Energy Strategy Of Turkey And Its Role In The Region

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Abstract

America and Europe gradually rely on natural gas and oil imports from the Middle East, the Caspian Sea, and Russia. Turkey is positioned to play an increasingly prominent role as a global energy hub in the years ahead, owing to its central location between consumer and producing countries. Turkey has energy agreements with Russia, Syria, Qatar, and the United Arab Emirates. Turkey is diversifying its energy supply as a result of these agreements. According to some observers, Turkey is aiming to develop its energy reliance. In contrast, others say the government attempts to establish an energy web to gain from its energy security rather than relying on others. With the objective of becoming an energy hub, this paper will explore how Turkey's energy strategy affects its own and regional energy security reliance or interdependence.

Keywords: Turkey, Europe, Energy, Strategy, and Security.

Introduction

Turkey's domestic energy consumption climbs by an average of 4.3 percent yearly. Turkey has sought energy from various sources and suppliers to expand demand and diversify its energy supply. The Gulf, the Caspian Sea Basin, and Russia contain around 71.8 percent of the world's known oil and natural gas reserves (Mehmet and Danilla, 2009). Turkey has a border with energy-producing states and energy-consuming Europe, making it an excellent position for both sides.

Turkey seeks to consolidate its position as an essential link in the supply chain for ensuring energy security for the source countries and the markets they service, owing to its proximity to the Caspian Basin, Russia, and the Middle East as Europe. Turkey's energy strategy, which intends to become a major energy hub via pipeline construction, has increased after Russia's aggressive energy policy and the Georgian-Ukraine crises (Alex, 2008). Russian energy policy, instability in Iraq, tensions between

America and Iran, and the Israeli-Palestinian conflict are further sources of concern for western energy security (Tuncay, 2009). Turkey's security requires maintaining cordial relations with all of its neighbors and diversifying its energy supply due to its placement in this region. Turkey's status as a trustworthy source of energy security is largely due to the country's strategy of domestic and international peace.

Turkey's geographic position enables it to act as a transit nation while offering a range of energy alternatives. Regarding establishing a solid alternative supply chain and gaining access to global markets, Turkey seems to be the greatest choice for Europe and its suppliers (Katinka, 2007). Despite American opposition, pipelines from Turkey to the Middle East, Russia, Iran, and Europe have developed strong linkages. According to this report, Turkey's energy strategy of becoming a hub for consumers and suppliers contributes to the region's energy security by integrating pipelines from North to South and East to West. Despite the ISA (Iran Sanctions Act), Turkey's energy policy toward Russia and Iran contributes to regional stability. It provides Turkey with taxes and the flow of gas and oil over the Turkish border.

Research Question

To what degree does Turkey's ambition to become an energy hub directly affect the country and region's reliance on or dependent on energy security?

Problem Statement and Hypothesis

As a consequence of Iran's intentions to develop nuclear weapons, America has used the Iran Sanctions Act to isolate the country from international operations. While including Iran in energy agreements has several advantages, it also has several disadvantages. Iran's geostrategic location between Iraq, Turkey, Oman, Central Asia, the Caucasus Mountain Range, the Caspian Sea, and the Pakistan-Afghanistan borderlands

may enable it to extract gas and oil from the Caspian Basin more cheaply and efficiently than it already does. On the other side, the US is opposed to this because of its policy of isolation with Iran (Shah, 2002).

Another point of contention is Iraq's security condition. Turks want a stable and secure Iraq that is not a haven for terrorists (Brian, 2009). The PKK, a terrorist organization, operating in northern Iraq, has suspicions about the Kurdish Regional Government's intentions to achieve greater autonomy and independence from Iraq, conflicts between ethnic and religious groups, and the frequency and severity of attacks on Iraqi oil pipelines, oil installations, and oil personnel are the primary threats to Iraq's stability that could disrupt gas and oil flow through the country's pipelines. Consequently, Turkey is promoting business with Iraq to bolster bilateral relations. Turkey is Iraq's principal economic partner and the single conduit for exporting Iraq's gas and oil to the European market (Ibrahim, 2007). Turkey's relationships with its neighbors are at the root of all the aforementioned concerns. On the other hand, Turkey is grappling with internal energy security challenges.

Turkey's energy policy is predicated on the premise that it is increasing its reliance on other countries via its energy projects with Iran, Syria, Azerbaijan, Qatar, and Russia (Mahir, 2009). According to this idea, Turkey has grown too dependent on its energy suppliers, mainly Russia, due to its energy treaties. On the other hand, Turkey must solve its domestic concerns. It implies that Turkey's energy source must be diversified. Consequently, the only way to do this is to use the energy resources available in other countries. Due to its landlocked position, the Caspian Basin, heavily influenced by Russian foreign policy, is the best option for reliable transshipment of gas and oil from the Caspian area to the global market (Chen, 2009). As a significant energy consumer and transit country, Turkey and the energy-generating regions have a common interest in this regard. As a consequence, a strong feeling of mutuality exists.

Literature Review

Energy security is defined as the availability of cost-effective, reliable, and ample sources of gas and oil. According to the International Energy Agency, energy security is defined as a continuous supply of energy at a fair cost while simultaneously considering environmental factors (Jan and David, 2005). One of its two axes represent the views of exporting and importing nations. For an exporting country (producer), energy security is defined by access to markets and demand security; for an importing country (consumer), energy security is defined by access to sources and supply security. Turkey is critical for the transportation of energy from consumers to producers. Turkey's natural position as an energy hub, according to CER director Katinka Barysch, benefits Europe's security of supply due to its proximity to resource-rich nations (Katinka, 2007). Turkey acts as an energy route between the Central Asian and Caspian areas and Europe. Turkey's energy difficulties extend beyond pipeline politics. Turkey's energy security and its position as an energy bridge are under threat due to a lack of indigenous energy supplies, high electricity tariffs, and a large reliance on Russian gas.

Turkish Prime Minister Ahmet Davutoglu stated that Turkey's security interests are contingent on correctly balancing its position as an energy transit nation. He argues that energy transit via the country is necessary given Turkey's geographical position and domestic policies. America, Iran, and Russia are all interested in the smooth operation of gas and oil pipelines crossing Turkish territory. As a consequence, Turkish experts seek to unify all of these interests. It is an objective judgment, not an ideological one. Turkey's relations with Iran and its efforts to retain its understanding with Russia are based on a shared objective. Energy cooperation with

America will be maintained via coordinated Trans-Caspian efforts and a global economic strategy for energy security (Ahmet, 2008).

Turkey is a significant player in the oil route's north-south corridor, owing to the energy flow that passes via the Turkish straits. Turkey's status as an east-west energy corridor is bolstered by the BTC oil route and the BTE gas pipeline. However, as Turkey's prominence as an energy sector player increases, so does the pressure on Turkey. Turkish diplomacy must achieve a balance between regional hegemony and supremacy. Turkey's energy strategy and the interests of hegemonic powers such as Russia and America might result in a schism between them. America and Russia were displeased with Turkey's backing of Georgia during the 2008 Georgian-Russian War (Tuncay, 2009).

Turkish diplomacy toward the Caucasus and Central Asia has taken on a new dimension due to the Caspian Basin's emergence as a significant oil supplier. Although the Caspian oil reserves were first overstated, their significance has not lessened (Stephen and Ian, 2003). Due to the landlocked Caspian region, new pipelines are required to connect the energy to global markets. Turkey is the greatest option for Caucasian and Central Asian states seeking to avoid Russian influence on the global market. For Turkey, the Caspian Basin has three primary aims: lower Turkey's reliance on Middle Eastern oil and Russian gas while also employing less developed eastern Turkey (Dietrich and Wolfango, 2001). Turkey's engagement in the Caspian is mostly political by America, the EU, and Russia, even though Turkey has economic interests in the area. The Caspian Basin and Turkey are crucial components of America's plan to expand Western influence, oppose Russian influence in Central Asia, and sustain America's containment policy against Iran. America seeks to ensure pipeline security by reducing Russian and Iranian control over the region's gas and oil production, exploration, and pipeline routes. Turkey's energy

ambitions are demonstrated by agreements with EU member states on the Nabucco gas pipeline, with Russia on the competing South Stream project, Qatar on liquefied gas and a potential pipeline, Azerbaijan on gas supplies for its isolated Nakhchivan autonomous region, and Syria on gas imports (Tuncay, 2009). According to Mahir Zeynalov, a well-known Turkish newspaper writer, Turkey is the World's Largest Energy Hub (Stephen, 2007).

Turkey is rapidly emerging as a major global energy crossroads as a result of its pipelines, which connect North and South as well as East and West:

- The Baku-Tbilisi-Ceyhan (BTC) project
- The Kirkuk-Ceyhan oil pipeline
- The South Caucasus pipelines
- The Turkey-Greece-Italy gas pipeline
- The Nabucco gas pipeline
- The Trans-Caspian pipelines

Turkey's energy policy is mostly determined by domestic demand. Despite its efforts, Turkey's energy production remains insufficient to fulfil demand. Turkey needs a constant supply of energy to sustain its fast-economic expansion. Due to the country's lack of proven local gas and oil reserves, it must majorly boost energy imports while simultaneously developing domestic resources and increasing energy efficiency. Turkey's energy requirements are satisfied by signing energy deals with Iran, Russia, the Caspian Sea Basin nations, and the Middle East. At times, it is comparable to Europe and America. Regarding energy, Iran and Russia are a source of dispute for America and its European allies, but Turkey must grow its energy output to meet domestic demand (Mehmet, 2007).

Methodology

This article employs qualitative research to examine Turkey's energy security plan and the region's security. To begin, this paper examines Turkey's energy system and the country's attempts to meet its needs. Following that, it

examines the impact of their initiatives on the region. Finally, this paper examines the problems inherent in functioning as an energy node or corridor.

Outlook of Turkey Energy

Given Turkey's geographic placement at the crossroads of Europe and Asia, it's unsurprising that the country's energy future seems to be bright. Turkey has been a NATO member since 1952, a significant member of the Group of Twenty, the Black Sea Economic Cooperation Organization, the International Energy Agency, and a member of the Organization for Economic Co-operation and Development. Turkey has made tremendous economic and social improvement since 2001, with increased employment and wages putting the country in the World Bank's upper-middle-income category. Turkey's GDP per capital almost tripled for the first time since 2001, increasing from USD 13235 to USD 24811. Turkey was the world's 19thlargest economy in nominal GDP terms in 2018 (World Bank, 2019a). However, in 2018, the devaluation of the Turkish lira triggered a currency and debt crisis in the country, resulting in high inflation, increasing borrowing rates, and a surge in loan defaults. In 2018, the annual GDP growth rate slowed to 2.8 percent from 7.5 percent in 2017 (World Bank, 2019b).

Turkey's agricultural-based economy is being phased out in favor of an industrial and service-based economy. Agriculture and industry employed 15% and 18% of total workers in 2019. Germany is the world's largest commercial partner, accounting for more than half of worldwide business. China and Russia are the two largest importers. At the same time, significant trade happens with the Middle East, particularly with Iran and Iraq (Turkish Statistical Institute, 2018). Turkey has abundant natural resources, yet few are found in large amounts. Turkey is the only neighboring country with significant coal reserves, apart from Iran. Despite

its continuous dependence on imported gas and oil, Turkey is striving to diversify its energy supply by cooperating with more nations and increasing its reliance on indigenous resources such as renewables. Turkey has long aspired to become a major energy trade center connecting Europe, the Middle East, Russia, and Central Asia. It is because of Turkey's geopolitical importance.

Turkey's 2018 GHG emissions, which reached 520.9 million metric tons of CO2 equivalent, were accounted for by 72% by energy use. Industrial processes accounted for 13% of emissions, followed by agriculture (12%) and waste management (3%). Turkey wants to reduce GHG emissions by up to 21% from business by 2030, as part of its Intended Nationally Determined Contribution (INDC) submitted to the United Nations Framework Convention on Climate Change. Turkey's economy is expected to continue growing due to population growth and economic development, resulting in a rise in energy consumption and greenhouse emissions. On the other hand, Turkey can consider expanding its economy without raising GHG emissions. Turkey wants to increase renewable energy capacity while lowering energy intensity to satisfy its INDC targets.

Renewable energy consumption in Turkey has increased in recent decades, owing mostly to the rise of solar, wind, and hydro energy. In 2018, renewable energy accounted for 60% of total energy consumption. Most of the heat was generated by biofuels and geothermal, but the sun also played a significant role. Biofuels, a kind of renewable energy, account for a negligible portion of transportation fuels. In Turkey, the Renewable Energy Support Mechanism provides a stable return on renewable energy supplied via a feed-in tariff system for ten years. Additional premiums are offered for the program's usage of locally constructed renewable energy-producing equipment. Recently, the government launched competitive auctions for large-scale renewable energy projects and introduced a new payment mechanism for distributed solar systems. Turkey's current support system may be adjusted to improve cost efficiency and expand the use of renewable energy beyond electricity to other sectors such as heating and transportation, which have had slower development (Fatit, 2021).

Turkey as an Energy Hub

Turkey aspires to become a regional "hub," acquiring increased relevance as a crossroads for electricity, gas, and oil pipelines and leveraging this position for foreign and security policy purposes. They are not happy to act as a simple "bridge" for energy to pass through. As an energy hub, Turkey will be able to import oil and gas from a range of countries, ensuring Turkey's energy security first and foremost. Additionally, cross-border pipeline projects may benefit Turkey's economy by producing new jobs, transit fees, and new investment along pipeline lines. Turkish dominance and leverage over European states and energy producers in the Caspian Sea, Middle East, and the Eastern Mediterranean will grow due to Turkey's emergence as a hub. According to the MENR Strategic Plan 2015-2019, integration with external energy markets might make the country a more active participant in these markets. Turkey's primary objective is to expand its regional influence by increasing its engagement in pipeline projects and establishing itself as an energy hub. According to Balal, cited in Akramova (2014), Turkey regards its energy potential as a critical weapon for reaffirming its geopolitical position in the area.

Consequently, Turkish officials are devoted to establishing the country as an energy leader worldwide. The government intends to boost oil carried across its territory to strengthen its position as an energy corridor, with a goal of 6–7% of world demand. Ceyhan Terminal is essential to Turkey's goal to develop into an energy hub. Turkey's MENR intends to transform Ceyhan into a major energy center by

constructing refineries, gas liquefaction units, LNG terminals, petrochemical facilities, and LNG trains. Ceyhan's role might increase to mirror Rotterdam's if the Mediterranean's LNG, gas, and oil marine transportation industries can be sustained by a regional oil price-setting mechanism (Bilgin 2015). Gas and Oil are only two commodities the country aims to export through the Turkish corridor to European markets. It participates in several transnational gas pipeline projects, including the Turkish Stream, the Turkey-Greece-Italy Interconnector, and the Iran-Turkey Natural Gas Pipeline.

Turkey has a variety of assets that might help it develop into a major energy hub. The first is that it is ideally located between Europe's energy consumers and the energy producers of Russia, the Middle East, and Eurasia. Additionally, Turkey's and the EU's energy policies are complementary. Both nations are heavily reliant on Russian gas and are attempting to diversify their sources of supply. In this regard, the geopolitical context favors Turkey's goal since the Russia and Ukraine crises have prompted the EU to intensify its attempts to diversify its gas suppliers to reduce its reliance on Russia. Due to the Russian-Ukrainian conflict, Moscow has considered Turkey a possible transit country for Ukrainian goods. It has also aided Turkey's future aspirations to become an energy hub. Energy producers in the Middle East, the Eastern Mediterranean, and the Caspian Sea want to export their resources to Europe and Turkey through Turkish borders. Turkish pipelines link Europe to the rest of the globe and vice versa (Tokus, 2010). However, several steps must be taken for the country to become an energy center in the future. Apart from its massive measures, the government must first liberalize the market, including clear trade legislation and functional trading platforms (Haizmann 2017). Third-party access to the gas market cannot be enhanced until the BOTAS network code is deployed efficiently and until trading and transmission operations are decoupled. Export and import restrictions are eliminated. A competition authority's role is very clear: to supervise the transfer of BOTAS. In this respect, an independent system operator must be built. Before creating a gas trading center, it is necessary to address the problem of cross-subsidies to develop a cost-based pricing system (Winrow 2014).

Second, Turkey must develop the required physical infrastructure to become a commercial hub where consumers and suppliers engage in competitive, transparent, and open markets. A comprehensive network of pipelines, receiving terminals, refineries, and storage facilities is essential to minimize bottlenecks. Turkey must establish additional gas and oil pipelines to become an energy hub. In this regard, the Caspian Sea region's gas resources are critical. The development of proposed gas pipelines across Turkey is contingent on several regional circumstances. Russia's goal to minimize competition to keep its share of the European gas market, the strength of any European gas demand rebound, and China's rising interest in accessing gas supplies from the Caspian and Central Asia are the primary factors influencing transit routes provided (Weiss, 2012). Turkey's ability to become an energy hub is contingent on the contractual terms of its gas contracts with providing nations, including whether the country may re-export purchased gas, the magnitude of its energy requirement, the proportion of imported gas and oil used to meet that demand, and the state of the country's energy mix.

Turkey's stated objective of establishing an energy bridge connecting East and West and North and South remains a mystery. Karbuz and Sanli (2010) argue that Turkey will never be a significant gas hub due to a lack of requirements and conditions. Similarly, Winrow (2014) expects that Turkey will not soon become a significant commercial natural gas trading center. Similarly, Tagliapietra (2014) asserts that Turkey is unlikely to develop into a regional natural gas

hub in the medium term (i.e., between 2020 and 2025). According to him, it is improbable that more than 10 Bcm per year will flow from Turkey to the EU during this period, based on the SGC's data. He says that Turkey's long-term prospects as a gas hub are quite questionable. According to Rzayeva, there is no doubt that up to 100 billion cubic meters of gas per year might be delivered through Turkey to Europe in the long term after new LNG facilities and storage capacity expansions are built (Austvik and Rzayeva 2017).

Energy Security of Turkey

Turkey's primary policy priority is to ensure energy supply and fulfill expanding demand to keep up with the country's growing population. Turkey's economic interests pressure government to move toward a more sustainable energy system. Among other things, fossil fuel usage must be lowered, markets made more competitive, and individuals be given more energy choices. Turkey will benefit from investing in renewable energy technology and manufacturing in the long term. Energy security and the country's bargaining position with suppliers will be strengthened, the current account deficit and inflationary pressures will be alleviated, high-tech sectors will be increased, and economic activity and jobs will be generated.

Turkey's primary energy output exceeded 100 million tons of oil equivalent (Mtoe) per year for the first time since 2007. While Turkey's total energy consumption is lower than that of other members of the Organization for Economic Cooperation and Development (OECD) and the Group of Twenty (G-20), it has the fastest-growing market in terms of demand (U.S. Energy Information Administration, 2019). Since the turn of the century, energy consumption has increased at a pace of 4–5% each year, with an average yearly rise of 7% (International Energy Agency, 2017). Global electricity consumption will reach between 440 and 550 terawatt-hours by

2030. Turkey imports almost three-quarters of its total supply, including virtually all of its coal, crude oil, and natural gas. The natural gas supply chain uses 30% of the country's primary energy source. Turkey used roughly 45 billion cubic meters of gas annually in 2015, more than tripling in the recent decade. Turkey imports crude oil from Iran, Russia, and Iraq for more than 20% of its primary energy source. Turkey's connections with Russia and Iran are fraught with political risks and a degree of political vulnerabilityconcerns shared by NATO and EU countries. Turkey's strong energy and business linkages with its bigger neighbors are contingent on political stability on both sides. Coal continues to account for 27% of Turkey's primary energy supply, and hard coal imports have surged by 200 percent over the previous decade. With small hard coal resources in Zonguldak Province and large lignite distribution across the country, coal is Turkey's only significant fossil fuel source (Alan, 2015).

Turkey's economy is vulnerable to fluctuating global energy prices due to its reliance on imports from major fossil fuel markets, which notably adds to the current account deficit. Turkey's energy import bills were US\$53 billion in 2014, at the peak of energy prices. Global energy costs fell by US\$36 billion in 2017, reducing import expenditures (World Bank Group, 2018). The import bill is likely to continue growing due to recent events, forecasts for 2018, and increased energy use in Turkey and abroad. Turkey's current account deficit was \$53.4 billion between 2017 and 2018, with energy imports accounting for the bulk of the gap (Trading Economics, 2018).

Consequently, Turkey's primary objective is to transition from importing fossil fuels to creating renewable energy. Turkey's political reliance on energy exporters such as Russia and Iran may be reduced. Turkey can be protected against price shocks and variable energy prices by prioritizing the development of indigenous renewable energy

sources. For instance, Turkey generated 18.8 TWh of wind and solar energy in 2017. Turkey could save more than \$1 billion in energy imports if it increased renewable energy output to replace electricity generated by imported fossil fuels. Turkey's current reliance on imported energy equipment and supplies has aggravated the country's current account imbalance. Despite Turkey's typically solid manufacturing sector, net imports of energy supply equipment were US\$2.8 billion in 2015 or 1% of overall net trade imports. Imports of renewable energy equipment have been increasing at a rate of 5% per year in recent years, which has contributed. Italy, Germany, and China account for more than half of the imports. Turkish wind turbines export US\$1.1 billion annually; on the other hand, Turkish solar and coal-fired power production equipment imports totaled US\$4.2 billion in 2015 (Economic Policy Research Foundation of Turkey, 2017).

Energy Security of Europe-Turkey

Turkey has worked diligently to attain energy security as a crossroads between Europe and Asia. Russia has long participated significantly in Eurasia's geopolitical and energy landscapes. The first South Caucasus energy pipeline was established in 1906, connecting Baku on the Caspian Sea to Batumi on the Black Sea. A 20centimetre-diameter, 835-kilometre-long kerosene pipeline has been replaced by a modern network of gas and oil pipelines that links the center of Eurasia to the rest of the globe more than 112 years after it was established. Although a few pipelines link Europe to the Caspian region, notably the South Caucasus pipelines, Baku-Tbilisi-Ceyhan, and the Baku-Supsa, further development is necessary. The Southern Gas Corridor, in particular, is taking form. When fully operational, the Southern Gas Corridor will provide 31 billion cubic meters of gas per year to European markets through six countries and a 3,500-kilometer length of pipeline. Two large pipelines are now under construction as part of the Southern Gas Corridor: TAP and TANAP. Sangachal Terminal, located just south of Baku on the Southern Gas Corridor, was turned on for the first time. The TANAP will be officially opened in Azerbaijan and Turkey. This pipeline, which would pass via Turkey and Georgia, will service Azerbaijan's Shah Deniz-2 gas field and other Caspian Sea locations. The TAP and TANAP will join at the Turkish-Greek border, supplying gas from Turkey to Albania, Greece, Italy, and eventually the rest of Europe (Luke, 2018).

The Trans-Adriatic Pipeline has overcome several political and geographical obstacles. More than 73% of the pipeline's route has been built in Albania and Greece. Turkish-Greek partnership on the TAP project demonstrates how national interests and pragmatism can overcome geopolitical issues. There were concerns that Italy's new government would cancel or hinder the project. That's excellent news for Italy's new government coalition, including the anti-pipeline Five Star Movement and anti-establishment Lega parties, which have voiced opposition to the Trans-Adriatic Pipeline's entry into Italy. Consequently, it is reasonable to presume that the project will progress according to schedule. The Southern Gas Corridor has significant future potential, with a Trans-Caspian Gas Pipeline connecting Europe to critical Central Asian gas markets across the Caspian Sea. The Caspian region is projected to have 292 trillion cubic feet of gas reserves, proved and probable. According to current estimations, Turkmenistan has the fourth-largest gas reserves globally (Luke, 2018). Given current technology and gas price, a pipeline is the only viable option for delivering gas over the Caspian Sea. Transportation of liquefied natural gas is only feasible across a distance of at least 2,000 kilometers. Baku, the capital of Azerbaijan, is just 270 kilometers from Turkmenistan. As a result, transporting LNG is not an option. The legal dispute over Caspian Sea sovereignty has prevented the Trans-Caspian Gas

Pipeline from becoming a reality. Inconveniently, the Trans-Caspian Gas Pipeline has a plethora of benefits. From Europe's perspective, it would give an alternative to Russian gas. There are various advantages to Turkmenistan diversifying its energy export markets through the Trans-Caspian Gas Pipeline. While it is possible that an agreement on the Caspian's legal status could be achieved by the end of the year, do not get your hopes up just yet. The same proposals have been proposed yearly, with little progress in resolving the problem (Luke, 2018).

Europe is now too dependent on Russian energy. When Nord Stream 2 becomes a reality, the situation will deteriorate further. With the existing Nord Stream pipeline, gas will be carried under the Baltic Sea, connecting Germany and Russia while bypassing several other European states. Moscow has always resisted the development of pipelines that pass through its territory to retain control over gas and oil exports to Europe. According to the Kremlin, Europeans should purchase gas and oil only from Russia. Since a single kerosene pipeline was built in 1906, considerable progress has been made in the region's development. The Southern Gas Corridor can significantly improve Europe's energy landscape. Recent work on the Trans-Adriatic pipelines and Trans-Anatolian is welcome news for European towns. By purchasing gas from Turkmenistan, Kazakhstan, or Azerbaijan through Turkey and Georgia, Europe's dependence on Russian supply is reduced by one cubic meter (Luke, 2018).

Challenges to Turkey's Energy

Turkey's energy policy primarily relies on pipelines, the latter being the most critical component. Turkey aims to become a regional energy giant by capitalizing on its geographical advantages. Numerous impediments have stood in the way of accomplishing this goal. Due to these difficulties, Turkey's energy strategy in the region is at risk. There are two perspectives on

these topics. The first is a natural hazard presented by the environment. The principal cause of external concerns is instability in the countries that provide the raw resources (Fiona, 2004). As ethnic tensions in the Middle East and the Caspian Sea Basin grow, the area faces a slew of instabilities. Apart from causing turmoil, regional nations' aggressive tactics to retain control over the region endanger Turkey's energy security strategy. Russia's active foreign policy in Eurasia, notably its power to affect ethnic conflicts, is the biggest threat to Turkey. Due to South Ossetia's 2008 declaration of independence shut the Baku-Tbilisi-Ceyhan pipeline down (Greg. 2008). If outside dangers are disregarded, the most serious challenge to Turkey's objectives is the Kurdistan Workers' Party (PKK) Terrorist Organization. Turkey has been waging a threedecade-long war against this terrorist organization. Turkey's status as an energy hub has been questioned after a PKK attack on the Baku-Tbilisi-Ceyhan pipeline in 2008. Foreign and internal impediments have hampered Turkish aspirations to establish a regional energy hub. These challenges mostly affect investors, who must consider other pipeline routes to Turkey. Thus, Turkey has been attempting to persuade investors that, despite its challenges, Turkey is the best energy center in terms of energy security.

Conclusion

Eurasian newly independent countries were at the center of the early 1990s energy conflict between Turkey and America alliance. Russia was the sole alternative available to newly independent nations for energy export. Nations that are landlocked lack access to international shipping routes. Consequently, they were completely dependent on Russia's aging pipeline infrastructure. The West wants to expand pipelines to challenge Russia's energy monopoly in these areas. Additionally, Eurasia's newly independent nations are exploring alternative energy sources. Georgia and Azerbaijan have

already established the Baku-Tbilisi-Ceyhan oil pipeline and are nearing completion of the Baku-Tbilisi-Erzurum natural gas pipeline. Turkey benefits from all of these shifts as an East-to-West energy corridor.

Moscow has been pressed to reclaim control over its "near abroad" due to Western attempts to undermine Russia's energy monopoly. Russia has used its weight to inflame ethnic tensions in the Eurasian republics and hinder the West's new pipeline development plans in opposition to Turkey's east-west energy corridor. Abkhazia and South Ossetia in Nagorno-Karabakh and Georgia between Azerbaijan and Armenia are the best examples of Russian influence being utilized to manipulate ethnic tensions in Moscow's favor.

In contrast to Turkey's advantages, the country's energy center ambitions face significant impediments. The Middle East and Eurasia, as well as Russia's aggressive energy agenda, endanger world stability. Although America and Turkey have cooperated, the isolation of Iran by America and the terrorist organization known as the Kurdistan Workers' Party are the biggest dangers to Turkey's stability. Despite these challenges, Turkey remains a viable energy security option. Turkey is a critical participant in the global energy market as the only country with significant linkages to Europe, Iran, Russia, and the newly independent republics of Eurasia.

Consequently, Turkey acts as a single point of contact for all these competitors regarding energy transportation. Turkey shares a lot with Europe and is similarly concerned about energy security. Turkey is an attractive transit point due to its strategic location between Europe, the world's greatest energy consumer, and Russia, Eurasia, and the Middle East. Since Turkey is a democratic and peaceful country, it has built international gas and oil gas pipelines. Turkey already has energy infrastructure, and its fast-growing energy demand puts it at the forefront of energy security.

Global energy consumption is predicted to continue to climb, and energy transportation will remain a key challenge in the years ahead. Turkey will continue to play a critical role in gas and oil transportation as long as gas and oil pipelines remain the dominant transportation route. Numerous opportunities for Turkish reliance exist to meet its energy demands and stabilize a very volatile region, even if Turkey lacks its gas and oil resources. As pipelines link additional states, Turkey will avert conflicts and promote peace in the region if it develops interdependence among regional adversaries. Turkey does not have a plentiful source of energy. Turkey imports almost all of its gas and oil. Turkey's reliance on imported gas and oil will likely stay high as long as gas and oil remain major energy sources. Consequently, Turkey's reliance on imported gas and oil is unlikely to decrease much in the foreseeable future. As a result, Turkey is seeking energy-transportation long-term agreements. Turkey's actions will increase the interdependence of countries and regions that use and generate energy. It will result in greater interdependence and peace in the region rather than Turkey's reliance on oil.

References

- 1. Ahmet, D. (2008). "Turkey's Foreign Policy Vision: An Assessment of 2007," Insight Turkey 10, no. 1, 91–92.
- 2. Akramova, M. (2014). The Russian-Turkish gas trade partner- ship: Structures and policies (Unpublished master's the- sis). Humboldt-Universita't zu Berlin.
- 3. Alan, M. (2015). "Turkey's Growing Energy Ties with Moscow" (Washington: Center for American Progress, 2015), Available at: https://americanprogress.org/issues/security/reports/2015/05/06/112511/turkeys-growing-energy-ties-with-moscow/.

- 4. Alex, P. (2008). "Russia's War for Oil Supplies," Young Professionals in Foreign Policy, Available at: http://www.ypfp.org/content/russias-war-oil-supplies.
- 5. Austvik, O., and Rzayeva, G. (2017). Turkey in the geopolitics of energy. Energy Policy, 107(C), 539–547.
- 6. Bilgin, M. (2015). Turkey's energy strategy: Synchronizing geopolitics and foreign policy with energy security. Insight Turkey, 17(2), 67–81.
- 7. Brian, K. (2009). "The U.S. Needs Turkey for Its Middle East Agenda," Atlantic-Community, Available at: http://atlanticcommunity. org/index/articles/view/The_U.S._Needs _Turkey_for_its_Middle_East_Agen da.
- 8. Chen, M. (2009). "Turkey Emerges as World Energy Hub After Big Deals," Turkish Weekly, Available at: http://www.turkishweekly.net/news/876 62/turkeyemerges- as-world-energy-hub-after-big-deals.html.
- 9. Dietrich, J. and Wolfango, P. (2001). Turkey at the Crossroads Ottoman Legacies and A Greater Middle East (New York: Zed Books), 186.
- 10. Economic Policy Research Foundation of Turkey. (2017). "Enerji Makine-Ekipman dış Ticareti: Mevcut Durum ve Fırsatlar", Available at: http://www.tepav.org.tr/upload/files/1509522079-
 - <u>2.Enerji Makine Ekipman Dis Ticareti</u> <u>Mevcut Durum ve Firsatlar.pdf.</u>
- 11. Fatit, B. (2021). 'Turkey 2021 Energy Policy Review', International Energy Agency. Available at: https://iea.blob.core.windows.net/assets/cc499a7b-b72a-466c-88de-d792a9daff44/Turkey_2021_Energy_Policy_Review.pdf

- 12. Fiona, H. (2004). "Caspian Conundrum: Pipelines and Energy Networks," in The Future of Turkish Foreign Politics (Cambridge: MIT Press), 211–212.
- 13. Greg, B. (2008). "Turkey at An Energy Crossroads," Council on Foreign Relations, Available at: http://www.cfr.org/publication/17821/.
- 14. Haizmann, J. (2017). The making of an energy hub. Available at: http://www.iflr.com/Article/3720554/Th e-making-of-an-energy-hub.html.
- 15. Ibrahim, M. (2007). "Twenty First Century Energy Security Debates: Opportunities and Constraints for Turkey," in Contentious Issues of Security and The Future of Turkey, (Burlington: Ashgate Publishing Limited), 147.
- 16. International Energy Agency. (2017). "World Energy Balances 2017", Available at: https://webstore.iea.org/world-energy-balances-2017.
- 17. Jan, H. and David, L. (2005).

 "Introduction: The Need to Integrate Energy and Foreign Policy," in Energy Security Toward a New Foreign Policy Strategy, ed. Jan H., and David L. Goldwyn Kalicki (Washington DC: Woodrow Wilson Center Press), 9–10.
- 18. Karbuz, S., & Sanlı, B. (2010). On formulating a new energy strategy for Turkey. Insight Turkey, 12(3), 55–89.
- 19. Katinka, B. (2007). "Turkey's Role in European Energy Security," Centre for European Reform Essays, Available at: http://www.cer.org.uk/pdf/essay_turkey_energy_12dec07.pdf.
- 20. Luke, C. (2018). 'Turkey strengthens energy security of Europe', TRT World. Available at: https://www.trtworld.com/opinion/turke

- <u>y-strengthens-energy-security-of-europe-17993</u>
- 21. Mahir, Z. (2009). "Turkey Becomes World's Largest Energy Hub Through Recent Deals," Sunday's Zaman, Available at: http://www.sundayszaman.com/sunday/detaylar.do?load=detay&link=184792.
- 22. Mehmet, E. (2007). "Turkey: Europe's Emerging Energy Corridor for Central Eurasian," Caucasian and Caspian Oil and Gas, Available at: http://www.balkanalysis.com/2007/01/2 0/turkey- europe's-emerging-energy-corridor-forcentral- eurasian-caucasian-and-caspian-oil-and-gas/.
- 23. Mehmet, O. and Danilla, B. (2009).

 "Rivals Become Partners," European Voice, Available at: http://www.europeanvoice.com/article/2 009/09/rivals-become-partners-/65924.aspx.
- 24. Shah, A. (2002). "Pipeline Politics in the Caspian Sea Basin," Strategic Analysis: A Monthly Journal of the IDSA XXVI, no. 1.
- 25. Stephen, L. (2007). "Turkey Rediscovers the Middle East," Foreign Affairs 86, no. 4, 103–114.
- Stephen, L. and Ian, O. (2003). Turkish Foreign Policy in an Age of Uncertainty (Santa Monica, California: RAND National Security Research Division), 107.
- 27. Tagliapietra, S. (2014). Turkey as a regional natural gas hub: Myth or reality? Turkish Policy Quarterly, 12(4), 87–98.
- 28. Tokus, I. (2010). Turkey as an emerging energy hub (Un-published master's thesis). Naval Postgraduate School.
- 29. Trading Economics. (2018). "Turkey Imports By Category," Available at: https://tradingeconomics.com/turkey/imports-by-category

- Tuncay, B. (2009). "Turkey at the Energy Crossroads, Turkey Past and Present," Middle East Quarterly, Available at: http://www.meforum.org/2108/turkey-at-the-energy-crossroads.
- 31. Turkish Statistical Institute. (2018).
 Transportation Statistics, TurkStat.
 Available at:
 www.turkstat.gov.tr/PreTablo.do?alt_id
 =1051.
- 32. U.S. Energy Information Administration. (2019). "Ranking: Total Energy Consumed per Capita, 2015 (million Btu)," Available at: https://www.eia.gov/state/rankings/?sid=CA#series/12
- 33. Weiss, A. S., Larrabee, F. S., Bartis, J. T., and Sawak, C. A. (2012). Promoting international energy security volume 2, Turkey and the Caspian (Rep.). Rand.
- 34. Winrow, G. (2014). Realization of Turkey's energy aspirations pipe dreams or real projects? (Turkey Project Policy Paper, 4). Center on the United States and Europe at Brookings
- 35. World Bank Group. (2018). "Commodity Markets Outlook: Oil Exporters: Policies and Challenges", Available at: http://pubdocs.worldbank.org/en/271
 041524326092667/CMO-April-2018-Full-Report.pdf
- 36. World Bank. (2019a). World Development Indicators, World Bank, Washington, DC. Available at: https://databank.worldbank.org/data/download/GDP.pdf.
- 37. World Bank. (2019b). National Accounts Data, World Bank, Washington, DC. Available at: https://data.worldbank.org/indicator/NY. GDP.MKTP.KD.ZG?locations=TR.