ENERGY SUPPLY SECURITY AND THE SOUTHERN GAS CORRIDOR (SGC)

ERDAL TANAS KARAGÖL • SALİHE KAYA
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ABOUT THE AUTHOR

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Karagöl graduated from the Faculty of Economics at Istanbul University in 1992, earned his MA from University of Connecticut in the U.S. and Ph.D. from York University in Britain. He published numerous articles and research papers in the areas of foreign debt, current deficit, economic growth, defense expenditures, energy, unemployment, public expenditures, poverty and social aid. A member of the TÜBA, Karagöl is a professor of Political Science at Yıldırım Beyazıt University and the Director of Economics at SETA, and conducts research at TÜBİTAK.

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In the 21st century, natural gas has become a strategic source, one of the most discussed and a “top of the agenda” item with its advantages and risks. The significance of natural gas increases day by day since in terms of carbon dioxide emission, it is a clean fossil fuel with a wide range of use.

Increasing cost and import of natural gas to an unsustainable level in the EU countries have brought the issue of energy supply security into the European agenda, as Russia exploits the dependency of Europe on Russian natural gas. The EU countries, importing 34 percent of their natural gas supply from Russia, have a great deal of concern about the threatening attitude of Russia as a political and economic power exploiting its richness in energy. All these developments clearly reveal that the energy supply security has begun to play an effective role in international affairs.

First of many crises between Ukraine and Russia, the natural gas crisis which occurred in 2006 stemmed from the pipeline transferring the Russian natural gas to the EU countries via Ukraine. Hungary, Poland and Austria were badly affected by this crisis due to the decreased amount of transferred gas.

In pursuit of different sources, the EU is expected to speed up this search with the current Russia-Ukraine crisis. As known, the natural gas transferred from Russia via Ukraine constitutes 66 percent of the flow to the EU and creates political and economic tension between the two countries.

The goal is to meet short, middle and long term energy demands of the system in accordance with the desired amount and quality with predictable cost. Energy supply security is defined as providing stability to the system in case of sudden changes and meeting increasing energy demands. This study aims to determine supply and demand conditions of countries and enable efficient use of good quality energy at a reasonable cost.
The Southern Gas Corridor (SGC) intended to provide energy supply security is a project that shines out to introduce alternative energy sources to the EU countries and avert Russia’s energy threat.

The SGC proposes the transfer of 1.2 trillion cubic meters of natural gas reserve to be extracted from the Shah Deniz field in Azerbaijan via Turkey and is regarded as one of the most critical projects to reduce Europe’s energy dependency on Russia.

The SGC is to become the first ever energy line connecting the Caspian to Europe. The Trans Anatolian Pipeline (TANAP) launched in 2012 and the Trans-Adriatic Pipeline (TAP) which is to pick up the Shah Deniz gas from the Turkish border and deliver it to Europe, stand as new alternative energy routes to transfer Caspian natural gas to the EU countries. As the most vital part of the SGC, the two pipelines will also clear the way for Turkey to become an energy hub in the region.

Turkmenistan is another key country along with Azerbaijan in the Caspian region rich in diversity of energy sources. The significance of Turkmenistan increases with possible incorporation of other reserves in the region as part of the SGC project to transfer Caspian natural gas reserves to Europe. Turkmenistan aims to have more contacts with external markets based on open economy principle. In addition, Iranian oil and natural gas sources are also introduced among other sources to consolidate the SGC. On the other side, although they are not part of Turkey’s energy policies, the sources in the Kurdistan Regional Government (KRG) and the Eastern Mediterranean are worth paying attention to as possible alternative natural gas sources in this corridor to empower the SGC.

The KRG gas has not been considered in conjunction with TANAP, but its inclusion in the SGC project is still possible and the delivery of KRG gas to Europe via Turkey will not only provide energy supply security and diversification of energy sources, but also will form the new economic and political integration models of these countries.

Turkey has failed for years to use the advantages of being a natural energy hub owing to its geographical location and to become a regional actor in energy. Therefore, providing energy supply security and bringing new investors into the Turkish energy sector are among the priorities of Turkey so as to achieve its economic goals.

Within this scope, the establishment of an Energy Exchange will be a major step for Turkey in order to bridge the East with the West, and reduce energy costs; as well as to become a transit country, a regional actor and a trading hub in energy. Setting up an Energy Exchange and including natural gas and oil subsequently in the market are critically important for Turkey to realize its 2023 vision, meet its energy needs and be a geographical energy hub. Once this is established, the Turkish Energy Exchange will be the third largest in the world after Germany and France.
INTRODUCTION
As the fuel of the 21st century, natural gas will put its mark in the history of economics as a strategic energy source. Natural gas is cleaner than other fossil fuels in terms of carbon dioxide emissions and gains more significance with its wide range and variety of use. In addition to its advantages, the ever increasing dependency on natural gas makes this energy source more significant and popular among the agenda items. The developments between Russia and Ukraine, in particular, clearly demonstrate the criticality of supplying natural gas; and the competition, agreements and disputes created internationally by this criticality. The EU countries which meet their natural gas needs through this route are affected the most by these developments.

As known, 66 percent of the natural gas delivered to the EU transects Ukraine causing political and economic tensions between Russia and Ukraine. The increase in natural gas consumption in the EU countries also increases their dependency on Russia. Consequently, in search of alternative energy sources, the EU is expected to gear up efforts to find new suppliers in the face of the latest Russia-Ukraine crisis.

Three of the pipelines at the center of the Russia-Ukraine crises carry Russian natural gas and one oil pipeline delivers Russian oil to Europe through Ukraine. The “Bratstvo” (Brotherhood) Pipeline is an important one carrying Russian natural gas to Europe. The pipeline enters Europe via Slovakia and transfers gas to Northern and Southern European countries. On the other side, Soyuz (Union) Pipeline carries Russian and Central Asian gas through Ukraine to Europe. Elsewhere, Trans-Balkan Pipeline (TBP) delivers natural gas via Ukraine through Romania to the Balkan countries and Turkey as the last stop. Druzhb (Friendship) Pipeline carries Russian oil to Slovakia through Ukraine (Figure 1).

First of many crises between Ukraine and Russia, the natural gas crisis which occurred in 2006 stemmed from the pipeline transferring the Russian natural gas to the EU countries via Ukraine. Hungary, Poland and Austria were badly affected by this crisis as the transferred gas decreased in amount.

On the other hand, political disputes in Russia-Ukraine relations are the leading actors in these crises. Being a stage for a power struggle between pro-Russian former President Victor Yanukovych and former Prime Minister Yulia Tymoshenko, Ukraine supported Georgia during the Georgian offensive in Ossetia in late 2008. As Ukraine protested the Russian invasion in Ossetia, Russia-Ukraine relations were strained once again. Correspondingly, the natural gas crisis which broke out on January 19, 2009 be-

between the two countries ended up 20 percent discount in gas price for Ukraine from Russia and a reduction in tariff for transporting Russian gas. Subsequently, realizing what kind of crises may occur if Russia stops gas transfer especially in a period of desperate need for natural gas, the EU countries started to act more strategically in their bilateral relations with Russia.

Protests and acts of violence which started after the pro-Russian Ukrainian government rejected to sign the EU Partnership Agreement on November 22, 2013 ended with the overthrow of the government. The government which had taken over the administration as a result of the Orange Revolution subsequent to the run-off vote on November 21, 2004 has taken over the administration as a result of political events (of 2013). Disturbed by the situation in Ukraine, Russia used its power in energy again as means of pressure. This phase ended with the annexation of Crimea by the Russian forces. Russia sent a letter to 18 EU countries complaining that Ukraine did not pay its debt. Russia underlined a possible cut-off of gas supplies thus threatening the EU countries in a way. Russia ceased gas delivery to Ukraine on June 16, 2014 to prove how serious it was. The gas cut-off followed when Ukraine failed to pay 1.95 billion dollars of its total debt of 4.5 billion dollars on the due date. This signals that difficult days ahead await the EU countries. Besides, the U.S. and EU sanctions applied against Russia due to the Russian politics in Ukraine will also have a negative impact on Ukraine’s economy. On the other hand, import restrictions announced by Russia on some products from the U.S. and EU countries indicate how the situation has turned inextricable already.

In the global order of economic and political disputes interacting with each other, the causes of crises occurring among countries, as it was in the Russia-Ukraine crisis, show some similarities as well. Natural gas price disputes between Russia and Ukraine and Ukraine’s not paying its

debt are seen as the main reasons for the crisis; however, the real reason appears to be the political power struggle between the parties. On-going power struggle is a strong sign that natural gas crises will repeat in the upcoming days, and gas will be used as a weapon.

One of the latest developments taking place under the shadow of the political turmoil in Ukraine is that pro-EU billionaire Petro Poroshenko, nick named the “King of Chocolate”, won the early presidential elections held on May 25, 2014. Poroshenko concentrated on the EU relations rather than mending the fences with Russia. He took office with the claim to resolve the political crisis. As Poroshenko rejected the annexation of Crimea by Russia, it has become a matter of discussion whether or not new Russia-Ukraine crises will follow. In this sense, the likelihood of future crises force the concerned countries to examine their energy supply security.10

Another development is that Poroshenko signed a free-trade and political partnership agreement with the EU on June 27, 2014. As known, the former Ukrainian President Viktor Yanukovych refused to sign the association agreement with the EU in late 2013 and this led to an environment of chaos that has brought the country into a civil war triggering the incidents to divide up the country.11 The statements issued by the Ukrainian administration about how beneficial the relations with the EU would be, are the messengers of the prospective developments. Russia strongly objected to the integration of Ukraine and the EU. The number one criticism by Russia is that the EU will only buy materials having an adaptation certificate, and this will decrease competition and increase unemployment. On the other hand, those who support the agreement assert that the agriculture sector in Ukraine will develop thanks to the agreement, and this will increase exports.12

In consequence, the concept of “energy supply security” introduced during the past oil crises has been revisited with the Russia-Ukraine tug of war. Russia with the intention to play the “big brother”13, applies sanctions against Ukraine on all occasions, reminiscing its old Soviet Russia legacy. With Russia’s restrictions on natural gas flow to the EU, Ukraine, on the other hand, tries to reinforce its position as a country in-transition-state in order to protest the Russian attitude and raise questions among the EU countries about Russia’s credibility. The EU countries meet 34 percent of their natural gas needs from Russia14 and are deeply concerned about Russian threats to use its energy sources as a political and economic power against Europe. All these developments clearly show that energy supply security has begun to play an active role in international affairs.

As energy supply security requires diversification of sources, Turkey should evaluate the advantages it will acquire in this sense. Turkey, as a transit country between the East -with the abundance of energy sources- and the West - with the scarcity of these sources- should not only settle for the income to be obtained through the usage of its lands during gas transfers. Turkey failing to solve the issue of its current deficit due to energy import should prioritize agreements to procure inexpensive natural gas.

Just at this point, the SGC project envisioned to provide energy supply security will give more maneuverability space to the EU countries against Russia, and avert the Russian energy threat. Therefore, Turkey should use this opportunity to have ac-

access to inexpensive natural gas as a transit country.

The second part of this analysis will focus on the concept of energy supply security in addition to the functions and features of the SGC project that have been developed to provide energy supply security. The third section will include the details of the SGC, TANAP and TAP projects. Turkmenistan, Iran, KRG and the East Mediterranean will be given in the fourth section as examples of countries supporting the SGC project. The political and economic implications of the SGC project through the perspectives of the EU countries and Turkey will be analyzed in the fifth section. A general assessment of the SGC and energy supply security along with several suggestions will be made in the conclusion section.

ENERGY SUPPLY SECURITY

The most important concept presented by the two oil crises in the 1970s to the “energy” literature is the “energy security”. This concept is remembered once again as a result of current natural gas crises. The starting point of energy supply security is the green paper entitled “Towards a European Strategy For the Security of Energy Supply” prepared by the European Commission in 2001. In this paper, the description of energy supply security is given as “to ensure, for the good of the general public and the smooth functioning of the economy within the scope of sustainable development, the uninterrupted physical availability on the market of energy products for all consumers at all prices”.

In short, security of energy supply means sustainability of energy services needed by an economy. Security of energy supply contains many factors such as the controllability of energy supplies in a way to meet the needs, low cost, diversification of energy supplies, sustainability of sources, and security of energy purchase and sale.

Increasing need for energy has dominated a significant portion of international relations and trade, and this has elevated security of energy supply to a strategical level in terms of country economies. Use of technology in search of energy reserves makes it easier for countries to have access to energy. Here, the objective is to meet the energy need of a system, depending on demand in accordance with the desired amount and quality at sustainable and predictable costs in short, medium and long terms. ‘Achieving stability of the system against unexpected changes and meeting increasing energy needs’ is defined as the energy supply security. The purpose with this, here, is to determine supply and demand conditions of countries, provide good quality energy at a reasonable price, and use it efficiently.

In addition, the focus on energy cooperations among countries reveals the significance of energy supply security.

In the scope of energy supply security, natural gas consumption figures indicate 1.4 percent increase in the world’s natural gas consumption as of late 2013 compared to 2012. In the U.S., natural gas consumption jumped from 623.4 billion cubic meters to 737.2 billion cubic meters in 2013. In Saudi Arabia, this figure changed from 71.2 billion cubic meters to 103 billion cubic meters; and in China from 46.8 billion cubic meters to 161.6 cubic meters (Table 1).

The amount of natural gas consumption increases in proportion to the growth rate of the countries (starting with China) in the natural


The natural gas consumption rate in China was 10.8 and 4 percent in the Middle East in 2013 compared to the previous year. Natural gas demands of these countries are higher than others. 400 billion dollars worth of natural gas deal signed between Russia and China on May 21, 2014 put forth the importance of China in natural gas consumption recently. Beside this, the International Energy Agency (IEA) data estimate an increase in natural gas import of the EU countries from 312 billion cubic meters in 2009 to 523 billion cubic meters in 2020.19


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<td>2839,6</td>
<td>2954,4</td>
<td>3027,7</td>
<td>2957,4</td>
<td>3180,8</td>
<td>3233</td>
<td>3310,8</td>
<td>3347,6</td>
<td>1,40%</td>
</tr>
<tr>
<td>THE EU</td>
<td>497,1</td>
<td>490,1</td>
<td>486,3</td>
<td>496,3</td>
<td>465,4</td>
<td>502,2</td>
<td>451</td>
<td>444,1</td>
<td>438,1</td>
<td>-1,10%</td>
</tr>
</tbody>
</table>

Source: British Petroleum Statistical Review, 2014
On the other hand, the energy need in Turkey increases in line with the uninterrupted steady growth since the last quarter of 2009; as a result, natural gas consumption jumped from 26.9 billion cubic meters in 2005 to 45.6 billion cubic meters in 2013 (Table 1).

Energy consumption increases together with a sustainable economic growth in Turkey making the country more dependent on external energy supplies. On the other side, energy sources, natural gas in particular, are used in almost all sectors. It should not be forgotten after all that natural gas as a key fossil fuel is a cost-increasing factor and this should be considered in advance of making future investments in the area.

In the global order of economic and political disputes interacting with each other, the causes of crises occurring among countries, as it was in the Russia-Ukraine crisis, show some similarities as well.

THE SOUTHERN GAS CORRIDOR (SGC)

Incidents during the winds of the “Cold War”, in particular, have shown the significance of energy supply security and proven how critical natural gas investments are. These investments have already changed energy policies of countries and power balances among them in global markets.

The Southern Gas Corridor (SGC) envisages the transfer of 1.2 trillion cubic meters of natural gas reserves from the Shah Deniz field in Azerbaijan to Europe through Turkey. It is one of the key projects to reduce Europe’s energy dependency on Russia. Considering the power the Russian Gazprom, the largest energy company and the number one natural gas producer in the world, has to determine natural gas prices on its own, Russia’s use of its power in energy as a trump card in every single international crisis, and too much energy dependency posing an obstacle before political decisions; the SGC will take on quite many different missions. Energy consumption in Turkey increases with economic growth. Therefore, the SGC project is expected to supply more and cheaper natural gas to Turkey and provide political maneuverability space to the EU countries as its economic significance for these countries increases.

With the implementation of the SGC project; the EU, Turkey and Azerbaijan will have different advantages depending on their individual positions. To allow the transfer of Shah Deniz gas to Europe through Turkey; the key chains of this corridor, forming the first direct energy line stretching from the Caspian region to Europe; the Trans Anatolian Natural Gas Pipeline (TANAS) launched in 2012 and the Trans Adriatic Pipeline Project (TAP) set an alternative route to the EU countries in search and need of new energy sources. TANAS and TAP will pave the way for Turkey to become a new “Energy Center”. As seen in the figure, the SGC contains the South Caucasian Pipeline (SCP), TANAP and TAP (Figure 2).

With the SGC project, a total of 16 billion cubic meters of natural gas, six billion cubic meters of which will be transferred to Turkey and 10

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23. For detailed information, see. The 1st Chapter in the Trans Anadolu Doğalgaz Boru Hattı (TANAP) Project Environmental Impact Assessment Report (ÇED).
billion cubic meters to Europe, will be delivered as of the period of 2018-2019. The project all in all turns into a source of confidence with the expectation that Europe will have less problems with Russia. Six billion cubic meters of gas will be transferred to Turkey and 10 billion cubic meters to Europe as part of the SGC (Table 2). The SGC will facilitate for Turkey to bridge Europe to energy sources, due to its proximity to the sources in the region; therefore, it will contribute to its becoming an energy hub. In addition to this, while Turkey maintains sustainable economic growth, it will be able to purchase natural gas at a reasonable price owing to SGC.

Despite all these favorable features, however, the SGC is a big and complex project which implies several risks. The first is the increasing input price, therefore the cost of the project planned. Another risk is the dispute between the British Petroleum (BP), as one of the biggest partners in the Shah Deniz consortium, and the State Oil Company of Azerbaijan Republic (SOCAR)\textsuperscript{24}. Furthermore, the Russian natural gas will be transferred to Europe through the Black Sea floor via the South Stream project and this poses another risk for the SGC. As known, the South Stream Natural Gas Pipeline Project consists of both offshore and onshore pipeline systems. The offshore part of the project affects Exclusive Economic Zones (EEZ) of many countries, some of which are Ukraine, Georgia, Romania, Bulgaria and Turkey. In fact, Russian natural gas will be delivered to Varna first and then to Serbia, Hungary and through Slovenia to Italy according to the plan. The total length of the South Stream is 2466 kilometers and its offshore section with the total length of 930 kilometers will run under Black Sea as the design capacity will amount to 63 billion cubic meters. The South Stream will carry Russian gas to Bulgaria, Greece and Italy respectively. Natural gas in the South Stream will not be transferred via Ukraine and this is preferable for the EU countries considering the Russia-Ukraine crises hitherto. Therefore, on account of the Crimean crisis, the South Stream becomes a meaningful project for Russia as it by-passes Ukraine while transferring gas to Europe. Encouraged by the Crimean dispute, Russia tries to finalize the South Stream project as soon as possible\textsuperscript{25} (Figure 3).

On the other hand, Bulgaria, as an EU member state and one of the transit countries

25. For detailed information, see. Güney Akım Açık Deniz Doğalgaz Boru Hattı Türkiye Bölümii ÇED Raporu.
involved in the South Stream, announced on June 8, 2014 to remain loyal to the EU in relevant projects; however, the next day Bulgarian Economy and Energy Minister Dragomir Stoynev stated that South Stream is a strategic and European project and Bulgaria has not given up on the South Stream, and that Bulgaria really is actively working on their share of the project. However, in another statement issued on June 19, Bulgaria announced to halt works on South Stream natural gas pipeline project.

Yet another pipeline project called North Stream and inaugurated in 2011 stretches from Vyborg in northwest of Russia to Sassnitz in northeast of Germany. The length of the pipeline is 1225 kilometers and the estimated cost will be 9 billion euros. The pipeline will carry a total of 55 billion cubic meters of Russian gas to Europe. With the annual transfer capacity of 55 billion cubic meters, North Stream is seen as one of the possible competitors of the SGC.

Lastly, through Turkey’s perspective, the SGC project will increase tariffs together with TANAP; therefore, Turkey should organize its energy infrastructure and market rather than just letting the project use its land during natural gas procurements. In this context, Turkey should focus on energy investments and take advantage of the competition through TANAP which will be constructed running parallel to the current natural gas pipelines, and set the goal to be a bridge country.

With the SGC project, a total of 16 billion cubic meters of natural gas, six billion cubic meters of which will be transferred to Turkey and 10 billion cubic meters to Europe, will be delivered as of the period of 2018-2019.

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Trans-Anatolian Natural Gas Pipeline (TANAP)

After struggling with fluctuations and instability until 2002, the Turkish economy has reached stability and positive growth figures in the last 12 years. Despite many negative developments, Turkey’s economy continued to grow and carried plenty of giant projects into effect. In this context, TANAP is a key project for Turkey to become an energy hub in the region and a transition country between the East and the West. It is also a cost-reducing project as far as the import of energy supplies is concerned and means numerous opportunities for Turkey.

TANAP was inaugurated in June 2010 after BOTAS Petroleum Pipeline Corporation, a state-owned crude oil and natural gas pipelines and trading company in Turkey, and State Oil Company of Azerbaijan (SOCAR) signed a partnership agreement in Istanbul. Turkey and Azerbaijan signed a memorandum of understanding on

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December 24, 2011 establishing a consortium to build and operate the pipeline. Another agreement followed on May 30, 2014 to strengthen partnership between the Shah Deniz Natural Gas Production Site and TANAP; with this agreement 20 percent share of BOTAS in TANAP is upgraded to 30 percent. The state-run TPAO has inked a $1 billion loan agreement with Turkish state-run lender Vakıfbank and the country’s largest non-state lender İşbank, so it can purchase more shares in the Shah Deniz project to increase its shares from nine percent to 19 percent.

TANAP pipeline is planned to enter Turkey from Türkgözü border gate and transect the country. The length of the pipeline will be 1900 km with a diameter of 1422 mm (56 inches) pipes (Figure 4). The construction phase is planned to start in 2015 and to be completed by 2018. A total of 1.2 trillion cubic meters of natural gas from the Shah Deniz field in Azerbaijan will be delivered as of 2018. The planned capacity of the pipeline is 16 billion cubic meters (570 billion cubic feet) of natural gas per year at initial stage and will be increased later up to 23 billion cubic meters (810 billion cubic feet) by 2023, and 31 billion cubic meters (1.1 trillion cubic feet) by 2026. The planned route of TANAP will be via: Ardahan, Kars, Erzurum, Erzincan, Bayburt, Gümüşhane, Giresun, Sivas, Yozgat, Kirşehir, Kırıkkale, Ankara, Eskişehir, Bilecik, Kütahya, Bursa, Balıkesir, Çanakkale, Tekirdağ, Edirne and Kırklareli provinces in Turkey.

As seen clearly, Turkey should sign projects to reduce energy cost against increasing energy consumption despite the lack of energy sources. Turkey imports natural gas from Azerbaijan, Russia and Iran but pays 450 dollars per thousand cubic meters for the gas imported from Iran, the most expensive. Turkey pays 405 dollars for per thousand cubic meters natural gas purchased from Russia and 380 dollars for the same amount of gas imported from Azeirbaijan.

therefore the most reasonable.\textsuperscript{33} In this sense, TANAP will be an important opportunity for the growing Turkish economy.

TANAP will make great deal of contributions to Turkey, such as increasing competitiveness and employment and raising awareness on energy investments. The country will also become a bridge between the East with rich energy sources and the West with lacking energy sources. Energy and trade relations between Turkey and Azerbaijan will improve more owing to TANAP as the Baku-Tbilisi-Erzurum (BTE) natural gas pipeline and the Baku-Tbilisi-Ceyhan (BTC) crude oil pipeline will add to political and economic interaction between the two countries.\textsuperscript{34}

The significance of TANAP increases every passing day for Europe, as the EU countries depend on Russian gas but seek alternative sources. On the other hand, Turkey’s mission as an energy bridge between Azerbaijan and the EU will reinforce the country’s EU membership bid. In this context, it is a wish to see the energy chapter among the “chapters pending for approval at the European Council” is opened for negotiations after the aforementioned agreements signed.\textsuperscript{35}

Ergo, Turkey should be aware of TANAP’s significance in terms of energy supply security as far as natural gas is concerned and take its steps very carefully. In energy deals, it is quite difficult to reach the desired result at once; therefore, energy investments should be promoted and paid attention to as they may have tendency to change direction due to incidents along the way. As the energy consumption increases, Turkey should have warm relations with the countries it imports energy from. Turkey, making a remarkable progress in becoming an energy hub, should turn its mission of bridging the East with the West into an advantage and be in contact with leading actors of energy market in a way to protect its own interests.

\textsuperscript{33} Obtained from YCHART, See. https://ycharts.com/indicators/europe_natural_gas_price
\textsuperscript{34} “TANAP seferberliği”, Aljazeera, January 14, 2014.
\textsuperscript{35} “Katılım Müzakerelerinde Mevcut Durum”, T.C. Avrupa Birliği Bakanlığı, November 5, 2013.
In this sense, Turkey should have deals with its energy-rich neighbors and participate in exploration and production works for natural sources. Turkey should also increase the amount of natural gas consumption and decrease the gas price; only then, new pipeline agreements and the Energy Exchange will make more sense. Turkey should be actively involved in this process not only as a transfer country but also as a trading partner. Joint efforts of BOTAS and TPAO appear to be crucial for exploration, production and pipeline works. To do this, the two companies should seek a single company structure similar to Gazprom or SOCAR and be presented in energy deals on behalf of Turkey. These companies should mainly be active in external markets and dominate the Balkans in particular. This will be a critical step for the country. Many Balkan states are dependent on Russian natural gas today; therefore, Turkey’s investments in this region become more important. Considering that Bulgaria, in particular, has the required infrastructure, one of Turkey’s priorities should be to take part in energy investments in the Balkans.

Trans-Adriatic Pipeline (TAP)

Although the EU countries exhibit different tendencies towards different energy sources, the need for natural gas still remains high. Another key component of the SGC which will create alternatives to Russia centered natural gas sources is the Trans-Adriatic Pipeline (TAP). TANAP will join the TAP in the Greek village of Kipoi. TAP will transfer the natural gas originating from Greece, via Albania and the Adriatic coast to Italy. TAP will be 870 km in length, 550 km, 210 km, 100 km, and 10 km of which will transect Greece, Albania, the Adriatic Sea and Italy, respectively. TAP will carry natural gas from the Shah Deniz II field of Azerbaijan to Greece, Albania, the Adriatic Sea and Italy to meet Europe’s need (Figure 5).

On 13 February 2008, Swiss AXPO and the Norwegian energy company Statoil signed an agreement to realize the TAP, a joint venture to develop, build and operate the pipeline. The German E.O.N. Corporation joined the venture in 2010. AXPO and Statoil own 42.5 percent shares each and E.O.N 15 percent. The estimated cost of the project is about 1.5 billion dollars (Table 3). Natural gas transfer is expected to begin in 2019.

After the Fukushima accident, natural gas became the energy source of the 21st century due

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to the stagnancy felt in the nuclear energy field, run-down nuclear plants, efforts to limit the share of coal in electricity production as a result of the measures introduced in the Kyoto Protocol and ever increasing electricity consumption. Considering the EU countries’ dependency on natural gas, TAP becomes more significant for Europe.

Considering that Greece has suffered an economic crisis for quite some time, TAP is vital for this country too. Greeks expect about 18 billion euros and high number of employment from this project in the next 50 years; therefore, TAP, backed by private sector, is a tremendous opportunity to revive the Greek economy. On the other hand, Italy currently benefiting from Libyan natural gas is on the same page with Greece. Italy depends on external energy sources by 25 percent, 90 percent of which comprises oil and natural gas. The Azeri gas via TAP becomes a priority for Italy as the use of natural gas in electricity - compared to nuclear plants and renewable sources – is on the rise in the country. TAP becomes the fourth gas supply channel for Italy after the already functioning ones--from Northern Europe, Northern Africa and Russia; it is also important for Italy to ensure security of energy supply and sustainability.

Therefore, neither Greece nor Italy hesitate to provide government support for this project. Albania, on the other side, backs up the TAP with the expectation of economic activities and new employment opportunities through foreign investments in the country. Geostategical significance of Albania increases with TAP and economic stability is also expected owing to this project.

In conclusion, the TAP project in general is never negatively approached by any transit or buyer countries; and it is supported by politicians, too. However, some environmentalist groups have raised their voice against TAP for environmental concerns in their countries. The project has managed to convince all sects and proceeds steadily. The EU countries hope that the TAP will decrease energy dependency on a single country.

**POSSIBLE SOURCES TO BOLSTER THE SGC**

As mentioned above, European countries seek alternative pipelines to reach new energy sources

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and to ensure energy supply security. The Caspian region with its diverse energy sources is attractive for Europe. Turkey, on the other hand, neighbors the countries possessing more than 70 percent of the world’s proven natural gas reserves. At this point, Turkey’s position allows energy integration between the EU and the Caspian region. Turkmenistan and Iran come to mind with their energy sources in the Caspian region and the Middle East enriched with abundance of energy sources. Elsewhere, energy reserves in the KRG region and Eastern Mediterranean are also on the agenda as alternative sources to bolster the SGC.

Turkmenistan and Iran
At the dawn of the 2000s, Turkmenistan made a leap forward in the field of economics owing to its energy resources. The Central Asian country Turkmenistan holds the world’s fourth largest natural gas reserves after Iran, Russia and Qatar, possessing a total of 17.5 trillion cubic meters of natural gas reserves. The world’s second biggest natural gas field, the South Yolotan (Galkynysh) in Turkmenistan, is estimated to contain about 14 billion cubic meters of natural gas reserves.

Natural gas production in Turkmenistan stood at 48.4 billion cubic meters in 2002, but rose to 62.3 billion cubic meters in 2010 (Graph 1). As Russian Gazprom closed the Central Asia-Main pipeline in 2009, natural gas flow from Turkmenistan to Russia was halted, hitting a blow on the country’s economy. Along the way, Russia’s irresponsible and domineering attitude has caused Turkmenistan to speed up the operation of the natural gas reserves in the Galkynysh area.

Taking crucial steps in the global energy market, Turkmenistan exports large sum of its natural gas to China, Russia, Iran and post Soviet countries. However, increasing demands in China and India parallel to the increasing population and consumption will reinforce Turkmenistan’s guarantorship in natural gas. Named the “Blue Gold” by the public at large, Turkmenistan’s natural gas exported via Turkmenistan-

China natural gas pipeline, inaugurated in December 2009, and Turkmenistan-Iran natural gas pipeline revived the Far East and Middle East energy markets. Turkmenistan is expected to take place among the leading countries in the world owing to its geopolitical position and works in the natural gas area.\(^4^4\)

A gas-for-loan agreement signed between China and Turkmenistan in 2007 is highlighted in the international economics literature. Turkmenistan strengthened cooperation with China through the Central Asia-China Gas Pipeline, 1900 kilometers in length, connecting Turkmenistan and East Turkistan in China and Trans-Asia Gas Pipeline; and in the mean time, welcomes natural gas demands from European countries. The EU supports the Trans-Caspian project with Turkmenistan in order to break the Russian energy monopoly; and as part of this project, Trans-Caspian Gas Pipeline is expected to be connected with the SGC.\(^4^5\)

Although Turkmenistan wishes to meet short-term natural gas needs of its Asian neighbors, it plans to benefit from the SGC in the long run and reach the European market.

As energy sources have started to dominate foreign policies of countries, the transfer of Turkmenistan gas to European countries via Azerbaijan and Turkey has become an issue on the world’s agenda. The SGC is set on the road to carry the Caspian gas reserves to Europe, and other reserves in the area will be incorporated to the SGC project. Turkmenistan becomes more important at this point, and the country aims to have closer relations with foreign markets. Home of the second biggest natural gas reserves in the world, Turkmenistan appears willing to play a key actor at the negotiation table as European countries try to save themselves from the Russian hegemony in energy.

However, Russia and Iran are exerting efforts to intercept the transfer of Turkmenistan natural gas to Europe. An important reason is that they are disturbed by the existence and rivalry of other source countries. In this direction, inclusion of Turkmenistan eventually in the Eurasian Economic Union established by Russia, Kazakhstan and Belarus, is a subject matter frequently being visited recently. Turkmenistan remains at arm’s length to the idea and time will tell whether or not Turkmenistan will join them.\(^4^6\)

Considering the developments in Ukraine and the attitude of European countries against Russia due to these developments, Russia’s political and military power and the unclear status of the Caspian Sea, Russia sees Turkmenistan as a rival; therefore, the probability of transferring the Turkmenistan natural gas to Europe diminishes. Besides, Iran does not like to see Turkmenistan as a competitor in the same region, and this may delay the transfer of Turkmenistan natural gas to Europe. In addition to all these, Turkmenistan is hesitant to export its natural gas to other countries due to troubles in the region and possible international reactions. In fact, Turkey, during the meeting of the Foreign Ministers of Turkey, Azerbaijan and Turkmenistan in Baku on May 26, 2014, offered the delivery of Turkmenistan natural gas through Turkey, but Turkmenistan turned down the offer and expressed its intention to focus on Asian countries in energy policy for now.\(^4^7\)

However, in the short term, Turkmenistan focuses on natural gas export to European coun-


tries through the SGC although it plans to export gas to neighboring Asian countries. The dispute with Azerbaijan over the continental shelf in the Caspian Sea and the natural gas agreement signed between Russia and China are likely to curb Turkmenistan’s transfer capacity in the future.48

Iran is another country that may provide support to the SGC. With its rich oil and natural gas reserves, Iran has managed to become a leading actor in the Middle East. Iranian energy sector has been followed by powerful actors in international markets for years. In Iran, natural resources in general and natural gas in particular have caused conflicts of interests; which therefore, have prevented economic development in the country. As the energy sector has started to gain ground, Iran has become a focal point of the struggle among the powerful States in competition with each other to expand their areas of influence.49

Not to mention, the impact of Iranian energy policies on global markets is crucial. The number one reason strengthening Iranian economy is nationalism which has emerged and escalated after Iranian territory turned into a battle ground in the 1st and 2nd World Wars. Nationalizations of foreign energy companies in particular by the leaders of those periods are the proofs of this. Consequently, Iran with a rather introverted economy has tried to become a super power within its own borders. On account of its oil and natural gas reserves, Iran has succeeded to have a say in the global energy markets without any involvement with the West. Today, Iran frequently makes headlines with new energy projects in particular. A Memorandum of Understanding was signed on November 17, 2008 between The Ministry of Energy and Natural Resources of Turkey and The Ministry of Oil of Islamic Republic of Iran for the transit pass of Iranian natural gas over Turkey. With Iran-Turkey-Europe Natural Gas Pipeline Project (ITE), Iran opens up to external markets by leaving its nationalist structure behind.50 Although they were controlled by foreign companies on and off, Iranian energy companies have had a nationalist structure in a general sense.

Among the most used energy sources, oil and natural gas have a tremendous effect on global markets, and this effect grows more every day in the face of increasing demands. Therefore, Iranian energy resources are being closely followed by the countries in need of natural gas. With its 33.8 trillion cubic meters of natural gas reserves, Iran ranks number one in the world although the country experienced increase in natural gas production and consumption between the years of 2002 and 2013 (Table 4).

As Iran explores new natural gas and oil fields, it is ranked 2nd in the Organization of Petroleum Exporting Countries (OPEC), which determines oil supply amounts and prices. While it had to keep pace with the capitalist system, Iran has made progress in opening up to external markets. In this sense, Iran can exports oil and natural gas to neighboring countries, but in general it has adopted a nationalist policy. Capitalist powers should reconsider their sanctions imposed on Iran. Investments of foreign energy companies and other states in Iran have been blocked for years in order for the U.S. to suppress Iranian energy sector through these embargos.51

The U.S., which has imposed sanctions against Iran with the pretext that the country uses nuclear energy to produce nuclear arms, has recently made contacts to lift the sanctions on Iran. Following this, Iran has changed its attitude towards the U.S. after a long period

of tension, and managed to be effective in the Middle East. Although it has been said that the possible rapprochement between Iran and the U.S. would negatively affect Turkey-Iran relations, Turkish Foreign Minister of the time Ahmet Davutoğlu invited his Iranian counterpart Mohammed Javad to Ankara on November 1, 2013 and underlined a positive course of bilateral relations. Therefore, it is crucial not to hamper Turkey-Iran relations, including both signed and prospective agreements in the field of economics in particular.

Despite the U.S. sanctions in effect against Iran, Turkey resumes natural gas trade with Iran and is willing to do so in the future as well. Turkey, aiming to have good foreign policy relations with the Iranian President Hassan Rouhani, plans to benefit from the SGC transecting Turkey. Although the distance from Azerbaijan to Europe is quite long, bridging Azerbaijan to Europe and delivering Azeri gas to Europe, Turkey intends to lower natural gas price with Iran as part of this project. Then, Turkey will be able to sit at the negotiation table with its neighbor Iran for a discount. Turkey, who already pays a high price for the Iranian gas, will be able to bargain with Iran for a lower price due to the competitive environment to be brought about by the SGC. Iran plans to have good connections with external markets and sell natural gas to Europe. This will have a positive effect on Turkey. Beyond being a bridge between the East and the West, Turkey also plans to purchase natural gas at a reasonable price. Through the SGC project, Turkey is likely to meet this objective.

**Kurdistan Regional Government (KRG)**

The Middle East has always been on the world agenda although the region has been the scene of many social and political conflicts for long years. One explanation for this may be the oil and natural gas reserves in the area. Iraq is one the legs of this trivet. In terms of energy sources, Iraq is ranked the fifth in the world with 150 billion

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**TABLE 4. IRAN OIL AND NATURAL GAS PRODUCTION AND CONSUMPTION AMOUNTS (2002-2013)**

<table>
<thead>
<tr>
<th>Years</th>
<th>Production (Million Ton)</th>
<th>Consumption (Million Ton)</th>
<th>Production (Billion M^3)</th>
<th>Consumption (Billion M^3)</th>
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<td>166,1</td>
<td>92,9</td>
<td>166,6</td>
<td>162,2</td>
</tr>
</tbody>
</table>


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barrels of oil reserve capacity, a quite important amount of which reside in the Kurdish region.

As known, newly explored natural gas sources are found in Polar Regions and quite close to the surface. In this sense, in the category of natural gas sources according to surface closeness, Iraq ranks the 12th (Graph 2). Quite significant amount is found in KRG and causes tension between the Central Iraqi Government and KRG. The area has plenty of untouched hydrocarbon reserves. Sources are both close to surface and may be extracted at a lower cost. Therefore, KRG wishes to use these advantages, having about 60 percent of a total of 3.6 trillion cubic meters of natural gas reserves. KRG means less cost and new sources for the EU and Turkey.

Despite the U.S. invasion in 2003, Iraq in the last 11 years has continuously increased trade relations with Turkey. Close relations Turkey established have positively affected bilateral relations in energy market. After Germany, Iraq is the second country Turkey exported to in 2013 data. Turkey is located in a strategical region in terms of energy sources. One of its neighbors rich in energy sources is KRG. Natural gas export from the Kurdish region in Iraq to new markets will make a great deal of contribution to lower Europe’s dependency on Russian gas.

After the U.S. invasion, Turkey’s relations with Iraq continued via the Baghdad administration until 2009. From this date on, political and commercial relations have been improved with KRG since the region gained constitutional self-government right. The Kurdish self-government could not bare the pressure by the Central Iraqi Government and started oil export of its own. Presently, the new administration in Arbil is the new addressee of Turkey in the years-old oil export via the Kirkuk-Yumurtalık pipeline. The region has gained strategical importance with the existence of natural gas reserves in addition to oil fields. Therefore, natural gas found in KRG rises

as a critical energy source to be benefited from and incorporated with the SGC.

On the other hand, the Central Government of Iraq has controlled energy sources in the country for a long time and made an attempt to control natural resources in the Kurdish region as well. The sides are separately involved in different oil and natural gas deals and operations. This, however, has created tension between the two as Kurdish Peshmerga have had hot encounters with the Iraqi forces under the former Prime Minister of Iraq Nouri al-Maliki.

The probability of a new pipeline transiting Turkey in regards to the sale of Region’s energy sources via Turkey to foreign markets is getting stronger with bilateral relations between Turkey and KRG. In this respect, transferring KRG natural gas to Europe through Turkey will not only provide security of energy supply but also format new political integration models of the countries.

On the other hand, only 0.8 billion cubic meters of total 3.6 trillion cubic meters of natural gas reserve has been extracted in Iraq according to 2012 data. Iraq fails to effectively use natural resources of its own.\textsuperscript{56} Disputes between the Central Iraqi Government and KRG caused trouble in oil and natural gas production, and a solution was expected with the new Iraqi Constitution passed in 2005. The Iraqi Constitution mandates appropriation of 83 percent of oil and natural gas income to the Baghdad government and 17 percent to Arbil.\textsuperscript{57}

However, KRG had to explore new horizons in the search, extraction and production of energy sources due to political disputes with the Central Iraqi Government and the delays in appropriated payments to KRG. The dependency of the EU countries on natural gas, economic growth-current deficit conundrum of Turkey\textsuperscript{58} and KRG’s need to find new markets have pushed the sides to take new steps in favor of the SGC project.

Along with the latest developments, Minister of Energy and Natural Resources of Turkey Taner Yıldız announced on May 22, 2014 the sale of oil transferred from KRG and stocked at Ceyhan to Europe.\textsuperscript{59} If this conjuncture is maintained, a similar announcement for natural gas delivery would not be a surprise. On the other hand, different social sects reacted differently to the situation. First of all, the Oil Ministry of Iraq warning all international companies about “illegally exporting the Iraqi oil”, criticized KRG as well. The Ministry announced to take a legal act against Turkey and BOTAŞ of Turkey for violation of the agreement signed between the two countries in 2010. The Court of Appeal, however, overruled the Ministry’s objection and ruled in favor of KRG on the sales of oil.

Amongst all, the U.S. made a criticism worth paying attention to. The U.S. asserted that both parties should not take any further steps without striking a deal on exporting the KRG oil from Turkey to foreign markets. KRG wishes to open up to the outside world through Turkey, and the administration’s relations with the Central Iraqi Government have started to change as soon as the oil export took off.\textsuperscript{60} In addition, international markets have been shocked by the Islamic State of Iraq and the Sham (ISIS), turning all political balances upside down and taking over mainly the Sunni populated regions such as Mosul and Tikrit in Iraq. The biggest trump card Iraq has in hand in the political arena is energy. However, the existence of another power in control of Iraqi oil and natural gas will increase costs in energy sales. As ISIS intimidates Kirkuk by attacking Mosul and Tiqrit, therefore exerting pressure over energy sources; balances may be changed in the region\textsuperscript{61} (Figure 6).

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\textsuperscript{56} “Doğalgaz Piyasası Sektör Raporu”, EPDK, (2013).
\textsuperscript{59} “Irak petrolünde sevkıyat başladı”, Sabah, May 23, 2014.
\textsuperscript{60} “Yüzde 17’lik paydan vazgeçmeye hazırız”, Anadolu Ajansı, January 16, 2014.
\textsuperscript{61} Erdal T. Karagöl, “Enerji Denkleminde Beklenmeyen Değişken: IŞİD” SETA Perspektif, no. 54 (June 2014).
The ISIS operation followed the reaction of the Central Iraqi Government against Turkey-KRG relations and oil delivery as part of their partnership in energy. Relations between Turkey and the Kurdish region in Iraq have taken a new turn after ISIS kidnapped the Turkish consulate personnel and truck drivers on June 11, 2014. Although the truck drivers were released on July 3, 2014, the consulate personnel are still in the hands of ISIS. This is a sign of ongoing crisis. If Turkey acts with foresight, makes accurate analyses and adjusts its strategies accordingly, the country will increase its influence during energy negotiations.
The ISIS’s taking over Mosul in particular and pressing upon the KRG borders will have an impact on the Turkey-KRG partnership. Increasing number of alternative energy sources, and diversification of energy channels despite political and economic turmoils in the region are main factors in Turkey-KRG relations. Taking over Kirkuk, clashes between the Kurdish Peshmerga and ISIS militants still continue. In this context, starting oil export through the Kirkuk-Yumurtaş pipeline, KRG will fight against ISIS. KRG natural gas to be transferred via Turkey as part of the SGC project, will inevitably change power balances in the energy game.

On the other hand, Israel has recently made headlines in the energy field. As a matter of fact, Israel consumes 289,000 barrels per day of oil and 2.6 billion cubic meters of natural gas yearly. However, the newly explored reserves in the Leviathan field, roughly 135 kilometers off the coast of Israel, are estimated to have 3.4 trillion cubic meters of natural gas. Among the partners involved in the operations of Leviathan natural gas reserves, American energy company Noble Energy takes the lead with 30 percent share, and Woodside Petroleum follows with 25 percent share (Graph 3). The natural gas explored in this particular field will not only serve Israel but also Turkey, Egypt, The Republic of Cyprus, Turkish Republic of Northern Cyprus, Syria, and Greece. Therefore, it is predicted that the Leviathan gas field will be on the energy agendas of the countries.

The natural gas market forces Egypt, Syria, Turkey, Greece and Israel to act together due to their common interests. The biggest obstacle in front of these countries and of smooth operations and progress in the area are the years-old conflicts in the region among themselves. Therefore, the uncertainty in which route to use for the transfer of the Eastern Mediterranean natural gas to Europe, poses some risks on relations between the regional and European countries. The Israeli offensive in Gaza in 2008, the Mavi Marmara incident, the Gaza Assault in 2014

### TABLE 5. EAST MEDITERRANEAN COUNTRIES OIL AND NATURAL GAS DISTRIBUTION IN 2013

<table>
<thead>
<tr>
<th>Country</th>
<th>Oil Reserve (Billion barrels)</th>
<th>Oil Production (Barrels/Day)</th>
<th>Oil Consumption (Barrels/Day)</th>
<th>Natural Gas Reserve (Trillion m³)</th>
<th>Natural Gas Production (Billion m³)</th>
<th>Natural Gas Consumption (Billion m³/Year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Egypt</td>
<td>3.9</td>
<td>714,000</td>
<td>757,000</td>
<td>1.8</td>
<td>56.1</td>
<td>51.4</td>
</tr>
<tr>
<td>Syria</td>
<td>2.5</td>
<td>56,000</td>
<td>---</td>
<td>0.3</td>
<td>4.5</td>
<td>---</td>
</tr>
<tr>
<td>Turkey</td>
<td>---</td>
<td>---</td>
<td>714,000</td>
<td>---</td>
<td>---</td>
<td>45.6</td>
</tr>
<tr>
<td>Greece</td>
<td>---</td>
<td>---</td>
<td>287,000</td>
<td>---</td>
<td>---</td>
<td>3.6</td>
</tr>
</tbody>
</table>

Source: British Petroleum Statistical Review, 2014


### Eastern Mediterranean

Due to its geographical location, the Eastern Mediterranean region is populated with supplier and buyer countries. For Europe in search of different natural gas sources, Eastern Mediterranean is an alternative region. When oil and natural gas reserves, productions and consumptions of Eastern Mediterranean countries are examined, Egypt and Syria come to the foreground as oil and natural gas producers versus Turkey and Greece as consumers (Table 5). Egypt and Syria, as the key countries in the Eastern Mediterranean in terms of natural gas production and consumption, cannot effectively use these sources due to the on-going war in Syria.
and elbow-touch between the American Noble Energy and South Cyprus are only a few of the sensitivities. The Cyprus question and the Mavi Marmara incidents still remain unresolved.\textsuperscript{64} Besides, referring to the Israeli attacks against Gaza in 2008 and 2014, the Turkish Energy Minister Yıldız announced on August 4, 2014 that unless sustainable peace is maintained in the solution of the Israeli-Palestinian conflict, Turkey will not allow the use of its territory for any Israeli project involving natural gas transfer from the Eastern Mediterranean energy sources.\textsuperscript{65} Being perfectly aware of these risks, South Cyprus and Israel have started the construction of Liquid Natural Gas (LNG) facilities to deliver natural gas to Europe.\textsuperscript{66} Therefore, they will ensure security of energy supply and break the Russian monopoly by using Egypt’s LNG facilities, their own LNG facilities and another pipeline planned to carry the Eastern Mediterranean natural gas to Europe.

The Eastern Mediterranean region lies between the energy suppliers countries of Russia, the Middle East, and North Africa and the energy buyer countries of the EU, China and India. For that matter, many obstacles in front of the energy activities are not surprising. Although it appears to be impossible in the short term, the steps to be taken for natural gas trading and any initiatives backing the SGC will contribute to the regional economy. In this process, Turkey must lower the current deficit, meet internal energy demands and maintain economic growth.\textsuperscript{67}

THE EU, TURKEY AND THE SGC

Russia’s use of EU countries energy dependency on its gas as a trump card, rising natural gas import and cost have forced Europe to concentrate on diversification of energy supplies. The EU countries meet 79 percent of their natural gas needs from Russia, Norway and Algeria; therefore, any political problem with any of these suppliers will cause energy problems for the EU states as well (Graph4).

Russia has the world’s second largest natural gas reserves after Iran. In short, the EU countries seek new alternatives in the face of the Russian-Ukrainian dispute and the Russian threat against Ukraine to cut the gas flow in the absence of an agreement. On the other hand, the EU states’ dependency on Russian gas appears to continue because of the decreasing natural gas production in the EU countries (Graph5).

However, the EU should not be considered as a whole in the subject of dependency on Russia. As Bulgaria, Lithuania, Finland, Estonia, Latvia and the Czech Republic depend on Russia 100 percent in natural gas, Spain does not need Russian gas. Big European economies, such as Germany, Britain and France, benefit from the Russian natural gas although

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\textsuperscript{64} “Afrodit” sayesinde mizakerre”, Aljazeera, February 10, 2014.
\textsuperscript{65} “Yıldız: İsrail gazı Türkiye’den geçemez”, cnbc-e.com, August 4, 2014.
\textsuperscript{66} “Doğalgaz Piyasası Sektör Raporu”, EPDK, 2013.
\textsuperscript{67} “İsrail Güney Kıbrıs’ın hamisi olmak istiyor”, Yeni Şafak, May 28, 2014.
not in high amounts. These differences cause failure among the EU members to develop a common policy against Russia due to varying interests (Graph 6).

Formed by common interests, the EU countries have differences of opinion when it comes to purchasing natural gas from Russia. Still, the total cost of export to Russia in 2013 approaches 130 billion euros. It is also known that almost half of the natural gas bought from Russia meets 27 percent of the total energy consumption in the EU. Besides, Europe, with its 71 percent share, tops the list of countries to which Russia exports natural gas.68

Despite all these, it is a matter of question whether or not Russia and the EU will gather around common interests considering the Russian foreign policy in Europe and the latest Russia-Ukraine crisis. On the other hand, the EU sanctions imposed on Russian companies bring the EU countries closer. Europe's success in search of alternative energy sources means lower natural gas demand from Russia and less dependency on Russian gas. Russia; earning 200 billion dollars only from oil and natural gas in 2006, and 400 billion dollars from exports in 201269, will obviously be negatively affected if Europe finds new energy sources. In this case, both economic and political roles of the SGC will not only change the tree-party structure of Europe, Turkey and Russia, but also alter the world balance. On the other hand, Russia also seeks new routes, speeding up contacts with China, Japan and South Korea.

Elsewhere in Turkey, natural gas has become a key energy source. Turkey, sitting on the natural gas route from Azerbaijan to Europe, does not wish to be regarded as “a transit country” like Ukraine. Turkey, also as a natural gas consumer country, aims to lower the cost originating from natural gas price which will increase when TANAP becomes operational.  


Inauguration of TANAP and TAP, planned to transfer Azeri natural gas found in the Caspian Region to Europe via Turkey, is important in terms of supply security both for Turkey and Europe. As a transit country in energy and a bridge between the East with the West, Turkey has been presented with golden opportunities by these projects to become an energy hub and an actor in the region.

Within this scope, it is crucially important to transfer natural gas to Europe via Turkey as far as regional and global integration is concerned. Turkey aims to become a key transition point as it was under the name of “The Silk Way” in the...
past. All these experiences show how eager Turkey is to become an energy hub by taking steps so as to become a key actor in the energy field.

CONCLUSION
Today, the global energy market is defined by the countries with energy surplus versus with energy deficit. Tendency towards renewable energy sources has increased; however, natural gas market still ranks number one in terms of the area of usage. Russia, with the world’s second largest natural gas reserves, does not hesitate to exploit its energy power as a trump card in the international arena; and energy dependency on Russia poses a great deal of threat for Europe.

Russia has rich energy sources; therefore, increasing natural gas demands in developed and developing countries strengthens its hand in politics and economy. Ukraine, as a natural gas terminal between Europe and Russia, is shown the Russian energy card every time the two have disputes. The concept of “energy supply security” is used in conjunction with oil crises. This consolidates Russian power in energy as the country already enjoys the role of “big brother” in the region. Ukraine, on the other hand, expresses discontent with Russia’s attitude. They have even engaged in many conflicts for this reason.

Ukraine appears to lose the advantage of being a transit country due to the latest developments. The EU countries that will be negatively affected by the fragile relation between Russia and Ukraine see the SGC as a savior. The SGC has a capacity to provide global integration, change power balances and cause new alliances among countries in the long term. The SGC is of critical importance not only for the EU countries in need of natural gas but also for Turkey due to the country’s geopolitical position; therefore, it is a project that may be frequently heard of in energy-related discussions from now on. Iran, Turkmenistan, KRG and the East Mediterranean are kept in mind for a possible integration with the SGC; this may easily take the matter of energy supplies to the top of the world’s agenda.

Energy security emerges as a critical issue together with energy wars in international literature, and is important for leading countries in the field of energy. Energy sources to meet energy needs, low cost of energy, diversification of energy supplies, sustainability of supplies, and security of energy trading are vital points in the issue of energy. Increasing demands for energy sources have raised the security of energy supplies to a strategical level in the eyes of countries. In this scope, the key role of economics and therefore energy in international affairs should not be neglected. Turkey should claim its seat at the table when it comes to energy supply security.

For this purpose:
Investments by both supplier and buyer countries in the energy market are of importance considering the scarcity of energy sources and their localization in certain regions. With the arrival of globalization, the SGC project is planned to affect change in energy balances, a shift from the West to the East.

As the EU dependency on Russian gas gradually increases, they seek new alternatives. With this project, Europe will have access to Azeri gas today and to other Asian and Middle Eastern sources in the future insofar as circumstances permit.

This project is vital for Turkey as the first leg of the SGC project and a transit country between the East and the West. Positive figures in its economic performance recently have indicated that Turkey develops faster than many European and Middle Eastern countries. With this project, Turkey desires to lower its energy cost as well. In this frame, Turkey should decide very carefully in

making investments and always be aware of the significance of its geostategical position.

The SGC project will bring plenty of advantages to Azerbaijan as the source country, and to the EU as the buyer countries, and to Turkey as the transit country. The SGC will be the first energy pipeline connecting the Caspian region to Europe, and the first energy corridor between the East and the West. TANAP is the key component of this corridor and the SGC project. TAP is the other ring to carry the Shah Deniz natural gas to Europe through the Western border of Turkey. Therefore, TANAP and TAP have become a window for the Asian and Middle Eastern countries’ opening to the West.

First Azerbaijan and then Turkmenistan, Iran, KRG and the Eastern Mediterranean, respectively, will look through this window to be opened by the SGC project. Europe plans to benefit from the sources provided by these countries via the SGC. The European countries aim to have expanded maneuverability space against Russia both politically and economically - if not in the short term, in the long term.

Kurdish oil passing through Turkish territory to Europe and Kurdish natural gas similarly to be sold to the world will be a strategical step for Turkey as part of the SGC project. The KRG natural gas is crucial for Turkey as the country plans to diversify its energy sources.

Before the ISIS attacks, Turkey and KRG had a deal for the transfer of two million barrels of oil per day to the world markets and at least 10 billion cubic meters of natural gas export to Turkey. However, conditions have changed. ISIS invaded Mosul, but KRG took over Kirkuk and controls the city presently. Therefore, both KRG and Turkey will have tremendous acquisitions owing to the transfer of Kurdish oil and natural gas to foreign markets via Turkey.

On the other hand, the Eastern Mediterranean taking its place among both suppliers and buyers due to its geographical position, appears to be a perfect candidate for Europe in search of alternative energy sources. Besides, the latest Gaza assault by Israel and the Mavi Marmara incident still unresolved have already ended any possible energy cooperation between Turkey and Israel. Turkmenistan, on the other side, prioritizes Asian markets, but closely follows Turkey. In the light of bilateral relations both countries wish to improve, Turkmenistan is likely be involved in the SGC project as well.

With its many oil and natural gas reserves, Iran has already become a key actor in the Middle East and may provide support to the SGC project. Despite the U.S. embargo on Iran, Turkey continues natural gas trade with this country and wishes to maintain energy cooperation. In this sense, Iran needs new markets to sell its energy sources and wishes to have better relations with foreign markets. Therefore, the SGC project presents a good opportunity for Iran as well.

Turkey makes rapid progress to become an energy hub. However, Turkey will not be “a new Ukraine” for the EU and plans to come ahead, along with benefiting as a bridging country, also as a consumer country. Turkey is taking steps with the 2023 objectives in mind to become a key actor in the energy sector in the future.

However, Turkish territory should not only be used as a transit hub; but at the same time, Turkey should be involved in energy trading, BOTAS and TPAO as state-owned energy companies of Turkey should work together in search, exploration and production of sources as well as pipeline operations. In this sense, it would be better for both companies to seek a structure, similar to that of Gazprom or SOCAR, and be united under a single roof and participate in energy negotiations on behalf of Turkey.

Last but not the least, establishment of the Energy Exchange in Turkey and its active involvement in energy markets will also make Turkey an attractive country in the field of energy.
In the 21st century, natural gas has become a strategic source, one of the most discussed and a “top of the agenda” item with its advantages and risks. Increasing cost and import of natural gas to an unsustainable level in the EU countries have brought the issue of energy supply security into the European agenda, as Russia exploits the dependency of Europe on Russian natural gas. In short, the EU countries seek new alternatives in the face of the Russian – Ukrainian dispute and Russian threat against Ukraine to cut the gas flow in the absence of an agreement.

South Gas Corridor (SGC) is gaining in importance day by day for EU, heading towards different supplies, and for Turkey who aims to take more effective role in the new market. Inauguration of TANAP and TAP, planned to transfer Azeri natural gas found in the Caspian Region to Europe via Turkey, is important in terms of supply security both for Turkey and Europe. As a transit country in energy and a bridge between the East with the West, Turkey has been presented with golden opportunities by these projects to become an energy hub and an actor in the region.

This analysis focuses on the concept of energy supply security in addition to the functions and features of the SGC project that have been developed to provide energy supply security with Turkmenistan, Iran, KRG, and the East Mediterranean as examples of countries supporting the SGC project. In addition to the analysis of the political and economic implications of the SGC project through the perspectives of the EU countries and Turkey, there will be some suggestions about the same topic.