to prevent imports of finished products in lieu of raw material production/exports, in line with the economy of resistance doctrine.

In either case, in a market where low prices are combined with abundance in supply, Iran will not be able to use its oil card as a strategic foreign policy trump. Tehran's aim in the short run, then, may be to increase its oil exports regardless of geographical restrictions. Yet, in the long run, Iran should make use of the foreign investments that it will have attracted as a tool to increase the cost of possible future sanctions by Western states. As such, if the consequences of imposing sanctions on Iran increase, any sanctions might be softer and have less impact.

25 US EIA, "Iran".

26 Ibid.

27 For Turkey: Energy Works General Directorate, "Enerji Denge Tablosu 2014" [http://www.eigm.gov.tr/File/?path=ROOT%2f4%2fDocuments%2fDenge+Tablosu%2f2014\\_Denge\\_Tablosu.xlsx](http://www.eigm.gov.tr/File/?path=ROOT%2f4%2fDocuments%2fDenge+Tablosu%2f2014_Denge_Tablosu.xlsx); For EU: Eurostat, "Consumption of Energy", [http://ec.europa.eu/eurostat/statistics-explained/index.php/Consumption\\_of\\_energy#Main\\_tables](http://ec.europa.eu/eurostat/statistics-explained/index.php/Consumption_of_energy#Main_tables); For China: US EIA, "China", [https://www.eia.gov/beta/international/analysis\\_includes/countries\\_long/China/china.pdf](https://www.eia.gov/beta/international/analysis_includes/countries_long/China/china.pdf); For Russia: US EIA, "Russia", [https://www.eia.gov/beta/international/analysis\\_includes/countries\\_long/Russia/russia.pdf](https://www.eia.gov/beta/international/analysis_includes/countries_long/Russia/russia.pdf); For Saudi Arabia: "US EIA, "Saudi Arabia", [https://www.eia.gov/beta/international/analysis\\_includes/countries\\_long/Saudi\\_Arabia/saudi\\_arabia.pdf](https://www.eia.gov/beta/international/analysis_includes/countries_long/Saudi_Arabia/saudi_arabia.pdf).

### 2.B) Natural Gas Sector

In the post-sanctions period, Iran's natural gas sector will have a key role to play in the country's foreign policy. Choosing which countries and targets Iran will prioritize in its long-term natural gas export policy is of vital importance in terms of both regional energy geopolitics and Iran's foreign policy. In short, different from oil, Iran could be expected to make more strategic use of its natural gas, and more political use. The steps Iran needs to take in order to succeed in this area can be considered in two categories: to scale up natural gas production and to diversify demand in natural gas exports, which includes pipelines and LNG. In the post-sanctions period, Iran will likely form its natural gas export strategy based on a strategic maneuvering capability. And it can do so by implementing a diversification policy instead of remaining moored in a certain port in terms of natural gas exports to mitigate the effects of possible future sanctions and increase the cost of imposing them.



Positions of Qatar and Iran in South Pars (Source: Anadolu Agency)

Although Iran's production of natural gas did not see a vital drop during the sanction period, neither did it increase much. After 2012, when the sanctions became more severe, Iran's natural gas production dropped marginally, but increased again in 2014 (see Diagram 4). These figures illuminate the underlying reasons why Iran's share of global natural gas production is only 5%, and lower than 1% in the global natural gas trade, despite its 34 tcm of reserves, which comprise a global share of 18,2% (see Diagram 5).<sup>28</sup>

28 BP, Statistical Review of World Energy, 2015.

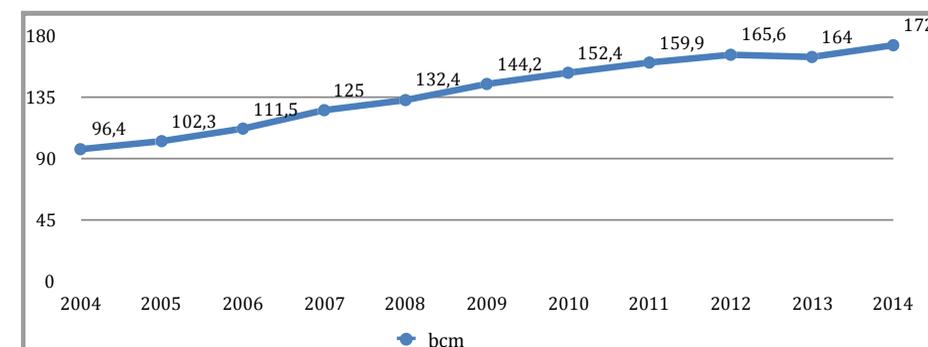


Diagram 4. Iran's Natural Gas Production Per Year (Source: BP<sup>29</sup>)

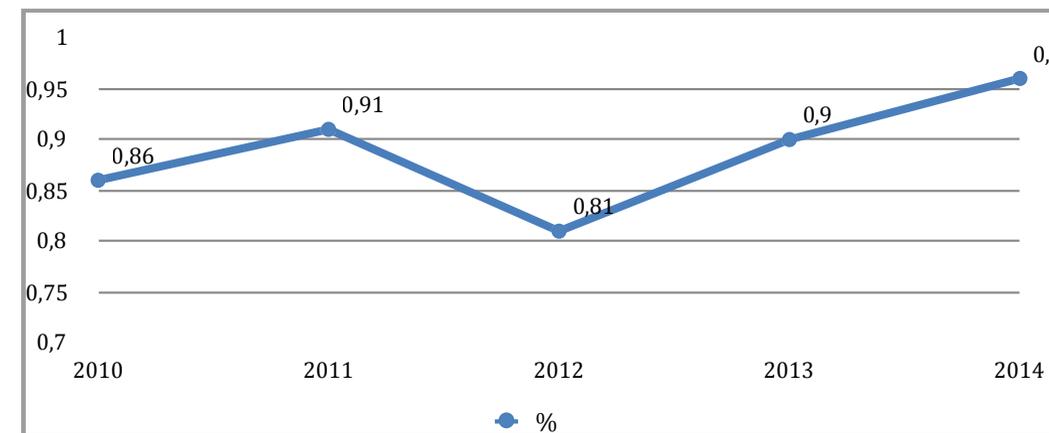


Diagram 5. Iran's Share in the Global Natural Gas Trade Per Year (Source: BP, IEA<sup>30</sup>)

Two of the major obstacles that have kept Iran from exporting more natural gas so far have been the sanctions and its high domestic consumption. Although the sanctions did not lead to a vital drop in Iran's natural gas production, they blockaded Iran's access to the finances and technology it sorely needed to increase its natural gas production, thus causing a relative weakening of production. For example, although Oil Minister Zanganeh stated that the Iranian natural gas sector needed fast-track access to a \$30 bn investment to develop the South Pars field, Iran's main natural gas production area, this requirement was not fulfilled because of the sanctions.<sup>31</sup>

29 Ibid.

30 Ibid., International Energy Agency (IEA), *Natural Gas Information 2012*.

31 NIOC, "Iran's Shared Oil, Gas Fields Needs \$50 Billion", <http://www.nioc.ir/portal/Home/ShowPage.aspx?Object=NEWS&ID=758f1377-f3d2-4029-94c2-3b310360c0ae&WebPartID=24c4c064-2409-43ec-a1d6-2fa9f50b4240&CategoryID=65c76df2-8d90-4f41-9b18-8b22a277f981>; Anthony DiPaola, Grant Smith and Indira A.R. Lakshmanan, "Iran Could Add Million More Barrels a Day to the Oil Glut", *Bloomberg*, <http://www.bloomberg.com/news/articles/2015-03-19/iran-can-add-million-barrels-of-oil-fast-but-needs-help-for-more>.

Regarding its domestic consumption, Iran is almost entirely dependent on the oil and natural gas that it produces. The share of natural gas in Iran's total consumption of primary energy resources in 2014 was 60%, and the share of oil was 30%.<sup>32</sup> Of Iran's 172,6 bcm natural gas production in 2014, some 50,3 bcm (corresponding to 29,2%) was consumed in thermal power plants for electricity generation, and 67% of the total electricity generation came from natural gas.<sup>33</sup> As a comparison, Turkey in 2014, which was an arid year where thermal power plants were run at their maximum levels, consumed a total of 23,4 bcm natural gas for electricity production.<sup>34</sup> Moreover, in 2014, Iran used 34 bcm and 32,6 bcm of natural gas, respectively, in reinjection and in the industry.<sup>35</sup> In 2016, Iran is expected to produce more natural gas than its domestic demand requires, and have a net natural-gas-exporting capacity.

Post sanctions it is almost certain that Iran's economy will grow relatively quickly (see Section 2). As a result, it is possible that Iran's domestic energy demand will increase on both scales: in electricity and natural gas. However, considering that Iranian cement manufacturers cannot even now continue production as a result of natural gas shortages, a skyrocketing demand for natural gas is extremely likely.<sup>36</sup> On the other hand, Iran will likely also have access to novel technologies and investment opportunities in the oil production sector, and hence be able to reduce the amount of natural gas consumed at re-injection for somewhat of a balancing opportunity. Furthermore, considering that the energy intensity in Iran's economy is equivalent to 2883kg, Iran has a considerable potential in terms of energy efficiency. Compared to other countries with similar climatic or economic traits, the same figure for Turkey is 1578kg, 1374kg for Iraq and 6789kg for Saudi Arabia.<sup>37</sup>

Because Iran's domestic natural gas consumption is so high, it is essential that changing the country's natural gas demand be a pillar of its natural gas export strategy. Thinking within this framework, it is apparent that Iran will have three main items on its export strategy agenda: to increase natural gas production, to balance and maintain the balance of domestic demand and

32 US EIA, "Iran".

33 Sara Vakhshouri, "Sanctions Raise Questions about Iran's Export Capacity," *Middle East Economic Survey*, November 9, 2012, <http://archives.mees.com/issues/1448/articles/49566>; "Iran Consumed 174 Bcm of Gas Last Year", *Natural Gas Europe*, <http://www.naturalgasasia.com/iran-consumed-174-bcm-of-gas-last-year-15211>.

34 Energy Market Regulatory Authority (EPDK), *Doğalgaz Sektör Raporu 2014*.

35 Dalga Khatinoglu, "Puzzle of gas re-injection in Iran; economical or not?", *Trend News Agency*, <http://en.trend.az/iran/business/2376060.html>; Micha'el Tanchum, "A Post-Sanctions Iran and the Eurasian Energy Architecture", *Atlantic Council*, 2015.

36 "Gas shortage cripples 35% of Iran's cement production", *Global Cement*, <http://www.globalcement.com/news/item/4473-gas-shortage-cripples-35-of-iran-s-cement-production>; Mehdi Sepahvand, "Iranian cement factories worried after gas supply halted due to cold", *Trend News Agency*, <http://en.trend.az/iran/business/2467038.html>; Mehdi Sepahvand, "Iran's cement industry grounded by non-cooperative oil, industry ministries", *Trend News Agency*, <http://en.trend.az/iran/business/2479172.html>.

37 World Bank, "Energy use (kg of oil equivalent per capita)", <http://data.worldbank.org/indicator/EG.USE.PCAP.KG.OE>.

to ensure diversification of external demand.

Iran's plan on how to scale up its natural gas production is to prioritize developing the dormant blocks in the South Pars field (which supplies more than half the nation's natural gas production) that it shares with Qatar and to increase production volume. Only half of Iran's 24 blocks have been developed. When foreign energy companies left South Pars in 2012 it was decided to have Iranian companies develop blocks 15 and 16, and their production has become an indicator reflecting Iran's national capabilities. Now, Iran can be expected to prioritize developing these dormant blocks by encouraging international investment.<sup>38</sup> Iranian officials' statements support this thinking; for example, they announced that five more blocks of the South Pars field would be developed during the summer of 2016.<sup>39</sup>

There are three other important areas of opportunity regarding balancing domestic demand for natural gas. The first is to gradually reduce energy subsidies, both to prevent energy waste and to make the shift to more energy-efficient technologies more competitive. In terms of reforming energy subsidies, 2010 and 2014, Tehran increased domestic electricity, oil and natural gas prices between 43% and 75%.<sup>40</sup> In the aftermath of the sanctions, Tehran will continue such reforms. We should not expect any radical decisions concerning energy prices before the elections at the end of February 2016, but by summer 2016, when energy consumption will surge for climatic reasons as well as economic growth, some pricing decisions may be made gradually.

With the lifting of the sanctions and thus easier access to new technologies and financing, especially in the oil production sector, the second area of opportunity for the Iran oil industry is to renovate old and inefficient wells so they will need less natural gas injection. The savings in natural gas for re-injection purposes (which was some 34 bcm in 2014) can be redirected to meeting the domestic electricity demands and natural gas export. The third area of opportunity is the savings in natural gas that will come from renovating Iran's inefficient thermal power plants and reducing the share and especially the amount of natural-gas-based power plants in Iran's installed power capacity. This power capacity is expected, as indicated in the country's Fifth Five-Year Development Plan, to reach 73.000 MW in 2016 and to increase by 5000 megawatts (MW) annually until 2025.<sup>41</sup>

38 Reza Yeganehshakib, "Will South Pars help bring Iran's economy back to life?", *Al Monitor*, <http://www.al-monitor.com/pulse/originals/2015/12/iran-south-pars-phases-15-16-inauguration-impact.html#>.

39 "Five more South Pars phases operational by summer", *PressTV*, <http://217.218.67.231/Detail/2016/01/11/445371/south-pars-gas-field-National-Iranian-Oil-Company-Roknoddin-Javadi->

40 US EIA, "Iran".

41 Iran Ministry of Energy, "Iran currently Mideast's major electricity producer", <http://news.moe.gov.ir/Detail?ANWID=636>; "28 milyar dolarlık elektrik alanındaki proje, yabancı yatırımcı bekliyor", *Mehr News Agency*, <http://tr.mehrnews.com/news/1858186/28-milyar-dolarl%C4%B1k-elektrik-alan%C4%B1daki-proje-yabanc%C4%B1-yat%C4%B1r%C4%B1mc%C4%B1-%28bn-Power-Projects-Up-for-Grabs%2C-Shana>, <http://www.shana.ir/en/newsagency/252684/-28bn-Power-Projects-Up-for-Grabs>.

The third pillar of Iran's natural gas export strategy allows Tehran to make three moves to ensure the diversification of demand. Iran can either integrate these moves or implement one or two of them by assigning them different levels of importance. The most critical move Iran can make in diversification is to acquire LNG export capability. Although for almost 40 years Iran has pursued the aim of building an LNG terminal, this has never become reality, mostly because of the sanctions.<sup>42</sup> In 2012 for instance, a Chinese company that undertook construction of an LNG terminal had to stop as a result of the aftershock of the tightened sanctions.<sup>43</sup> The basic motive behind Iran's desire for LNG capabilities is that it wants to deliver its (limited) natural gas exports to global markets without needing the neighboring countries, as political relations are not good among them. Although Iran shares a natural gas field with Qatar, it has no LNG export capacity; Qatar is the world's number one LNG exporter, holding a share of 31% since 2006.<sup>44</sup> Upon acquiring LNG export capability, Iran could market its natural gas within an arc of more than 10.000 km – from the Klaipeda Terminal in Lithuania to Japan's Nihonkai and China's Lianyungang LNG terminals. Considering that Trinidadian LNG, the product of one of the longest routes in LNG trade, travels about 25.000 km to Japan's Niigata-Higashi LNG Terminal via the Cape of Good Hope, it is very likely that Iran's LNG would be attractive to many buyers.<sup>45</sup>

Opting for LNG exports seems rational from a purely economic standpoint. However, it may not be easy for a new supplier such as Iran – which is just entering the sector, and which faces, in the mid-run, the possibility of new sanctions depending on its future behavior – to compete in the global market at a time when oil prices are extremely low. Australian LNG is expected to dominate the Asian markets and the presence of new suppliers to Europe, such as the US, may shake the market share of LNG giant Qatar. On the other hand, Iran likely aspires to acquire LNG export capabilities for political gains as well as economic ones. Against this politics-based economic move, the sanctions were in the form of politics-based economic footsteps, and the most obvious sign of this is the completion rates of the ongoing construction of the LNG terminal at Tombak (a port on Iran's Persian Gulf), where most phases are around 60% to 90% complete, but the liquefying terminal is only 40% complete, due to cutting-edge technology being greatly needed.<sup>46</sup>

Acquiring LNG export capability will give Iran strategic flexibility for possible future sanctions and a critical upper hand in energy exports. More countries trading in energy with Iran will mean more countries to convince to re-apply sanctions in the event of a possible crisis, meaning also that the West will face higher costs in the event of a new sanctions era. Thus, Tehran can achieve three goals by acquiring LNG export capabilities: relief from dependency on surrounding

42 US EIA, "Iran".

43 Yeganeh Salehi, "Iran and China Suspend \$3.3 Billion LNG Project, Mehr Says", *Bloomberg*, <http://www.bloomberg.com/news/articles/2012-09-02/iran-and-china-suspend-3-3-billion-lng-project-mehr-says>.

44 US EIA, "Qatar", [https://www.eia.gov/beta/international/analysis\\_includes/countries\\_long/Qatar/qatar.pdf](https://www.eia.gov/beta/international/analysis_includes/countries_long/Qatar/qatar.pdf).

45 International Gas Union, World LNG Report – 2015 Edition.

46 Iran Liquefied Natural Gas Company, "Current Status", <http://www.iranlng.ir/en/our-project/current-status>.

rival countries; diversification of its natural gas export portfolio and strategic flexibility against possible future sanctions.<sup>47</sup> To further LNG projects, Iran is currently meeting with European companies.<sup>48</sup> In order for Iran to move forward with LNG exports, the most likely course seems to be acquiring a floating LNG platform, which would enable it to start LNG exports of about a million tons (approximately 1,5 bcm).<sup>49</sup>

Another step Iran could take so as to diversify natural gas demand would be to diversify its exports via pipelines. Within this framework, Tehran has three options: Europe via Turkey; China via Turkmenistan/Pakistan and India via Oman (see Section 3.A, 3.D, 3.E). As the continuance of the relative cooperation attained with the nuclear agreement has not yet been clarified, Iran should commence with the option that is most economically and politically feasible rather than trying to advance all options at once. This way, benefits could be reaped as quickly as possible.

Iran's third option for diversifying the demand is to design natural gas exports as 'energy exports' and to export it in the form of electricity. Tehran could choose to handle the natural gas and electricity sectors as a bundle because the two are closely linked, and in a way that is harmonious with the economy of resistance doctrine, where Iran would prefer exporting natural gas not as raw material but as value-added electricity. Iran already enjoys a natural gas-electricity swap or direct electricity trade with all of its neighbors, within the scope of which it traded 11.000 gigawatt hours (GWh) of exports and 4.000 GWh of imports in 2012, which is a total electricity foreign trade volume of 15.000 GWh.<sup>50</sup> In comparison, Turkey's total electricity foreign trade volume in 2012 was 8.779 GWh, involving some 5.826 GWh of imports and 2.953 GWh of exports.<sup>51</sup>

Iran's target in exporting electricity is to maximize this amount and to become an important electricity supplier for the entire region, starting with Turkey and the Gulf states.<sup>52</sup> As electricity export creates an area of opportunity for Iran to circumvent sanctions, Iran can benefit from this should sanctions be reapplied.<sup>53</sup> Another benefit from exporting electricity is that it

47 Serhan Ünal, "Iranian gas may not flow through Turkey", *Hürriyet Daily News*, <http://www.hurriyetdailynews.com/iranian-gas-may-not-flow-through-turkey.aspx?pageID=449&nID=87332&NewsCatID=396>.

48 "Iran in talks to build LNG tankers", *PressTV*, <http://217.218.67.231/Detail/2016/01/13/445644/Iran-tanker-shipment-LNG-sanctions>.

49 "Iranian, French firms finalize FLNG talks", *PressTV*, <http://217.218.67.231/Detail/2015/12/13/441539/Iran-gas-production-FLNG-France-Javadi>; "Belgium May Establish FLNG Facilities in Iran's Kharg Island", *Natural Gas Europe*, <http://www.naturalgaseurope.com/belgium-flng-facilities-iran-kharg-island-26260>; "Iran, France to build 1st FLNG unit in Persian Gulf", *Mehr News Agency*, <http://en.mehrnews.com/news/112760/Iran-France-to-build-1st-FLNG-unit-in-Persian-Gulf>.

50 US EIA, "Iran".

51 Turkish Electricity Transmission Company (TEİAŞ), "Türkiye Elektrik Üretim-İletim İstatistikleri 2012", <http://www.teias.gov.tr/T%C3%BCrkiyeElektrik%C4%B0statistikleri/istatistik2012/istatistik%202012.htm>.

52 <http://www.iran-daily.com/News/131575.html>; "تفای شایزفا ناریا قرب دیلوت", *Mehr News Agency*, <http://www.mehrnews.com/news/2912331/>.

53 Shabnam Mirsaeedi-Glossner, "Iran's Flourishing Regional Influence: Electricity Exports as a Loophole to

gives Iran an upper hand as a supplier, different from primary energy resources such as natural gas or oil, as electricity is a commercially non-storable instant product. Therefore, even if the sanctions were to resume, countries importing a considerable amount of electricity from Iran would have less flexibility to agree to them. That is, by pursuing the electricity-export path, Iran will reduce the elasticity of demand for its energy exports.

Iran's short-term targets in natural gas now involve taking domestic demand growth under control, and multiplying natural gas production and exports to satisfy the requirements of sectors such as petrochemicals and electricity generation, which have a high level of natural gas consumption. And Iran in the long run will especially try to acquire LNG export capabilities and shall consider this one of the bases of energy diplomacy. Moreover, it will focus primarily on the prospective LNG pipeline export route that is the most feasible politically and economically, trying to establish a stable revenue item. Iran will mix a natural gas export strategy with an electricity export strategy to try and gain a critical advantage in regional energy geopolitics.

Sector/Term	Short term	Long term
Oil	<p><b>OBJECTIVE:</b> Ensure quick economic relief</p> <p><b>TOOL:</b> 1) Marketing stocks, 2) Commissioning dormant capacity, 3) Using released funds to meet urgent investment requirements.</p> <p>- Advances to increase market share without any geographical restrictions shall be expected, including spot markets.</p>	<p><b>OBJECTIVE:</b> Thanks to direct investments of international companies, to create mutual dependencies, increasing the cost of possible future sanctions for the West.</p> <p><b>TOOL:</b> 1) To attract more investments with the newly designed contract, 2) To carry out investments with released foreign funds.</p>
Natural Gas	<p><b>OBJECTIVE:</b> To supply for natural gas demand in a way to meet export and the domestic industry.</p> <p><b>TOOL:</b> 1) To control the growth of domestic demand, 2) To ensure efficiency increases in thermal power plants.</p>	<p><b>OBJECTIVE:</b> To ensure diversified demand for natural gas exports.</p> <p><b>TOOL:</b> 1) To scale up production of natural gas, 2) To acquire LNG export capability, 3) To open up a pipeline route that is the most politically/economically feasible.</p>
Electricity	<p><b>OBJECTIVE:</b> To meet the domestic demand that is expected to increase even faster following the sanctions.</p> <p><b>TOOL:</b> 1) To ensure increases in efficiency through plant upgrading, 2) To reform subsidies to attain balance in domestic demand.</p>	<p><b>OBJECTIVE:</b> To become a considerable supplier of electricity for neighboring countries.</p> <p><b>TOOL:</b> To achieve a surplus of electricity supply through investing in renewable plants, starting with new natural gas cycle plants.</p>

Diagram 6. Iran's Short-/Long-term Objectives/Tools for Oil, Natural Gas and Electricity Sectors

Sanctions", *Science and Diplomacy*, Vol. 2, No. 3.

### 3) REGIONAL ENERGY GEOPOLITICS

#### 3.A) Turkey and Azerbaijan

Turkey and Azerbaijan, other than being 'a single nation and two states', are also two allies with overlapping national interests. Turkey, due to its geographical location, is like a gateway relaying Azerbaijan's energy sources to global markets. In addition, Turkey and Azerbaijan constitute, together with Georgia in Southern Caucasus, the tripartite East-West strategic axis, in covert competition with the North-South axis involving Russia-Armenia-Iran. A cooperation that ever intensifies in the field of economics, including other cooperations in the field of defense, make it possible to consider the two countries on the same scale, assuming they would act concerted in terms of energy geopolitics. The recent historical experience in Ankara-Baku bilateral relations has also led to the strengthening of relations regarding common interests.<sup>54</sup>

Relations that intensified after the opening of the BTC (Baku-Tbilisi-Ceyhan) Oil Pipeline in 2005 have evolved into an alliance following the commissioning of the BTE (Baku-Tbilisi-Erzurum) Natural Gas Pipeline, breaking ground for the TANAP (Trans Anatolia Natural Gas Pipeline), SOCAR's (State Oil Company of Azerbaijan Republic) construction of the Star refinery in İzmir (the biggest direct investment in Turkey so far) and the development of the Baku-Tbilisi-Kars railroad project.<sup>55</sup>

The key factor that will determine the future of Iran's relations with Turkey and Azerbaijan as a duo is how Iran will get along with Turkey. Although there is the possibility of developing some independent electricity/natural gas projects between Iran and Azerbaijan, it would be wiser to consider these not on regional geopolitical grounds but within the scope of bilateral relations.<sup>56</sup> To further their bilateral economic interests, Azerbaijan and Iran could also consider swap agreements. Iran is targeting a fast and extensive economic boom in the aftermath of the sanctions, which coincides with the economic bottlenecks that have forced Azerbaijan to devaluation twice following the collapse of oil prices, a situation that may be encouraging for the economic relations between Azerbaijan and Iran.<sup>57</sup>

54 Barçın Yinanç, "Past crisis provided a reality check for Ankara and Baku", *Hürriyet Daily News*, <http://www.hurriyetdailynews.com/past-crisis-provided-a-reality-check-for-ankara-and-baku.aspx?pageID=238&nID=73201>.

55 Micha'el Tanchum, "Deepening Turkey-Azerbaijan Economic Partnership Creates Framework for Regional Bloc", *The Turkey Analyst*, <http://turkeyanalyst.org/publications/turkey-analyst-articles/item/334-deepening-turkey-azerbaijan-economic-partnership-creates-framework-for-regional-bloc.html>.

56 Dalga Khatinoglu, "Prospects of Tehran-Baku energy relations", *Trend News Agency*, <http://en.trend.az/business/energy/2473500.html>; Dalga Khatinoglu, "Five points of Iran-Azerbaijan energy cooperation", *Trend News Agency*, <http://en.trend.az/business/energy/2333794.html>.

57 "Azeri leader says cheap oil made manat devaluation inevitable", *Hürriyet Daily News*, <http://www.hurriyetdailynews.com/azeri-leader-says-cheap-oil-made-manat-devaluation-inevitable.aspx?pageID=238&nID=92918&NewsCatID=348>; "Azerbaijan to compensate consequences of manat's

The main aspect of current Iran-Turkey relations is energy relations, which constitute a balancing aspect for their economic relations. Therefore, energy relations must be examined separately, as existing and prospective relations. Existing relations, generally speaking, constitute the amalgam of relations created by a past bargain, whereas prospective relations *per se* are virgin ground for negotiations. In terms of existing relations, Turkey pays the highest price of all countries it imports from for Iran's natural gas; the amount of imports from Iran is around 9 bcm annually and the share of Iran's natural gas in the Turkish market is 18% (see Diagram 7).<sup>58</sup>

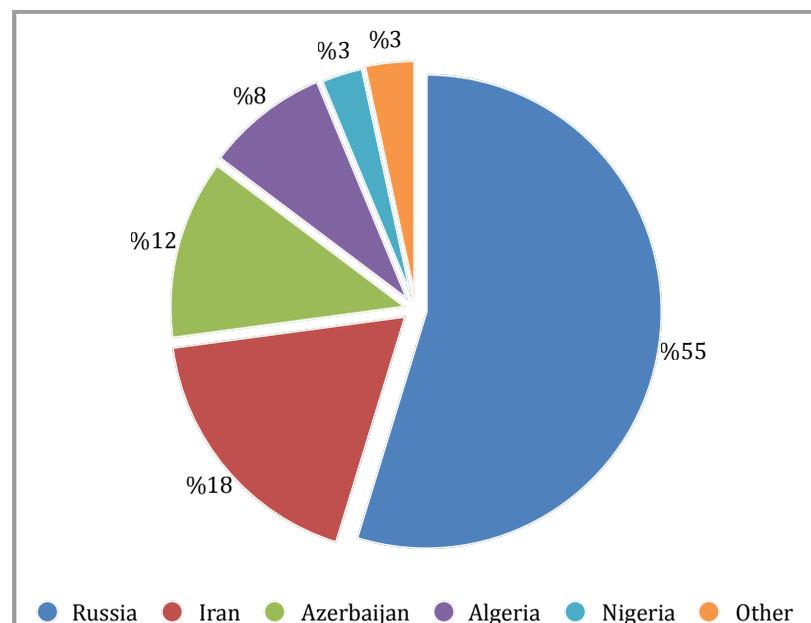


Diagram 7. Share of Supplier Countries in Turkey's Natural Gas Market (2014) (Source: EPDK)

Turkey's share in Iran's natural gas exports is above 90%. Turkey also imports crude oil from Iran, buying 5,19 million tons in 2014. Although the amounts fluctuate yearly, Iran is still second after Iraq for Turkish oil imports, with a market share of 29,72% (see Diagram 8).<sup>59</sup>

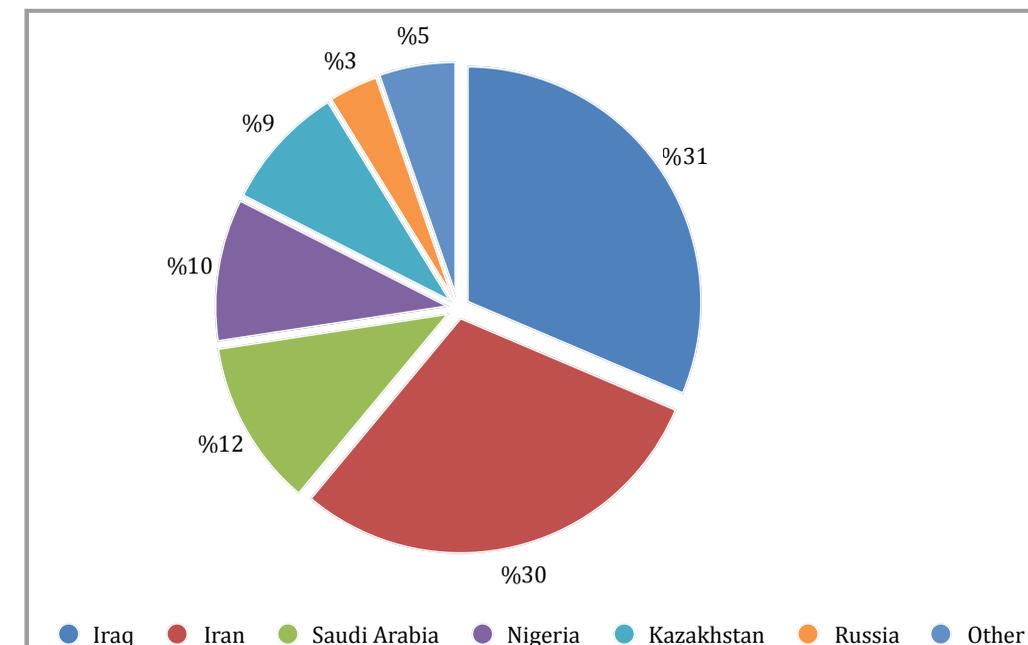


Diagram 8. Share of Supplier Countries in Turkey's Crude Oil Market (2014) (Source: EPDK)

In addition to the oil and natural gas sectors there is an intensive electricity trade between Turkey and Iran. For example, Turkey imported 2,252 GWh electricity from Iran in 2014, obtaining 1,1% of that year's total electricity supply.<sup>60</sup> Against this backdrop, one can argue that energy is the bedrock of economic relations between Turkey and Iran, where the main product is natural gas. The benefits that both parties reap from this relationship cannot be discounted, and there are no serious threats to the existing energy relations.<sup>61</sup> Further, problems that arise, such as the price of Iranian gas, which the International Arbitration Tribunal has decided to lower, have also been resolved.<sup>62</sup>

The most important issue regarding prospective energy relations is what Iran's natural gas will mean for Turkey and beyond after the sanctions. That is, whether Iran's natural gas will be transported to the West, especially to European markets, via Turkey. For this reason, relations between Turkey and Iran are of vital importance regarding the westward transportation of Iran's natural gas. Conveying of Iranian natural gas through Turkey to Europe, however, is un-

devaluation", *Trend News Agency*, <http://en.trend.az/azerbaijan/politics/2472283.html>; "Azerbaijani manat collapses after government abandons dollar peg", *Financial Times*, <http://www.ft.com/cms/s/0/b5f46eac-a7c4-11e5-9700-2b669a5aeb83.html#axzz3ws87ToTY>.

58 EPDK, *Doğalgaz Sektör Raporu 2014*.

59 EPDK, *Petrol Sektör Raporu 2014*.

60 TEİAŞ, "Türkiye Elektrik Üretim-İletim İstatistikleri 2014", <http://www.teias.gov.tr/T%C3%BCrkiyeElektrik%C4%B0statistikleri/istatistik2014/istatistik2014.htm>.

61 Serhan Ünal, Eyüp Ersoy, "Political Economy of Turkish-Iranian Relations: Three Asymmetries", *Middle East Studies*, Vol. 5, No. 2, pp. 141-164.

62 "Turkey to get Iranian gas discount", *Anadolu Agency*, <http://aaenergyterminal.com/newsRegion.php?newsid=7439861>.

likely for three main reasons: Turkey-Iran bilateral relations; the regional energy equation and geo-economic topics.<sup>63</sup>

First, from the perspective of Turkey-Iran bilateral relations, the mutual effort of both parties to maintain political and economic relations is hope-giving concerning the passage of Iran's natural gas through Turkey. Both Ankara and Tehran are cautious not to lose any existing economic benefits as a result of the market-disrupting impact of geopolitical competition. On the other hand, when it comes down to energy relations, Iran has the upper hand. Although Iran is highly dependent on Turkey's need for its natural gas, the Tabriz-Ankara natural gas pipeline is one of the vital trumps Iran holds against Turkey's dependence on Russia. For this reason, although relations between Iran and Turkey seem like interdependence, they are still short of providing Turkey effective bargaining power against Iran. For example, Turkey had no other recourse than to pursue international arbitration for the price of natural gas it procures from Iran, and Turkey needs to cooperate with other countries in the region such as Qatar and Saudi Arabia to pursue a balancing policy against Iran. If Iran's natural gas were transported to Europe via Turkey, this would equip Ankara with considerable bargaining power against Tehran. For that reason, we cannot expect Iran to turn its own gas into a bargaining chip for Turkey.

Second, from the perspective of a regional balance of power, other regional countries would take precautions against the possibility that Turkey would become a dominant factor in the regional energy equation, gaining power and influence. This factor is all about diversifying energy supply routes. Turkey becoming a transit route for Iran gas could turn Turkey into a far stronger 'Ukraine' within EU-Iran relations. Furthermore, as long as the future of the Turkish Stream (which looks bleak because of the crisis between Turkey and Russia) and the North Stream 2 projects remain nebulous, the future of the Iran-Turkey-Europe pipeline will be no brighter. If the Turkish Stream revives, considering TANAP and the Iraq-Turkey natural gas pipeline, Turkey would elevate itself to a very strong position, where Russian, Azeri, Iraqi and possibly (via TANAP and the Trans-Caspian pipeline) Turkmen and all Turkestan gases would be delivered to Europe via Turkey. Besides, Eastern Mediterranean energy resources may be among them. Moreover, there are ongoing EU-Turkey-Azerbaijan-Turkmenistan negotiations, and the EU hopes to procure Turkmen gas by 2019.<sup>64</sup> Although making this deadline is unlikely, still, in such an environment one cannot expect actors such as the EU or Russia to allow Turkey any say on Iran's gas. In brief, using the simplest logic in real politics, we can surmise that the existing balance of power would prevent Turkey from becoming a regional energy hub so easily.

Third, geo-economic issues mentioned above could steer Iran to options other than

<sup>63</sup> Serhan Ünal, "Iranian gas may not flow through Turkey", *Hürriyet Daily News*, <http://www.hurriyetdailynews.com/iranian-gas-may-not-flow-through-turkey.aspx?pageID=449&nID=87332&NewsCatID=396>.

<sup>64</sup> Marat Gurt, "European Union sees supplies of natural gas from Turkmenistan by 2019", *Reuters*, <http://uk.reuters.com/article/uk-turkmenistan-gas-europe-exclusive-idUKKBN0NN0FI20150502>; European Commission, "Ashgabat Declaration", [https://ec.europa.eu/commission/2014-2019/sefcovic/announcements/ashgabat-declaration\\_en](https://ec.europa.eu/commission/2014-2019/sefcovic/announcements/ashgabat-declaration_en).

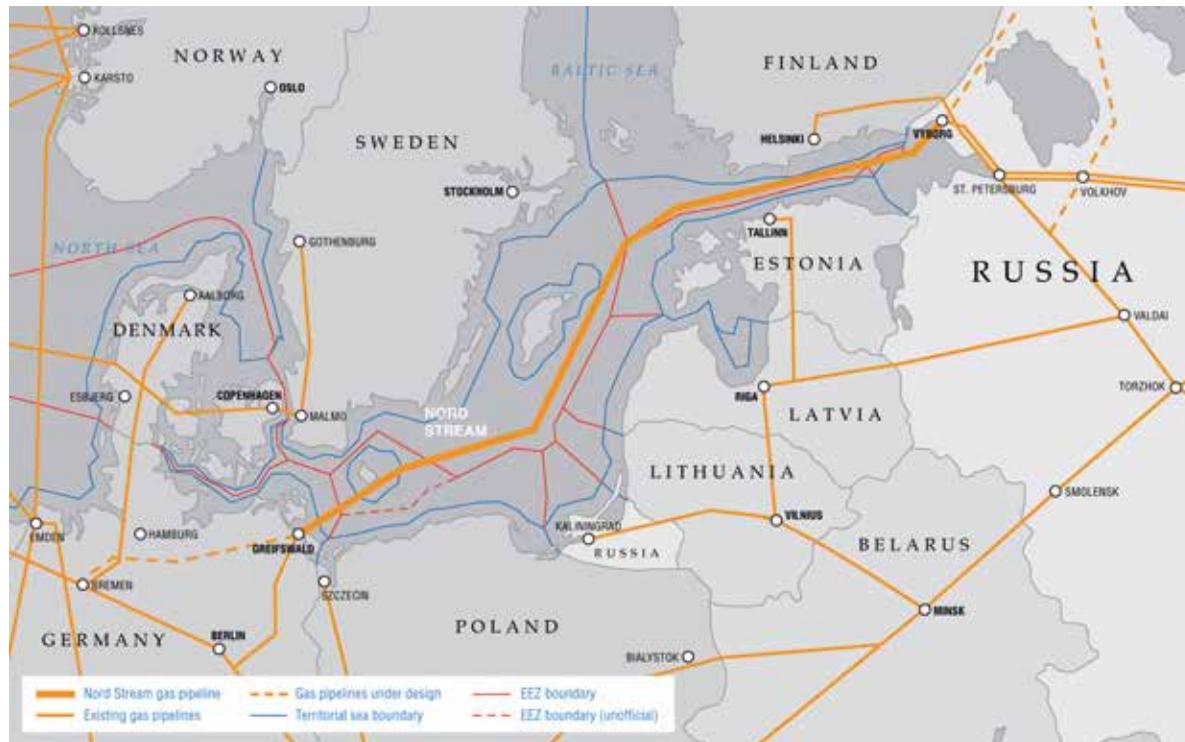
transporting its natural gas to Europe through Turkey (see Section 2. B). Iran's natural gas fields lie in the south of the country and on the Persian Gulf seabed; the existing energy transportation infrastructure in the region lacks the capability to transport them north. It is for this reason that the construction of a new natural gas pipeline from the Persian Gulf to Europe, one that will at least extend until the TANAP joint, is much needed. And here the key question is who will finance such an investment? The relief that will embrace Iran's economy after the sanctions will not be sufficient enough to finance this project in the short run. Europe has yet to overcome the stagnation in its economy, and global energy companies, as a result of the plunge in oil prices, might not want to be involved in such a big and politically risky project. Further, the political instability resulting from tense relations between the Saudi Arabia and Iran could lead to a suspension of investments in Iran.

Rather than being dependent on fixed pipelines into Europe, Iran would be wiser to acquire LNG export capability or have eastward pipelines built with the support of India or China (see Section 2. B, 3. D and 3. E). LNG exports would give Iran strategic flexibility and eastward pipelines would allow the country to diversify its portfolio in natural gas exports. Iran could thus meet three objectives: Not giving Turkey a trump card in Iran-Turkey relations, diversifying Iran's natural gas export portfolio and acquiring strategic flexibility against a possible future crisis. Besides, terrorist acts of the Kurdistan Workers' Party (PKK) targeting the energy infrastructure in Turkey's southeastern provinces hampers the construction of an Iran-Turkey-Europe natural gas pipeline, creating the risk of supply cuts and increasing operation costs even if the project is realized.

### **3.B) The European Union**

The content of Iran-EU energy relations up to now has been investment-based economic cooperation in addition to the relation of supply. The main aspect of such a relation has been Iran's export of oil to Europe until 2012. However, in agreeing to tighten sanctions in 2012 and deciding to ban exports of oil from Iran and prevent companies from investing in Iran's energy sector, the EU's supply oil from Iran EU was cut, and many ongoing projects by European companies in Iran were suspended.

With the lifting of the sanctions, two issues pertaining to EU-Iran relations have emerged, again with a focus on commerce and investment. The idea to transfer Iran's natural gas, which is the basis of the commercial aspect, to Europe through Turkey does not seem plausible for reasons that explained above (see Section 3. A). Among issues that serve as the backdrop to investment projections, those concerning Western companies resuming the projects that they suspended in Iran, developing Iran's oil and natural gas production fields, renovating Iran's thermal power plants and realizing some renewable energy investments are expected to come to the fore. The reopening of the British embassy in Tehran approximately one month after the 14 July



The Route of Nord Stream (Source: Gazprom)

2015 agreement, is corroborative with the UK's historical interest in Iran's energy sector.<sup>65</sup>

TANAP, which was launched by EU efforts to reduce its energy dependence on Russia by way of access to the energy resources of the Caspian and Turkestan, is of importance. Although it does not seem plausible to link large amounts of Iran's natural gas to Europe through Turkey, in order to ensure somewhat of a diversified portfolio in its natural gas exports, Iran could provide TANAP with a certain amount of natural gas.<sup>66</sup> According to some estimates, in order for the infrastructure needed for Iran's TANAP connection to be economically feasible, Iran must export 7 bcm of natural gas per annum.<sup>67</sup> A greater volume could be detrimental to Iran's political maneuvering capability. A similar assumption exists for Turkmenistan, as it wishes to acquire gas export capabilities to the EU with the Trans-Caspian project. Although it is Russia's consent that matters for the Trans-Caspian, Iran still has to be convinced of the project so that it will not trammel the efforts.<sup>68</sup>

65 Jeremy Bowen, "British embassy in Tehran reopens four years after closure", *BBC News*, <http://www.bbc.com/news/uk-34031615>.

66 "Increase co-operation", *The Oil and Gas Year*, <http://www.theoilandgasyear.com/articles/increase-co-operation/>.

67 Gulmira Rzyeva, *Natural Gas in the Turkish Domestic Energy Market*, Oxford Institute for Energy Studies, 2014.

68 Elena Kosolapova, "Trans Caspian Pipeline project requires effective Russian diplomacy", *Trend News Agency*,

As pressure within the EU to diversify its energy supply increases daily and as the North Stream is fervently debated, it is the routes as much as the origins of energy resources that matters to the EU. However, it is still more probable that regional energy geopolitics would not allow much Iranian natural gas to be transported to Europe through Turkey. Roughly, it can be argued that Eastern Mediterranean energy resources will flow westward and Iranian gas will flow eastward.

### 3.C) Russia

Iran and Russia position themselves on the same side of many issues within the existing political equation. Both countries' approaches to their relationship prioritize politics over economics, and indeed politics is the main driver of the above proposition. Thus, a possible scenario is that Russia-Iran relations would have a balanced flow in the post-sanctions era. Yet there are certain other parameters that hint that relations between the two countries, which generally agree on anti-Western policies, are not necessarily and always so much about collaboration. There are some areas of dissent, such as the Syrian crisis, which, despite the evident coalition between Russia and Iran, has the potential to damage relations.<sup>69</sup> These parameters, in a sense, define the limits of the cooperation between Russia and Iran, demonstrating that their relations may encompass some covert areas of competition after the lifting of the sanctions.

Friendly relations between Tehran and Moscow were highest between 2012 and 2015, when Iran's oil and natural gas had little effect on Russia's market share, when Iran was in harmony with Russia and China under the canopy of anti-Western policies and when Iran could not take critical steps to increase its influence in the southern Caucasus or southeast Turkestan as a result of the negative economic impacts of the sanctions. Now that the sanctions have been lifted, cooperative swaps and trade can flourish between Iran and Russia.<sup>70</sup> Important swap agreements being discussed between Russia and Iran concern Iran supplying oil to Russia's clients in the south in return for Russia's supply of natural gas to Iran's north. Other agreements under debate include Iran buying goods from Russia in return for oil.<sup>71</sup> When Iran's economy picks up, Russian companies will reap the benefits in strategic fields such as defense system procurement, oil/natural gas drilling, refinery and pipeline equipment, mining and railroads. These changes

<http://en.trend.az/business/energy/2478241.html>.

69 Eyüp Ersoy, "İran ve Suriye İç Savaşı: Koalisyon Siyaseti ve Artan Maliyetleri", *Ortadoğu Analiz*, No. 72, [http://www.orsam.org.tr/tr/trUploads/Yazilar/Dosyalar/2016113\\_12eyupersoy.pdf](http://www.orsam.org.tr/tr/trUploads/Yazilar/Dosyalar/2016113_12eyupersoy.pdf).

70 "Russia offers gas, oil swap deals to Iran", *Iranian Daily*, <http://www.iran-daily.com/News/129541.html>.

71 "UPDATE 1-Russia offers gas, oil swap deals to Iran", *Reuters*, <http://www.reuters.com/article/russia-iran-energy-idUSL8N12N1KU20151023>; "Russia: Iran oil-for-goods deal still in effect", *PressTV*, <http://217.218.67.231/Detail/2015/11/10/437058/Iran-Russia-barter-deal-oilforgoods>; Dave Forest, "Is Iran Opening A "Secret Passage" To Asia For Russian Crude?", *OilPrice*, <http://oilprice.com/Energy/Crude-Oil/Is-Iran-Opening-A-Secret-Passage-To-Asia-For-Russian-Crude.html>.

will help both countries achieve balance in their relations.<sup>72</sup>

On the other hand, even after the sanctions, there are three issues that could disrupt Russia-Iran relations. The first possible area of competition could be the European oil market. Iran's oil is a similar blend to Russia's Ural oil, which is the latter's main oil export.<sup>73</sup> When the EU banned oil exports from Iran in 2012, the latter's market share largely shifted to Russia's oil, making Russia one of the countries that benefited most from the sanctions.<sup>74</sup> Yet now, as Oil Minister Zanganeh has acknowledged, Tehran will do anything to win back the market share it lost.<sup>75</sup> To do so, it will market its existing oil stock quickly, and this amount will increase in parallel to Iran's production. So Iran's win, in this sense, would be Russia's *net* loss.

The second possible area of competition is Iran's natural gas rivaling Russia's in the Chinese theater. The Russia-China natural gas pipeline, *Power of Siberia*, is expected to be completed and commissioned in 2018. The possibility that Iran could export LNG to China in the mid-run and do the same for pipe gas in the long run gives China a diversification trump that it can hold against Russia. Iranian gas, in other words, just like Turkestan resources, is among the top diversification options for China, and as such, Iran's gain in the long-run would be Russia's *comparative* loss.

The third possible area of competition is when Iran will scale up its efforts to increase its influence in the southern Caucasus and southeastern Turkestan that serves somewhat as a buffer zone between itself and Russia. There is an electricity swap agreement between Iran and Armenia; for each cubic meter of natural gas Iran gives Armenia, the latter transmits three KWh of electricity.<sup>76</sup> In late 2015, the Russian company Gazprom acquired the 41 km-long pipeline delivering Iranian natural gas to Armenia by transfer, taking energy relations between Iran and Armenia under its control.<sup>77</sup> That Russia took this step af-



The Route of TANAP (Source: TANAP)

ter the July agreement can be viewed as a show of willingness to decrease the number of steps Iran would need in its search for increased influence in the region post sanctions. As a result of low oil prices and the lifting of the sanctions, Russia is slowly withdrawing from the periphery of the former Soviet space that it defines as the 'near abroad'. The most recent example of these decisions was in early 2016, when Russia ceased importing natural gas from Turkmenistan.<sup>78</sup> As Iran will be more flexible post sanctions lifted, it is probable that the country would continue to import an annual 7 to 8 bcm of natural gas from Turkmenistan to use as political leverage in its relations with Ashgabat.

### 3.D) China

One of the most important factors in Iran-China relations is the anti-West and anti-US air within the framework of their cooperation. As a reflection of this relationship, China has become Iran's biggest oil importer since 2012.<sup>79</sup> For example, 9% of China's oil imports in 2014 came from Iran.<sup>80</sup> Moreover, with China holding first place in Iran's exports, with a share of 4%, it is also the country Iran imports the most from, by some 10,3%. According to data from the World

<http://www.azatutyun.am/content/article/27052147.html>.

78 Elena Kosolapova, "Russia pushing Turkmenistan to European gas market", *Trend News Agency*, <http://en.trend.az/casia/turkmenistan/2478262.html>.

79 US EIA, "Iran".

80 WTO, "Iran", <http://stat.wto.org/CountryProfile/WSDBCountryPFView.aspx?Language=E&Country=IR>.

72 Paul N. Schwartz, *What the Iran Deal Means for Russia*, Center for Strategic and International Studies, [http://csis.org/files/publication/150603\\_Schwartz\\_IranDealRussian\\_Web.pdf](http://csis.org/files/publication/150603_Schwartz_IranDealRussian_Web.pdf).

73 Angelina Rascoet, Javier Blas, "Russia Seen as Biggest Oil-Market Loser When Iran Comes Back", *Bloomberg*, <http://www.bloomberg.com/news/articles/2015-07-05/russia-seen-as-biggest-oil-market-loser-when-iran-comes-back>.

74 Andrew E.Kramer, "An Embargo and a Boon", *The New York Times*, [http://www.nytimes.com/2012/02/17/business/global/russian-oil-industry-set-to-capitalize-if-embargo-hits-iran.html?\\_r=0](http://www.nytimes.com/2012/02/17/business/global/russian-oil-industry-set-to-capitalize-if-embargo-hits-iran.html?_r=0).

75 "Iran vows to regain lost oil market share", *PressTV*, <http://217.218.67.231/Detail/2015/09/30/431430/Iran-vows-to-regain-lost-oil-market-share>; Golnar Motevalli, Hashem Kalantari, "Iran Seeks to Regain Share of Oil Market Regardless of Price", *PressTV*, <http://www.bloomberg.com/news/articles/2015-07-20/iranian-oil-could-push-prices-lower-oil-minister-zanganeh-says>; Dina Khrennikova, "Russia's Oil Rivalry With Saudis Masks the Bigger Iranian Threat", *Bloomberg*, <http://www.bloomberg.com/news/articles/2015-11-12/russia-s-oil-rivalry-with-saudis-masks-the-bigger-iranian-threat>.

76 Armenia to sell Iran gas pipeline to Gazprom", *PressTV*, <http://217.218.67.231/Detail/2015/06/05/414428/Iran-gas-armenia-pipeline-gazprom>.

77 Giorgi Lomsadze, "Gazprom to Take Over Iranian-Armenian Pipeline", *Eurasianet*, <http://www.eurasianet.org/node/73731>; Astghik Bedevlan, "Gas Operator To Buy Iran-Armenia Pipeline", *Radio Free Europe/Radio Liberty*,



Power of Siberia Pipeline (Source: Gazprom)

Trade Organization, the trade volume between Iran and China in 2014 was around \$8,77 bn.<sup>81</sup> And the volume of economic cooperation between the two countries, according to some other sources, is stated as some \$52 bn.<sup>82</sup> Since 2007, when China first became an importer of natural gas, it has exhibited such raging consumption that in a matter of six years its share of imported natural gas has risen to 32%.<sup>83</sup> China's vital issues concerning energy security enter at this point.

China, generally, carries out energy import activities in its eastern port towns. This fact increases the energy costs of the western parts of the country, slowing their development. Another vital issue that arises from this situation is when China's energy supply security is threatened by the seas of south and east China becoming a theater for military competition. About 15,2% of all oil transported daily by sea pass through the Strait of Malacca, which also supplies more than half of China's crude oil imports.<sup>84</sup> Similarly, in terms of LNG imports, China is the third-largest global importer after Japan and South Korea. Qatar, with a share of 34%, is the biggest supplier of China's LNG market.<sup>85</sup>

81 WTO, *Trade Profiles 2015*, (<http://stat.wto.org/CountryProfile/WSDBCountryPFView.aspx?Language=E&Country=IR>).

82 "Iran, China to raise trade \$60b in one year", *PressTV*, <http://217.218.67.231/Detail/2015/03/10/401174/Iran-China-eye-60b-trade>; "Iran-China trade balance to hit \$60b", *Iran Daily*, <http://www.iran-daily.com/News/113759.html>; Peter Ford, "Iran nuclear talks: Can China keep negotiations on track?", *The Christian Science Monitor*, <http://www.csmonitor.com/World/Asia-Pacific/2015/0330/Iran-nuclear-talks-Can-China-keep-negotiations-on-track-video>.

83 US EIA, "China".

84 US EIA, "World oil transit chokepoints critical to global energy security", <http://www.eia.gov/todayinenergy/detail.cfm?id=18991>.

85 US EIA, "China".

Here, China's strategic needs overlap with Iran's vision of exporting natural gas and oil. An Iranian delegation visited China to discuss issues pertaining to oil trade before the July 2015 agreement was signed.<sup>86</sup> Iran is seeking to quickly increase its global market share in oil, regardless of the low price. Iran may thus become a critical oil source for China.<sup>87</sup> The agreements signed between the two countries during the Chinese president's visit to Iran in late January 2016 show that China's investments in Iran will serve the basis for far-reaching cooperation, the driver of which will be oil trade.<sup>88</sup>

Things are a bit more complicated in the natural gas sector. China's main strategy regarding natural gas is to prioritize pipeline transportation of Turkistan's natural gas resources rather than marine-transported LNG. Turkmenistan presently is the main supplier of China's natural gas imports via pipelines and the whole Turkistan region already enjoys a network of pipelines evolving in the direction of China. Iran can also connect to these pipes to export natural gas to China. Different than Iran-Russia relations, there are no strong factors with the potential to damage relations between Iran and China. Conversely, the July 2015 agreement paves the way for Chinese companies to avail themselves of investment opportunities in Iran. For example, the Chinese National Petroleum Company (CNPC) is preparing for investing in Phase 2 of the northern Azadeghan project.<sup>89</sup> China also supports the Iran-Pakistan pipeline for Iranian gas to be transported to China by an alternative route and to strengthen Pakistan as a balancing aspect of the competition between China and India.<sup>90</sup> Another possible scenario could be Chinese companies biting off a good share from Iran's weapons exports.<sup>91</sup>

86 Adam Rose, Chen Aizhu, "Iran oil officials in Beijing to discuss oil supplies, projects", *Reuters*, <http://www.reuters.com/article/us-china-iran-oil-idUSKBN0MY0AE20150407>; "Iranian, Chinese officials to hold oil talks", *Iranian Daily*, <http://www.iran-daily.com/News/115047.html>.

87 Chen Aizhu, "UPDATE 1-Oil cargoes bought for state reserve stranded at China port - sources", *Reuters*, <http://www.reuters.com/article/china-oil-reserves-idUSL3N12S2HG20151028>; Nick Cunningham, "Can China's SPR Rescue Oil Markets?", *OilPrice*, <http://oilprice.com/Energy/Oil-Prices/Can-Chinas-SPR-Rescue-Oil-Markets.html>; "China is stockpiling its own Strategic Petroleum Reserve", *Fuelfix*, <http://fuelfix.com/blog/2015/09/18/china-is-stockpiling-its-own-strategic-petroleum-reserve/#30267101=0>.

88 "Chinese President praises relations with Iran", *Anadolu Agency*, <http://aaenergyterminal.com/searchdetail.php?newsid=7363094>.

89 "China to develop N Azadegan's 2nd phase", *Mehr News Agency*, <http://en.mehrnews.com/news/113121/China-to-develop-N-Azadegan-s-2nd-phase>.

90 "Iran backs pipeline to China under 'One Belt, One Road' initiative", *PressTV*, <http://217.218.67.231/Detail/2015/04/25/408042/Iran-China-gas-pipeline-sanctions-tradenuclear-zarif-kerry-obama-rouhani-pakistan>; Dalga Khatinoglu, "China's \$46B investment in Pakistan, Iran's hopes and fears", *Azernews*, <http://www.azernews.az/analysis/80757.html>.

91 Juel Wuthnow, "Are Chinese Arms About to Flood Into Iran?", *National Interest*, <http://www.nationalinterest.org/feature/are-chinese-arms-about-flood-iran-14887>.

### 3.E) Pakistan and India

Pakistan is important for diversification as an alternative route for gas exports to China. It is also the shortest route for exporting gas to India, which is the fourth-largest consumer of energy after the US, China and Russia.<sup>92</sup> One of the parameters that will define Iran's relations with Pakistan and India in the aftermath of the sanctions will be the energy relations between these countries. From the geopolitical angle, India's activity in the region is limited because of its strong rivalry with Pakistan and China. Thus, a more holistic approach would be to consider post-sanctions Iran's relations with India and Pakistan together.

Although both Iran and Pakistan have commenced their portion of the pipeline needed after an agreement was reached concerning natural gas trade between the two countries, Pakistan's portion is not completed.<sup>93</sup> When the possibility grew stronger that an agreement would be attained in July 2015, another item dropped on the table: China releasing \$2 bn in loans for the completion of the Iran-Pakistan pipeline.<sup>94</sup> China gains in the completion of the pipeline by supporting Pakistan's energy sector (with its daily 12-hour shortages) against its competitor India. By reinforcing Iran-Pakistan relations with the loans, China can also integrate both countries into the \$46 bn China-Pakistan Corridor Project.<sup>95</sup>

India's energy relations with Iran until now have mostly been through trading oil. Iran's share in India's oil market is around 6%.<sup>96</sup> Post sanctions, India will likely take steps towards also importing Iran's natural gas. In other words, following the lifting of sanctions, natural gas will become one of the variables capable of positively affecting Iran-India relations. India plans to import Iran's natural gas through the the Oman-India Natural Gas Pipeline project.<sup>97</sup> This 1400 km offshore pipeline is expected to cost some \$5 bn, and is planned to pump 31 million cubic meters daily (mcm/d) (approximately 11 bcm annually) from Oman's Ras al-Jifan to India's Porbandar in Gujarat province.<sup>98</sup> However, India importing Iran's natural gas through Oman in the

92 US EIA, "India", [https://www.eia.gov/beta/international/analysis\\_includes/countries\\_long/India/india.pdf](https://www.eia.gov/beta/international/analysis_includes/countries_long/India/india.pdf).

93 "Pakistan: Iran gas pipeline best option", *PressTV*, <http://217.218.67.231/Detail/2015/12/02/440013/Iran-Pakistan-gas-pipeline-sanctions-Abbasi>.

94 Saeed Shah, "China to Build Pipeline From Iran to Pakistan", *The Wall Street Journal*, <http://www.wsj.com/articles/china-to-build-pipeline-from-iran-to-pakistan-1428515277>.

95 Sualiha Nazar, "Why Iran Needs to Explore Participation in the China-Pakistan Economic Corridor", *The Diplomat*, <http://thediplomat.com/2015/10/why-iran-needs-to-explore-participation-in-the-china-pakistan-economic-corridor/>; Shannon Tiezzi, "China Powers up Pakistan: The Energy Component of the CPEC", *The Diplomat*, <http://thediplomat.com/2016/01/china-powers-up-pakistan-the-energy-component-of-the-cpec/>.

96 Shebonti Ray Dadwal, M. Mahtab Alam Rizvi, "US Sanctions on Iran and their Impact on India", Institute for Defence Studies and Analyses, [http://www.idsa.in/system/files/IB\\_USSanctionsonIran.pdf](http://www.idsa.in/system/files/IB_USSanctionsonIran.pdf); US EIA, "India".

97 Micha'el Tanchum, "India Seeks 'Auspicious Re-Birth' in Iran's Energy Sector", *The Diplomat*, <http://thediplomat.com/2015/08/india-seeks-auspicious-re-birth-in-irans-energy-sector/>.

98 Ankit Panda, "India, Iran and Oman Open Talks On Deep Sea Gas Pipeline", *The Diplomat*, <http://thediplomat.com/2014/03/india-iran-and-oman-open-talks-on-deep-sea-gas-pipeline/>.

form of LNG remains another alternative until the pipeline is complete.<sup>99</sup>

Natural gas trade between Iran and India seems more plausible than Iran exporting large amounts of natural gas to the EU via Turkey, mainly because the trade of natural gas with the EU that will become even more fragile in the event of a future crisis. India, on the other hand, with its gargantuan appetite for energy, and thanks to its relations with the US, which are more flexible than its relations with the EU, can pursue a more sustainable natural gas trade with Iran. Moreover, since Iran, independently from the India pipeline project, will make some investments so as to use Oman's idle LNG export capacity, completing the remaining portion of the project seems all the more reasonable (see Section 2. B).

The most important aspect of the fragility of relations between India and Iran is India's high-level defence cooperation with Israel.<sup>100</sup> As a requirement of their strategic competition with a variety of Islamic countries, India and Israel are combining interests to develop joint weapon systems such as the Barak 8, which may create an environment that is more biased towards Iran-Pakistan and Iran-Pakistan-China projects.<sup>101</sup>

99 Shebonti Ray Dadwal, "Re-calibrating Iran-India Energy Ties", Institute for Defence Studies and Analyses, [http://www.idsa.in/idsacomments/iran-india-energy-ties-gas\\_sdadwal\\_101115](http://www.idsa.in/idsacomments/iran-india-energy-ties-gas_sdadwal_101115).

100 Shubhajit Roy, "24 years on, why India looks set to finally come out of the closet on Israel", *The Indian Express*, <http://indianexpress.com/article/explained/in-fcat-why-india-looks-set-to-finally-come-out-of-the-closet-on-israel/>.

101 Sankalp Phartiyal, "India test-fires long range surface-to-air missile developed with Israel", *Reuters*, <http://www.reuters.com/article/india-defence-missile-idUSKBN0UD0QI20151230>; Vivek Raghuvanshi, "Indo-Israeli LR Sam Test Fired Aboard Indian Warship", <http://www.defensenews.com/story/defense/international/asia-pacific/2015/12/30/indo-israeli-lr-sam-test-fired-aboard-indian-warship/78073524/>.

## 4) CONCLUSION

Iran's main strategy post sanctions is to pursue a cautious policy against a new possible wave of sanctions, preferring, when needed, political benefits over the economic benefits that it would reap with the sanctions gone.

What Iran will likely prioritize regarding the oil sector is to market its oil stocks with no restrictions in order to achieve quick economic relief as well as to increase its oil production capacity as much as it can in the short run. The most likely scenario for the oil sector in the mid- and long-runs is Iran augmenting its oil production capacity to the level before the sanctions, trying to restore the market share it had then. To do so, Iran will use the new petroleum contract system it has devised to attract more (and mostly European) energy companies to invest in its oil and petrochemical sector. These fixed direct investments in Iran will at the same time give Iran's political relations with other countries with more stability in the future.

Iran's short-term target regarding the natural gas sector is to change the subsidies applied to natural gas and electricity in order to balance the domestic demand that is expected to surge post sanctions. At the same time, increases in efficiency from upgrading the existing natural-gas-consuming power plants will be considered for meeting Iran's short-term industrial demand surge at home and abroad. In the long run, increasing production in the South Pars field and reinforcing Iran's position as a net exporter of natural gas will become the country's main objective. Natural gas exports have the potential to create important and stable political and economic benefits for Iran. Accordingly, the basis of Iran's long-term natural gas export policy would be to diversify demand by acquiring LNG export capability and by diversifying its natural gas export markets. Iran's main short- and long-term objectives in the electricity sector, which will develop parallel to its natural gas export policy, will be to scale up the export of this energy that cannot be stored instead of focusing so much on primary resources of energy that can be stored easily, such as natural gas.

It does not seem likely that Iran's natural gas will reach EU markets through Turkey in amounts that would offer an alternative to Russian gas. Yet there is the strong possibility that Iran would opt for exporting a certain amount of natural gas to Europe through TANAP. In other words, in terms of natural gas exports and under the condition to prioritize its LNG sector, it is possible that Iran would have an EU connection for a certain amount. However with the impact of expectations for a natural gas market, it is more likely that in the mid and long run, Iran would steer towards China via Pakistan and Turkmenistan and towards cooperation with India via Oman. Hence, in the long run would diversify its exports as well as its demand portfolios with at least four countries/regions (Turkey, the EU, China and India) in exporting natural gas, and also in the spot markets in the LNG sector.

## ABOUT THE TURKISH ENERGY FOUNDATION:

The Turkish Energy Foundation started its operations to shape the future of the energy sector by contributing and participating actively in national and international developments in 2012.

The Turkish Energy Foundation was founded as a "Think Tank" by the leading people in the energy sector and has three different research centers: Research Center of Energy Technologies and Sustainability, Research Center of Energy Politics and Diplomacy, Research Center of Energy Markets and Regulatory Acts.

Enerji Panorama is the official monthly magazine of Turkish Energy Foundation that has published since June 2013. Exclusive news, analysis and objective improvements in the energy sector was one of the biggest issue of Enerji Panorama. It covers political, social and economic scenes of energy that reach all operations in energy sector; executives of companies, ministries, energy bureaucrats and academics.





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