

Turkey's Pursuits Of Alternative Gas Suppliers: Central Gas Hub Project?

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Abstract

Energy has always been the most crucial issue on the world's political agenda and it is likely to remain so in the future. In recent years, changing dynamics of world politics has made the 'energy security' the number-one topic on the international relations. At theoretical level, dependency on one country for energy supply has been regarded as a leverage of one country over another. Thus, in this scope, diversification of energy suppliers has inevitably become a topic of academic and political discussions. As a result, diversification of not only energy suppliers but also energy routes has gained significance. In this sense, the diversity of energy transition routes is the essential part of the energy security issue (The IEA defines energy security as "the uninterrupted availability of energy sources at an affordable price"). This creates an opportunity for the countries like Turkey which occupy a geostrategic position to provide a secure transportation route by means of pipeline systems. At this juncture, this paper examines Turkey's efforts and potentials in diversifying source country and automatically energy routes for the purpose of increasing the energy security. Thus, forthcoming sections of the paper will touch firstly upon why Turkey has still potential to be central gas hub because of geostrategic position. Then, alternatives source countries will be analyzed.

Keywords: Energy Security, Gas Hub, Energy Sources, Energy Routes

Introduction

Changing dynamics of world politics has made the 'energy security' the number-one topic on the international relations. At theoretical level, dependency on one country for energy supply has been regarded as a leverage of one country over another. Thus, in this scope, diversification of energy suppliers has inevitably become a topic of academic and political discussions. As a result, diversification of not only energy suppliers but also energy routes has gained significance. This creates an opportunity for the countries like Turkey which occupy a geostrategic position to provide a

secure transportation route by means of pipeline systems. Thanks to that geo-strategic position, Turkey has been eager to be central gas hub and has sought to develop an energy security accordingly. Yet the international and regional developments have seemed to threat Turkey's energy politics to be central hub, which requires a short historical background for better comprehension.

Increasing energy demand and the practices in diversification of energy sources (in the context of energy security) have led to natural gas gaining importance and priority in the last decades¹⁴. In this regard, energy security has increasingly become an accelerator of Turkey's energy politics with a special emphasis on natural gas. Dependency of Turkey on Russian gas is obvious since that Turkey is dependent on Russia for almost 55 percent of its natural gas. And to clarify, together with Turkey, Europe is, as being the biggest consumer of natural gas, also destined to use Russian gas. There were two separate operating pipelines to meet both consumers' gas need. One was from Ukraine to Europe and another from Blue Stream to Turkey. After Russia annexed Crimea without international agreement Western block (the EU and the US) applied economic sanctions to Russia. As a reaction, Russia intended to supersede the South Stream with Blue streams which will be extended through Turkey and be called as Turkish stream. Under these international circumstances, Turkey took the advantage of it to realize its main energy politics to be central gas hub in the region, especially between Russia and Europe. While meetings started to get an agreement on the Turkish stream, Syrian crisis changed the path of the game. Turkey downed the Russian warplane on the ground that it transgresses the Turkish airspace. Since that, Russia declared that current gas delivery will continue but Turkish stream project suspended.

In the light of this short history, Turkey itself seek for more options to reduce the dependency on Russian gas and did not abandoned its energy politics to be energy hub. That is where the main argument of the paper starts as Turkey reached out alternate suppliers in incredibly short time. Moreover, the most recent efforts to explore natural gas reserve in Mediterranean Sea by Cyprus, Israel and Egypt will probably serve to the Turkey's energy politics despite disagreements between Turkey and them. That geostrategic position of Turkey locating between new potential suppliers and consumers is still applicable and Turkey preserves its political stability. Turkey's energy politics to be central hub does still seem realizable with alternative energy rich-countries and routes.

¹⁴ Yuri F.,Makogon, S. A. Holditch, and T. Y. Makogon. "Natural gas-hydrates—A potential energy source for the 21st Century." *Journal of Petroleum Science and Engineering* 56.1 (2007): 17.

Potential to be central gas hub

Thanks to the fact that it is located between major suppliers and consumers, Turkey can play a crucial role in the global energy arena. Turkey has sought to strengthen its position as an energy hub, aggregator and transit corridor in the region in the nearest future¹⁵. As it has been estimated by IEA (2014), by 2025 there will be 30 bcm of natural gas from Caspian area and 70 bcm from Middle East reaching Europe by pipeline. Therefore, As stated by Aribogan and Bilgin¹⁶, both the United States and the EU will need the cooperation of Turkey to include at least two of the energy rich countries - Azerbaijan, Turkmenistan, and possibly Iran to the European energy supply house. The EU's initiatives for the creation of alternative gas pipelines to bypass its energy dependency on the Russian natural gas resources¹⁷ have arisen Turkey's geostrategic position through alternative pipelines from Caspian area. That argument has been practically proved especially after the Russian-Ukrainian gas crisis which has posed a threat on the EU's energy security. To crystalize this argument, alike that the Baku-Tbilisi-Ceyhan (BTC) pipeline carrying oil from the Caspian to the Mediterranean and eventually to the Europe, and many other projects, including the Nabucco, natural gas can be delivered through parallel pipelines as long as Turkey success in being central gas hub. It shows that, Turkey has an advantage of ready buyer. Through such initiatives, Turkey can not only obtain energy sustainability for itself, but also contribute to the global energy security.

European natural gas security of supply is highly dependent to Russia. Due to worsening security concerns about the potential disruption of energy supply, the strategic objective of diversifying sources and routes of energy supply" will be taken more seriously by European Union¹⁸. Given the history of gas conflicts between Russia and Ukraine, and the latest warplane crisis between Russia and Turkey on one hand, and recent war of mutual sanctions between EU and Russia, on the other, EU has to either reduce its gas consumption in future or find new reliable suppliers. In this regard, the Southern Gas Corridor project or alternative projects via Turkey can play an important role¹⁹. Here several exporters from Middle East and Caspian area will compete for the share in capacity, while Turkey may take an advantage of monopoly power in natural gas transition.

¹⁵ Mert Bilgin, "Turkey's energy strategy: What difference does it make to become an energy transit corridor, hub or center?" *UNISCI discussion papers* 23 (2010): 120.

¹⁶ Ülke Aribogan and Mert Bilgin. "New Energy Order Politics Neopolitics: From Geopolitics to Energieopolitics." *International Relations/Uluslararası İlişkiler* 5.20 (2008).

¹⁷ Zeyno Baran, "EU energy security: time to end Russian leverage." *Washington quarterly* 30.4 (2007): 140.

¹⁸Michael Ratner, et al. "Europe's Energy Security: Options and Challenges to Natural Gas Supply Diversification." *Current Politics & Economics Of Europe* 23 (2012).

¹⁹ Bilgin, "Turkey's Energy Strategy," 121

With the Crimea issue between Russia and Ukraine it can be claimed that the pressure over Russia have changed the topology of future transit routes, with replacement of South Stream via Turkey. And in the same coin, the willingness of Middle East and Caspian countries to export their gas to Europe has made Turkey the best alternative route as seen in the figure below;



Source: Platt's Energy Economist (2013).

Taking the case of TANAP (Trans-Anatolian Natural Gas Pipeline) as an example (showed in the figure) an essential component of a future southern gas corridor, TANAP would enable Turkey to become a major energy transit state. Turkey may become a significant energy hub (physical and/or trading) after substantial investments having been made to upgrade infrastructure²⁰. Before December 2014, Russia was planning South Stream route with the capacity of 60 bcm/year. Due to primarily geopolitical tension with the West, Russia has decided to replace this route with Blue Stream-2 of similar capacity and has reached the preliminary unofficial agreement with Turkey. While this action practically and economically does not change anything for Russia, it does so for both Turkey and the EU. As can be seen again from the map, any challenges to the energy security bring Turkey into the mind when the subject is alternative energy routes, which also confirms the importance of geostrategic position of Turkey.

²⁰ "Türkiye'nin Enerji Stratejisi", accessed January 7, 2016. http://www.mfa.gov.tr/turkiye_nin-enerji-stratejisi.tr.mfa.

In the meantime, as a result of the agreement on enrichment capacity of uranium²¹ between the US, the EU and Iran, Iranian gas resources could be used to meet the EU's gas demand. Closeness of Turkey's geostrategic position to alternative natural gas resources is crucial for transit path. For instance, Turkey has started to buy Iranian natural gas in the 1990s. In 2011, Iran supplied 8.4 bcm natural gas for Turkey. In addition, there is a MoU (memorandum of understanding) which includes Turkey's participation in South Pars gas production. That shows the potential of Turkey to diversify natural gas suppliers. These arguments especially on natural gas resources of Iran superseding Russian ones are still on the table. However, from the perspective of political stance on Syrian crisis they do not seem applicable in near future.

The dependency of both the Europe and Turkey on Russian natural gas gives Russia a strategic advantage over energy relations. In other words, Russia is capable of using energy wealth as economic and political leverage on the Europe and now on Turkey. Besides, the recent warplane crisis between Turkey and Russia has deteriorated Turkey's long and short terms energy politics. Turkey has to meet its annual current natural gas needs, from more than 50 percent of it is being met by Russian natural gas resources. That leads us to the fact that Turkey itself is dependent on Russia. Thus it can be claimed that Turkey is moving too fast to form alternative energy routes, careless about its own energy dependency. To answer the claim, it should not be forgotten that Russia is already suffering from reduced oil prices which is speculated by the US and Saudi Arabia intentionally. In that case it does not seem possible that Russia can play its natural gas card against Turkey which is the second biggest buyer²² of Russian natural gas resources.

In sum, economic conditions of Russia due to western economic embargo will prevent Russia to play this card against Turkey. Despite warplane crisis Turkey's geostrategic position resurfaced and proved its potential as right after the crisis Turkey managed to find alternative gas-rich fields such as Azerbaijan, Kurdistan Regional Government, Qatar and Eastern Mediterranean. Relying on that, the argument of Turkey's potential to be energy hub is still intact. Yet it just can be argued that it is going to be delayed as such plan of Turkey requires massive infrastructure and long term

²¹ "The Historic deal that will prevent Iran from acquiring a nuclear weapon", accessed January 8, 2016. <https://www.whitehouse.gov/issues/foreign-policy/iran-deal>.

²² According to the latest statement made by Gazprom which is national gas company of Russia, Russia will keep its written promises in the previous signed agreements. "Gazprom: Türkiye'ye doğalgaz sevkiyatı normal şekilde sürüyor", *Hürriyet*, 3 December 2015, accessed January 7, 2016. <http://www.hurriyet.com.tr/gazprom-turkiyeye-dogalgaz-sevkiyatı-normal-sekilde-suruyor-40022462>.

negotiation which was already completed phases with Russia before the crisis.

Alternative Source Countries

In a country which is willing to be an energy hub like Turkey, there needs to be big gas storage capacities, more than 20 percent of its annual consumption. According to the strategic plan of Ministry of Energy and Natural Resources of Turkey for 2015-2019²³, there are plans to raise the gas storage capacity to 10 percent of the country's annual consumption level by the end of 2019 and to further raise this to 20 percent in the long-term. However, Turkey has quickly entered into search for alternatives immediately after the plane crisis with Russia and it has made strategic deals with several energy-rich countries, including Qatar and Azerbaijan, and has been developing several energy projects to further diversify its energy sources. In this sense, the natural gas reserves in Northern Iraq and the Eastern Mediterranean can be seen as crucial alternative sources advancing the diversification of Turkey's gas supply in the medium term. However, to diversify its energy supply through alternative routes Turkey essentially needs to construct a large scaled supply infrastructure (new pipelines and terminals, the solution of legal disagreements).

In Turkey's pursuits of alternative source country, Azerbaijan first comes to mind due to rich natural gas resources. The Azerbaijan's natural gas supply can be considered in the short term. Turkey receives annually around 6 bcm gas from Azerbaijan via the South Caucasus Pipeline. And Azerbaijan is also eager to become a high profile gas provider to both Turkey and Europe. The latest agreement²⁴ between Turkey and Azerbaijan has settled the acceleration of TANAP and initiation of gas transfer in 2018. In line with these developments Turkey is planning to import an additional 6 bcm from Azerbaijan at the end of 2018. In addition, with the completion of TANAP, Turkey expects to increase gas supply from Azerbaijan approximately 23 bcm by 2023, and 31 bcm by 2026. Despite such plans can be realized in medium term, Azerbaijan is one of the applicable options in Turkey's energy politics.

²³ T.C. Ministry of Energy and Natural Resources: Strategic Plan of 2015-2019, accessed January 5, 2016. <http://www.enerji.gov.tr/File/?path=ROOT%2F1%2FDocuments%2FStratejik+Plan%2FETKB+2015-2019+Stratejik+Plani.pdf>

²⁴ "Turkey agrees with Azerbaijan to accelerate gas Project", Hürriyet Daily News, December 3, 2015, accessed January 8, 2016. <http://www.hurriyetdailynews.com/turkey-agrees-with-azerbaijan-to-accelerate-gas-project-.aspx?pageID=238&nID=92046&NewsCatID=348>.

In such a competitive gas market, Northern Iraq having around 5.7 trillion cubic feet gas reserves is willing to be an important player by supplying gas to both Turkey and Europe. The warm relations between Turkey and Northern Iraq have created opportunity to Turkey to diversify source country. Immediately after the Russian warplane crisis, officials from Iraq's Kurdistan Regional Government (KRG) announced²⁵ that a plan has been drawn up to export natural gas to Turkey and therefrom to Europe. According to this plan, the government of Iraqi Kurdistan plans to deliver natural gas to Turkey by late 2016 and through Turkey, Northern Iraqi natural gas will be exported to Europe within three years. The region will be able to export annually 10 bcm gas to Turkey at the end of three years, and if everything goes right, by the early 2020, it is expected to reach 20 bcm.

In the diversification of natural gas supply the liquefied natural gas (LNG) can be considered as a potential source. The agreement²⁶ signed with Qatar during the recent visit by the President of Turkey indicated Turkey's willingness to increase the respective portion of LNG in the natural gas mix. As Turkey's strategic partner in the Middle East, Qatar is the largest exporter of LNG in the world and can supply high portion of LNG to Turkey. However, in that case Turkey needs to increase its storage capacity for LNG. But here, the critical issue of Turkey's LNG storage and regasification capacity pops into mind. According to the International Energy Agency, Turkey's LNG storage capacity covers around 3 bcm and the regasification capacity around 14 bcm. The current storage capacity supplies only 5 percent of Turkey's national demand which is well below the levels of Europe's demand (20 percent). Therefore, both LNG storage and delivery infrastructure requires major investments that would need years to complete and huge numbers to finance.

The recent discoveries of a significant amount of natural gas in the Eastern Mediterranean have increased the options in diversification of source country in the international gas market as shown in the table below; three large fields have been discovered offshore both Israel and Cyprus between 2009 and 2011. These three fields contain natural gas in total 1040 bcm. Moreover, the recourses discovered in the Zohr field (an offshore natural gas field located in the Egyptian sector of the Mediterranean Sea) are currently estimated about 850 bcm.

²⁵ "Iraq: KRG gas 'enough for needs of Turkey and Europe", Anadolu Ajansı, accessed January 7, 2016. <http://aa.com.tr/en/economy/iraq-krg-gas-enough-for-needs-of-turkey-and-europe/482935>.

²⁶ "Turkey, Qatar sign liquefied natural gas agreement", Daily Sabah, December 2, 2015, accessed January 7, 2016. <http://www.dailysabah.com/energy/2015/12/02/turkey-qatar-sign-liquefied-natural-gas-agreement>.

Key recent gas discoveries in the Eastern Mediterranean

Gas field	Country	Year of discovery	Resources
Tamar	Israel	2009	280 bcm (Gross mean resources)
Leviathan	Israel	2010	620 bcm (Gross mean resources)
Aphrodite	Cyprus	2011	140 bcm (Gross mean resources)
Zohr	Egypt	2015	850 bcm (Potential of lean gas in place)

Data sources: Noble Energy and Eni (2015) [bcm: billion cubic metres].

These recent developments have opened discussion about the relationship between regional geopolitics and energy. Many analysts have expressed hopes that the Eastern Mediterranean might become a gas-exporting region. Moreover, this newly discovered gas sources could pave the way for a new era of cooperation which has potential to solve conflicts in the region. In parallel with this argument, the Israeli officials' announcements²⁷ about gas supply to Turkey just after the Russian warplane crisis, gave reason to be optimistic about future energy cooperation. In fact, despite the ongoing political crisis, the trade between Israel and Turkey has reached an all-time high at 5.44 billion dollars in 2014²⁸. And also several Turkish companies such as Zorlu Group and Turcas have enhanced some initiatives for construction of pipeline transporting natural gas from the giant Leviathan field to the Turkey²⁹. It can be claimed that, this commercial factors can induce Turkey a quite pragmatic approach due to energy politics. In this context, the Eastern Mediterranean gas can be one of Turkey's options in the diversification politics.

Conclusion

It is obvious that Turkey initiated a clear-cut project to be a central gas hub due to the fact that its geo-strategic location being right between major gas-rich areas and consumers. As being the biggest gas supplier, Russia was an inevitable actor within this project. As it was the case till their

²⁷ "10 bcm of Israeli gas planned in first phase of Turkey deal", Today's Zaman, December 18, 2015, accessed January 8, 2016. http://www.todayszaman.com/business_10-bcm-of-israeli-gas-planned-in-first-phase-of-turkey-deal_407384.html.

²⁸ "Turkey-Israel relations: a political low point and an economic high point," Brookings Institution, 19 February 2015, accessed 8 January, 2016. <http://www.brookings.edu/blogs/markaz/posts/2015/02/19-israel-turkey-trade-business-economy>.

²⁹ "10 bids for Leviathan export tender to Turkey," Globes, 23 March 2014, accessed January 8, 2016. <http://www.globes.co.il/en/article-10-bids-for-leviathan-export-tender-to-turkey-1000926526>.

invidiously good bilateral relations was exposed to sudden opposite direction. Therefore, it is undeniable that the developments in the region especially the Russian warplane crisis have affected Turkey's energy politics and caused speculations that Turkey would not even get adequate gas supply from Russia for itself. This paper, in contrary, argues that all these developments could transform Turkey's energy politics in a way that it would limit its dependency on one source country.

In this sense, Turkey has accelerated its efforts to diversify gas suppliers in order to procure its energy security. Closeness of Turkey's geostrategic position to alternative natural gas resources and its pragmatic initiatives has proved that Turkey has a high capacity to diversify its energy supply. In case of being an energy hub, Turkey's potential still needs to be considered. In such conflict-ridden region, the most important feature of Turkey in the context of energy security is that Turkey is preserving its stability. Together with political stability of Turkey and secure routes, by increasing its storing capacity, Turkey can serve an uninterrupted availability of energy sources and at an affordable price. In conclusion Turkey's position within energy politics is still promising.

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