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# Turkey and European Energy (In)Security

**What Role for Turkey in European Energy Security Following the Russian Invasion of Ukraine?**

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**The desire of the European Union (EU) to reduce its dependency on Russia for gas and diversify its sources of supply by turning to the resources of Central Asia, the Middle East, and the Eastern Mediterranean regions theoretically gives Turkey a major role in the EU's diversification and energy security policy. However, this strategic role for Turkey seems to be overestimated, given the limited share of energy that transits through Turkey to Europe. With the Russian invasion and Europe's search for alternative energy sources in extremis, the old discussion resurfaces: Could Turkey become a major transit country for energy supplies? Given the structural changes that have occurred in the energy markets, the objective of decarbonisation, and of course the political and infrastructural challenges, it seems that this old dream will not come true this time either.**

A few months ago, when talking about energy, two key dates for the exit from fossil fuels dominated the discussion in Europe: 2030, by which time the EU wants to reduce its emissions by 55 per cent, and 2050, when the EU wants to become a net-zero greenhouse gas continent. The main objective was therefore to stop using fossil fuels. The discussion on taxonomy was raging within the EU between those who wanted to eliminate natural gas quickly from the European energy mix and those who wanted to keep natural gas as a source of energy for several more decades. Decarbonisation dominated all discussions on energy security.

This was indeed very good news for the fight against climate change. Despite criticism from environmental organisations and ecologists that the efforts of European countries to combat climate change are not sufficient, there was some relief, as the EU has embarked on a complicated decarbonisation process with many financial, social, and other difficulties. Finally, the issue of energy security became an integral part of the decarbonisation process, and even geopolitical considerations were discussed in the same context.

Unfortunately, the Russian invasion has seemed to disrupt, among other things, all discussions on Europe's energy security, and the focus now seems to be on how to quickly stop relying on Russian energy without abandoning the ambitious goals of fighting climate change and achieving the energy transition.

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In 2021, the EU imported about 140 billion cubic metres (bcm) of gas through pipelines and about 15 bcm in the form of liquefied natural gas (LNG) from Russia. The total of 155 bcm imported from Russia accounted for about 45 per cent of the EU's gas imports in 2021 and almost 40 per cent of its total gas consumption. For some European countries, such as Germany, this dependence is even higher.

It is becoming more urgent than ever to stop relying on Russian gas. The EU aims to cut its dependence on Russian gas by two-thirds this year and end all imports of Russian fossil fuels by 2027.

However, in the short term, replacing Russian gas will be no small feat. The EU is desperately looking for alternatives. While there are some alternatives that can be found in the North Sea, Norway, North Africa, the Middle East, the Caucasus, and the United States (US), there are technical, infrastructural, and timing obstacles making procurement difficult.

It is in this context of securing new sources of supply that makes Turkey, in fact, a valuable asset and important country because of its geographical location. In the past, there had been serious plans to bring gas to Europe via Turkey, but only a limited number of them have panned out.

Turkey links Europe to gas-rich countries such as Azerbaijan, Turkmenistan, Iran, and Iraq, so naturally many wonder whether Europe's efforts to find alternatives to Russian gas could enhance Turkey's attractiveness as an energy transit hub for energy transport to Europe.

Ankara may also want to seize this opportunity to finally realise its long-held dream of becoming the key transit country for European markets. President Tayyip Erdoğan's recent response to this situation seems to confirm this. After his meeting with NATO leaders during the extraordinary summit on March 24, on his return from Brussels Erdoğan told journalists that this crisis would open new doors for Turkey in the field of energy.

Brussels' efforts to minimise the EU's gas dependency on Russia gave Turkey a key role in the EU's diversification policy in the past. The EU, for obvious reasons, considered Turkey to be the best choice to transport oil from the Middle East and the Caspian Region due to its geographic location, acting as a bridge to Europe.

Turkey is at the heart of the Southern Gas Corridor (SGC) pipeline system, which aims to increase and diversify Europe's energy supply by bringing gas resources from the Caspian Sea to markets in Europe, without involving Russia. In this sense, the construction of the Trans-Anatolian Gas Pipeline (TANAP) and the Trans-Adriatic Pipeline (TAP) marked a turning point for Turkey. However, this cooperation has not yet fully developed to the level desired and was not sufficient to end the heavy dependency on Russian gas, neither in Turkey nor Europe.

With the Russian invasion, for the EU and Turkey, the possibility of connecting Iranian, Turkmen, and Iraqi Kurdish gas to the SGC (via the TANAP and the TAP) and the construction of new pipelines for that matter could potentially be crucial strategies. Since the discovery of significant gas deposits in the Eastern Mediterranean, the region is also often cited as an alternative to Russian gas for Europe's energy security. Here too, Turkey, thanks to its geographical position, could play a role in transferring this gas to European markets. However, there are several important political, technical, financial, and infrastructural challenges to overcome.

## Azerbaijan

While most of Europe's and Turkey's natural gas imports have historically come from Russia, geopolitical and energy security concerns have forced the EU and Turkey to diversify their supply and seek to increase imports from reliable alternatives in the region. Therefore, the energy development of the Caspian region (Azerbaijan and Turkmenistan) has long been recognised as a possible area of cooperation between the EU and Turkey. The region

has huge natural gas reserves that could play a significant role in this diversification.

Consequently, the EU has invested a lot of political capital in its energy partnership with Turkey, at least since 2008. Turkey has been put at the centre of the EU's most ambitious external energy policy initiative, namely the development of the SGC, which is designed to link the Caspian basin (Azerbaijan and Turkmenistan) to the EU, crossing Turkey, and thus bypassing Russian soil.

But today, 14 years after the launch of the initiative, the only non-Russian gas to reach the European continent via Turkey is Azeri gas. Europe's dependence on Russia is still very high, and the only concrete accomplishments of the SGC are the TANAP and the TAP, which connect Azerbaijan to Italy via Turkey. The TAP is part of the SGC and provides access to Azeri gas via Turkey over the TANAP. It began operations in December 2020 and is now delivering 10 bcm of gas per year to Europe. According to TAP executives, capacity could potentially double, enabling the TAP to carry up to 20 bcm per year, but the increase of production capacity would take between 4 to 5 years.

Although Azerbaijani gas accounts for only 2.5 per cent of EU gas consumption, the SGC is an important element to diversify the energy sources of EU states' domestic markets.

Azerbaijan has indicated that it has the ability to increase its exports to the EU by at least 2 bcm this year alone. Azerbaijan also has untapped gas reserves, and with further investment and time, it could increase its supplies to Europe in the future. According to Turkish Deputy Minister of Energy Alparslan Bayraktar, the SGC, which transports Azerbaijani gas to Italy via Turkey, could significantly increase its capacity if some compressors were added to the system.

But it is obvious that in the short term, there will not be a very large amount of gas coming from this country to Europe. Even if SGC capacity is increased in the short term, Azerbaijan will not be able to increase gas exports to Europe in the coming years, as its production levels will not allow it. In order to increase exports to Europe, Azerbaijan would need to start new production projects in different Azerbaijani fields. However, due to the time needed to build new platforms, it would take at least a few years to increase production levels.

## Turkmenistan

Despite having the fourth largest gas reserves in the world, Turkmenistan's geographical location has prevented it from exporting gas to lucrative European markets. Currently, Turkmenistan exports small quantities of gas to Iran, which Teheran then sells to Turkey and even Azerbaijan at a higher price. Meanwhile, larger volumes of Turkmen exports are destined for China.

The gas from Turkmenistan, theoretically, can be transported to Turkey via Iran or even under the Caspian Sea via Azerbaijan. In the past, the possibility of bringing gas from Turkmenistan to Turkey and then Europe was often proposed, but without success. Previous attempts to develop pipelines across the Caspian Sea have failed, largely due to disagreements between the five Caspian littoral states over the shared use of the seabed.

The most ambitious of the proposed pipeline projects in the late 1990s was the Trans-Caspian Pipeline (TCP) carrying Turkmen gas to Azerbaijan and then through Turkey to Europe as its final destination. The TCP was seen as a natural eastward extension of the SGC.

This pipeline would have required crossing the Caspian Sea and necessitated the agreement of all the littoral states. However, at that time, these countries had not yet agreed on the division of the seabed and economic resources of the Caspian Sea. The uncertain legal status of the Caspian Sea and the contested delimitation of rights to the seabed at the time were invoked by Russia and Iran. As a result, two countries prevented the project, which never saw the light of day. Especially after the discovery of large deposits in Azerbaijan, the country also lost interest in the project.

The legal status of the Caspian Sea was eventually resolved in 2018 with the Aktau Convention. The convention allows for the installation of oil and gas pipelines, but Russia has added some environmental clauses to the agreement that could further complicate the process and requires the approval of all riparian countries. This means that Russia and Iran could oppose the construction of such a pipeline across the Caspian Sea, which would be highly likely considering that a new pipeline would certainly not be in the best interests of the two countries, since they would be bypassed in the process.

Moreover, Turkmenistan seems to be more dominated by Moscow in its energy policy compared to Azerbaijan, which displays a more independent status vis-à-vis Russia. This is creating doubts as to its ability to advance its interests with projects that run counter to Russian interests, despite Turkmenistan's long-standing interest in projects involving the transport of energy to Europe through Azerbaijan and Turkey.

## Iran

Indeed, Iran has also been considered as a potential gas supplier for the SGC, but this interest has yet to come to fruition. Iran has some of the largest proven deposits of natural gas in the world and held the second largest natural gas reserves in 2020 after Russia. Nevertheless, the majority of the natural gas that Iran produces is consumed domestically, as export capacities are limited. Although Iran is connected to Turkey through a gas pipeline, it has yet to become a major supplier. Iranian supplies represent about 10 per cent of Turkey's gas consumption. It currently exports limited quantities to Iraq, too.

Iran also has the potential to increase its volumes considerably, but of course these prospects have been hampered by international sanctions as well as technical and financial difficulties.

The US government's withdrawal from the Joint Comprehensive Plan of Action (JCPOA), and consequently sanctions on Iran's oil exports, have also affected agreements with foreign companies on natural gas field development projects and delayed the Iranian government's long-standing plans to build the necessary infrastructure needed to export liquefied natural gas. Iran has not been able to acquire the technology needed to liquefy natural gas, and the country's natural gas production growth has also slowed. The sanctions have therefore limited natural gas production and exports.

Therefore, the country needs to make considerable investments to be able to bring more gas into Turkey. If the current JCPOA negotiations are successful and the US sanctions are lifted, Iran would be well-positioned to attract investment in the development of its natural gas sector. But this would take time.

However, even if production capacity is improved to produce larger quantities of gas, it would most likely initially be used to support the country's value-added industries, or exported as LNG via the Gulf rather than transported by pipeline through Turkey and then to Europe. There is the possibility of sending Iranian gas to Europe via the TANAP, but for this to happen considerable investment in new compressors would be needed, not to mention permission from Azerbaijan, which is unlikely due to politics and the competitive advantage they currently hold. There are often political tensions between the two countries.

Ultimately, if Iran can attract international donor support to complete the gas liquefaction plants being built in the south of the country, then it would be more advantageous for Iran to produce LNG and export directly to Europe instead of focussing on gas pipelines, which would require huge investments and long-term purchase agreements that would not be easy to acquire from European countries.

The prospect of Iranian gas reaching Europe via Turkey is therefore quite slim in both the short and medium terms.

## Kurdistan Region of Iraq (KRI)

The Ministry of Natural Resources of the KRI estimates the reserves of the region to be 25 trillion cubic feet (tcf) of proven gas reserves and up to 198 tcf of largely unproven gas, which is a very large reserve. Given the potential and proximity to Turkish and European markets, Kurdish gas could be a strategic viable alternative to Russian gas. Nevertheless, political, security, financial, infrastructural, and even legal challenges present significant barriers to this prospect.

Therefore, the KRI does not seem likely to be in a position to export natural gas anytime in the near future, particularly while it is still struggling to meet its own domestic consumption needs.

According to the experts, the KRI will not be able to export gas for at least three years due to production capacity and infrastructure constraints. Statements of Kurdish leaders seem to confirm this. And, of course, the legal issues between the central government of Iraq and the Kurdistan Regional Government (KRG) would also need to be resolved before any further progress can be made. At the moment, natural gas production levels in the KRI do not even meet the region's domestic consumption needs. According to the KRI's Minister of Natural Resources, Kamal Atroshi, investment of at least $4 to 5 billion is needed to start production in the new fields in the Kurdistan region, not to mention the investment needed for gas pipelines to transport the gas to Turkey. Moreover, the type of gas present in the KRI has a high level of hydrogen sulphide, which is very toxic and dangerous, not only for humans but also the environment. This would require even larger investments to sweeten it.

Indeed, the legal issues and political risks remain a major problem in attracting the foreign investment needed to build the necessary infrastructure for production and exports.

Legal problems are already affecting energy cooperation between Turkey and the KRI. In 2013, the KRG independently signed an agreement with Turkey to build a new pipeline with capacity to export up to 2 million barrels of oil per day and 10 bcm of natural gas per year to Turkey. However, the central government of Iraq has fiercely opposed the strategic energy contracts signed between the two.

In fact, the central government of Iraq filed a request for arbitration in 2014 directed against the Turkish state-owned pipeline operator over unilateral oil exports from Iraqi Kurdistan to Turkey under the 2013 agreement. There is now lingering fear that a gas deal would likely result in a similar case. Turkey's state-owned company Botas already built a gas pipeline to the Iraqi border, but the Kurdish side could not commence the project. The planned gas pipeline between Turkey and the KRI therefore remains an unfinished project.

Indeed, Baghdad and Erbil have long been at odds over the management of energy resources, as the Iraqi central government views international agreements that transfer resources from the Kurdish region to outside the country without its consent as illegal. Therefore, the KRG is in a constant legal battle with the central government in Baghdad over the use and export of fossil fuels. Multiple lawsuits are underway, with major blockages within the Iraqi central government over energy resources in the Kurdish region. This is therefore a major source of uncertainty for both existing and potential energy investors.

On February 15, a ruling by the Iraqi Federal Supreme Court overturned a 2007 oil and gas law that gave the KRG the power to independently manage its energy sector. The ruling also annulled licensing and exports and declared all existing KRG contracts invalid.

Indeed, the legal and political uncertainties between Baghdad and Erbil have the potential to hinder the investments needed to bring gas from Iraqi Kurdistan to Turkey, and potentially to Europe.

## Eastern Mediterranean

The discovery of significant quantities of natural gas in the region has created a certain excitement, as it could potentially become an alternative source to Russian gas for European countries.

However, despite the importance of the Turkish market and Turkey's favourable geographical position to transfer this gas to the European markets, Turkey has to date been excluded from any multilateral cooperation within the framework of the East Mediterranean GAS Forum (EMGF) and from bilateral cooperation with other riparian states beyond Libya. Conflicting claims of Turkey, Greece, and the Republic of Cyprus, the long-standing Cyprus problem, coupled with Turkey's confrontational policies and conflict-ridden relations with several countries in the region have made it impossible for Turkey to participate in energy cooperation efforts.

This exclusion along with Ankara's conflicting claims with Greece and the Republic of Cyprus have even led Ankara to go as far as to conduct disruptive measures against exploration activities in the region. As a result, two years ago, there were even fears of military conflict in the region. But since then, the tension has diminished, even though the underlying causes persist.

Ankara has started a process of normalisation of relations with several countries in the region, as is the case with Israel and Egypt, but relations are still far from being fully restored.

In this context, the prospect of a normalisation of relations between Israel and Turkey and the visit of Israeli President Isaac Herzog to Turkey on March 9 instantly revived discussion of a possible Turkey-Israel gas pipeline project in this new context that has resulted from the Russian invasion of Ukraine.

Following efforts to normalise relations, some Turkish politicians and media have become enthusiastic about the prospect of energy cooperation between the two countries. This enthusiasm is understandable given the isolation Turkey has suffered in recent years in the Eastern Mediterranean and its exclusion from any energy cooperation or dialogue.

Shortly after Israeli President Herzog's visit, Erdoğan announced that an opportunity to relaunch energy cooperation had arisen between the two countries and that Turkey's Foreign Minister and subsequently Energy and Natural Resources Minister would pay a visit to Israel in May.

In 2016, the two countries were already discussing the construction of an undersea pipeline linking Israel's largest offshore natural gas field — Leviathan — to Turkey, and these discussions were reportedly at an advanced stage. But the deterioration of political relations and the emergence of LNG as an alternative have buried the project. In parallel, Israel has also been working to develop energy cooperation with other countries in the region since then within the EMGF.

However, after years of conflicted relations, it has taken time to gain the confidence and trust needed to make the major investments necessary to build a pipeline. Israel seems to be more cautious about Ankara's efforts to normalise relations, as there are several contentious issues that could poison relations at any time.

In a recent interview, Turkey's Deputy Energy Minister, Alparslan Bayraktar, pointed to Turkey's proximity to Israel's offshore gas, which he says would be suitable for a 550 km pipeline to Turkey's southern coast to transport energy to Turkey and then on to Europe.

Such a pipeline would cost up to €1.5 billion to build, according to Israeli officials, making it more manageable than the €6 billion so-called EastMed pipeline designed to link Israel to Cyprus, Greece, and Italy. But any underwater pipeline from Israel to Turkey would first have to cross the territorial waters of a divided Cyprus or Syria. Both cases are problematic and present major political and geopolitical risks.

Any efforts to pass through the territorial waters of Cyprus without the consent of the Republic of Cyprus would jeopardise Israel's relations with Greece and Cyprus, so Israel does not appear ready to take these risks.

Therefore, a billion dollar gas pipeline through a conflict zone does not seem to be a viable option at this time.

Israel already transports gas to Egyptian facilities for installation as LNG and shipment to international markets, so this also reduces the importance of transporting it to Turkey for the European market.

However if there was a prospect for a resolution of the Cyprus issue or the possibility of a political normalisation between Ankara and the Republic of Cyprus, then an Israel-Turkey-Republic of Cyprus energy cooperation could become a reality, but this seems highly improbable anytime in the near future. Or in the unlikely event that there was a possibility to exploit Cypriot and Lebanese gas fields and combine them with Israeli gas, then the pipeline could once again become a viable option, but in the current state of affairs, this seems highly unlikely. These are the only options that would allow for a financially and politically reliable project. Under current conditions, the only option for Turkey is to receive Israeli LNG for its own consumption.

Transferring Israeli gas by pipeline to Egyptian processing plants to be liquefied for export on board ships seems to be the most likely option for getting the gas to Europe quickly at this time.

## Little Prospect for Turkey As an Energy Transit Hub

Despite the large potential for natural gas in the countries discussed above, none of them — with the exception of Azerbaijan, which is already supplying natural gas — are in a position to send gas to Europe via Turkey in the short term. Even in the medium term the prospects are not favourable. In the most optimistic scenario, to be able to one day acquire significant quantities of gas from these countries would take years and considerable investment. For the infrastructure to be financed, it would also require Europe to commit to long-term gas contracts, which seems inconceivable given the roadmap for energy transition.

It is necessary to point out that the EU's dilemma is that its search for alternatives to Russian gas is limited to the short term, and Brussels' medium- and long-term strategy is focussed on reducing the share of natural gas in the European energy mix. The current crisis does not alter the EU's commitment to the energy transition and reducing the EU's natural gas consumption by 30 per cent by 2030 and by 80 per cent by 2050.

Investing in a long-term expansion of new and existing natural gas export facilities will lock the EU into this kind of energy consumption, and thus delay the energy transition process that is essential to achieve the goal of net-zero carbon. To stick to fossil fuels would have terrible repercussions for climate change and the global fight against it.

The EU appears to favour an unprecedented supply of LNG to ensure the security of gas supply in the short term, namely an additional 50 bcm of LNG on an annual basis from Qatar, the US, Egypt, and West Africa. The EU also wants to diversify or strengthen its pipeline sources from countries such as Azerbaijan, Algeria, and Norway to reduce dependence on Russia. In any case, as of yet there have not been any new declarations of support for new investments in potential pipeline projects featuring Turkey as a key transit country for Europe.

The EU's — and a vast majority of European countries for that matter — commitment to the green deal excludes long-term gas projects that target Europe as the final destination, which is essential for the financing of gas pipelines. In order for this type of long-term project to find financing, it first needs a client with whom a long-term agreement can be concluded. Pipelines take years to build, cost billions of dollars, and thus to be worthwhile should be used for at least 15 or 20 years, or even longer, to be profitable.

The distrust between Turkey and the EU is also an important factor to be taken into account when it comes to long-term projects and cooperation that create significant dependency. Long-term cooperation requires trust. Although the war in Ukraine has

created a geopolitical rapprochement between Turkey and the West to a certain extent, it will take time to establish long-term political trust between Turkey and the EU.

If these challenges were not significant enough, there is yet another factor making the possibility of transiting new alternative gas through Turkey to Europe less plausible. Natural gas consumption in Turkey is on the rise, and Ankara is also trying to diversify its supply sources. Turkey's dependence on Russian gas is also very high (the Russian share of total imports was a staggering 44.9 per cent in 2021), despite efforts to reduce this dependency in recent years. Ankara will likely continue its efforts in this regard. So, the gas potential that could be derived from its neighbours will first be considered for domestic consumption to satisfy local needs.

With the new situation, Turkey is also in danger of losing its critical role as a transit country offered by Turk Stream, the pipeline that carries Russian gas, to European markets. With Turk Stream, Ankara sought to secure its role as a transit country for gas to Europe, but if Europe manages to stop relying on Russian gas in the next few years, this pipeline would no longer send gas to Europe.

Ultimately, the Europeans should focus on two distinct time horizons. They must take action to ensure energy security in the short term, while not losing sight of the opportunities in the medium and long terms, ultimately tackling key issues of energy dependency and transition.

If the EU is to achieve its medium-term goal of not relying on Russian gas and its long-term goal of net-zero emissions at an affordable price, Europe's leaders must be bold and develop renewable energy at an unprecedented rate. Europe's energy transition took on new urgency with the Russian invasion, thereby accelerating the pace for European countries to pivot from natural gas to renewable energy.

Insisting on energy cooperation based on fossil fuels, especially natural gas, is not in the interest of Europe or Turkey. Both are dependent on imported natural gas. Therefore, cooperation must focus on future energies, such as renewable energies and hydrogen, which would be beneficial for both sides.



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