

## Natural Gas Corridors in Southeastern Europe and European Energy Security



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### Summary

The question of European energy security has brought attention to the strategic significance of Southeastern Europe as a transport hub of natural gas and a key region for European energy security. The questions how to secure natural gas quantities sufficient for increasing European needs and how to reduce energy dependency on Russia led to pipeline projects aiming to provide the European market with non-Russian natural gas. The TGI Interconnector and the Nabucco pipeline projects aspired to bring Azerbaijani, Iranian, Turkmen, Kazakh, Egyptian and even Iraqi natural gas to Europe. The TGI Interconnector also comprises an example of the paradigmatic shift that has characterised Greek-Turkish relations since the late 1990s. Russia's own regional pipeline project, the South Stream, was understood as a strategic move in the energy chessboard of Southeastern Europe, aiming to maintain Russia's dominant position in the market of Southeastern Europe and Europe in general. To meet increasing natural gas demand and reduce energy dependency on Russia, European authorities need to promote the realisation of projects contributing to the diversification of natural gas supply, alongside improving its relationship with Russia, two targets which are not necessarily mutually exclusive.

The unprecedented increase of energy prices in recent months has highlighted the significance of European energy policy. As one of the biggest consumers and importers of fossil fuels in the world, the European Union is directly affected by the vicissitudes of the world energy market. This makes imperative the need for improved policy planning with the aim to improve European energy security. This includes guaranteeing an uninterrupted and diversified energy supply, so dependency on any single energy exporter remains at the lowest possible level. While crude oil is a fungible commodity whose supply is easier to be procured, natural gas does not provide similar flexibility. It requires long-term planning and commitment on the side of both suppliers and consumers. While natural gas liquefaction technology has significantly improved and provided increasing flexibility to the natural gas market, fixed pipelines remain the most commercially viable way of transporting natural gas. According to the projections of the International Energy Agency (IEA), the European market demand will increase on an annual rate of 2.4 percent and reach 630 billion cubic metres (bcm) annually in 2030. Meeting this demand becomes a difficult task especially if it is to be reconciled with the projected depletion of North Sea natural gas fields. In addition, the crisis of January 2005 between Russia and Ukraine, when a dispute over the price of natural gas led to the interruption of Russian gas supplies to Ukraine and Central Europe, worked as an eye-opener for many policy analysts and media. European energy dependency on Russia was highlighted, and the need to take measures to reduce it became pronounced, as the possibility that Russia could use energy supply as a political weapon became clear. As the Russian Federation is already providing approximately 25 percent of natural gas consumption in Europe, the European market will need to find additional quantities of natural gas.

Under these circumstances, Southeastern Europe

emerges as a key region for European energy security. The construction of additional pipelines, which could provide necessary additional natural gas quantities and reduce European dependency on Russian natural gas, could turn the region into a transport hub of natural gas. Three main pipeline projects have been proposed in that framework: Two of them involve the transport of non-Russian gas, originating from the Caucasus, Central Asia and the Middle East, to the European market. The third project involves the transport of Russian gas via a new pipeline, which would cross the Black Sea.

### Three Pipeline Projects

The **Turkey-Greece-Italy (TGI) Interconnector** was the first pipeline project to underline increased interest in Southeastern Europe as a transport hub of non-Russian natural gas. Involving the Greek natural gas company DEPA, the Turkish BOTAŞ and the Italian Edison, the project had two phases. In the first, a 285 km-long pipeline between Komotini and Karacabey, of which 200 km on Turkish and 85 km on Greek territory, would connect the natural gas networks of Turkey and Greece. In the second phase, an undersea pipeline between Stavrolimenas and Otranto would connect the networks of Greece and Italy. The pipeline capacity would begin with 0.75 bcm in 2007 and reach 12 bcm by 2012. Up to 3 bcm would be reserved for the Greek energy market, while the remaining volume would reach the Italian natural gas network. The potential extension of the pipeline from Greece towards the Western Balkans was also discussed. The construction of the Greek-Turkish leg of the pipeline began in summer 2005, and the first gas flowed in November 2007. In June 2008, DEPA and Edison announced the setup of their joint venture IGI Poseidon SA, the company which would construct the Greek-Italian undersea leg of the pipeline. The construction of the 212-km-long pipeline, expected to cost approximately 500 million Euros, would begin in 2008, with its completion scheduled in 2012.

### II Southeastern Europe emerges as a key region for European energy security

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While the completion of the Turkey-Greece leg of the pipeline and the setup of the company to construct the Greece-Italy connection reinforced optimism about the timely realisation of the project, the commitment of the necessary natural gas quantities remained unclear. However, the relatively small scale of the project made securing that supply an easier task.

The **Nabucco pipeline** project shared the same rationale with the TGI pipeline. It was planned to provide the European market with additional quantities of non-Russian natural gas. Nonetheless, it differed in its size. With its planned length of 2,050 miles and cost of 5.8 billion dollars, the Nabucco pipeline was projected to transport in its final phase 30 bcm per annum. With its start point in Erzurum in eastern Turkey, the pipeline was projected to cross Turkey, Bulgaria, Romania and Hungary and reach the Baumgarten natural gas hub in Austria. Half of the pipeline's capacity was planned to supply the markets en-route, while the remaining half would reach Austria and enter the natural gas market of Central and Western Europe. In Erzurum, the pipeline would be connected with the South Caucasus Pipeline, which supplies Turkey with Azerbaijani natural gas, as well as with the Tabriz-Erzurum pipeline, which brings Iranian natural gas to the Turkish market. Besides enabling the access of Azeri and Iranian gas to the European market, it was hoped that Nabucco would allow the export of Turkmen, Kazakh, Iraqi and Egyptian natural gas towards Europe. This would reduce the dependency of the European natural gas market on Russian imports and contribute to the development of a competitive natural gas market in Europe. The Nabucco Gas Pipeline International Company was established in June 2004 in Vienna by the Austrian energy company ÖMV, the Hungarian MOL, the Romanian Transgaz, the Bulgarian Bulgargaz and the Turkish BOTAŞ. The project was included in the EU Trans-European Energy Network programme. In June 2006, the Energy Ministers of Austria, Hungary, Romania, Bulgaria and Turkey and the EU Energy Commissioner Andris Piebalgs signed a joint declaration of the acceleration of the pipeline construction. In February 2008 the German RWE became the sixth partner of the project. The project also enjoyed the strong support of the United States who saw in it a step towards the economic and political emancipation of post-Soviet republics in the Caucasus and Central Asia.

However, the realisation of the project has been hampered by several obstacles. Securing the minimum natural gas supply for the feasibility of the project became a key issue. Azerbaijan's commitment to the project did not suffice to guarantee the feasibility of the project. Despite its steady increase of natural gas production and the discovery of large natural gas fields like Shah Deniz, Azerbaijan alone could not be able to meet existing contractual commitments and still provide all the natural gas quantity necessary for the commercial feasibility of the project. In addition, deteriorating relations between the United States and Iran had a negative impact on EU-Iranian relations, which rendered the prospect of shipping Iranian natural gas

through Nabucco to the European market weak for the foreseeable future. This also meant that Iranian natural gas supplies could not form the basis for the feasibility of the project. The shipment of Turkmen or Kazakh natural gas met with additional technical, legal and political difficulties. The absence of a direct pipeline connection between Azerbaijan and Turkmenistan under the Caspian Sea was linked to the opposition of Russia and Iran, both littoral states of the Caspian, which was expressed on legal and political grounds. This meant that Turkmenistan could only deliver limited natural gas quantities to Nabucco through Iranian territory. Turkmenistan's declaration in April 2008 that it would commit 10 bcm for transport to the European market was welcomed in Brussels, yet questions on how Turkmenistan would secure this quantity and ship it to Turkey remained. In addition, Russia has intensified its efforts to secure the biggest share of Turkmen natural gas possible, offering the improvement of existing pipeline infrastructure, as well as market prices, in order to prevent direct deals between Turkmenistan and European importers. Gazprom's strategy was also highlighted by its April 2008 agreement with the Libyan government to invest on the Libyan natural gas sector. Gazprom's aim was to procure the European market with Libyan natural gas in collaboration with the Italian ENI.

Moreover, both Kazakhstan and Turkmenistan were increasingly diverting the route of their natural gas exports towards China viewing the greater growth potential of that energy market. Moreover, while the construction of the trans-Arab natural gas pipeline from Egypt to Syria via Jordan and its expected connection with the Turkish network in 2009 could provide additional quantities of natural gas, political instability posed an additional hurdle. Iraq's unclear political future rendered unreliable any promises for annual delivery of 5 bcm of Iraqi natural gas through the trans-Arab gas pipeline and Nabucco to the European market, while Egypt's commitment could not provide for more than 2 bcm per annum.

Alongside obstacles related to supply, securing a market for the natural gas to be transported via Nabucco also proved difficult. The first contract for the provision of natural gas to be shipped through Nabucco to Europe was only signed in June 2008. In addition to these difficulties, legal disputes further complicated the situation. Turkey's insistence on maintaining a brokerage right, regarding the natural gas it had purchased, contravened the principles of the European energy market, as expressed in the European acquis and the European Energy Community Treaty. Signed on 25 June 2005 in Athens by the European Commission and nine Southeast European states, the Treaty aimed to unify the energy legal framework in Southeastern Europe on the basis of the EU acquis and establish an integrated energy market in Southeastern Europe. Turkey's refusal to ratify the European Energy Community Treaty has added a major additional obstacle to the smooth construction and operation of the Nabucco pipeline.

The third pipeline project to cross Southeastern Europe, **South Stream**, is of Russian origin. Russia had initially pondered to use Turkey as a hub of its natural gas exports towards the European market. The construction of the undersea Blue Stream pipeline

### II The announcement of the South Stream project was understood as a Russian strategic move in the energy chessboard of Southeastern Europe

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between 2001 and 2005 was the first step in that direction, and a second pipeline project Blue Stream II was discussed, with the potential either to provide Nabucco with a substantial amount of its capacity or enable the construction of a parallel to Nabucco Russian-controlled pipeline. Russia's eventual exclusion from Nabucco, favoured by the United States and the European Commission, which wanted to increase the access of non-Russian natural gas to the European market via this pipeline, facilitated the launch of the South Stream pipeline project, which would circumvent Turkey. On 23 June 2007, a memorandum of understanding was signed by the Italian energy company ENI and the Russian energy company Gazprom on the construction of the South Stream pipeline. With a total transport capacity of 30 bcm per annum, the pipeline would depart from the Beregovaya terminal on the Russian coast of the Black Sea, run for 900 km undersea until it reached the Bulgarian coast near Varna. It would then be split into two branches: The northern branch would cross Serbia, Hungary and reach Austria, while the southern branch would cross Greece, the Ionian Sea and reach Italy. A relevant agreement was signed in April 2008 during the visit of the Greek Prime Minister Kostas Karamanlis to Moscow. The announcement of the South Stream project was understood as a Russian strategic move in the energy chessboard of Southeastern Europe. Notwithstanding the absence of market guarantees, the technical difficulties of laying a 900-km-long pipeline in a depth of more than 2000 meters, as well as its disproportionate cost, Russia was seen as aiming to deal a blow against the commercial viability of Nabucco. Being itself the largest exporter of natural gas, Gazprom was able to guarantee the supply of natural gas for the whole pipeline capacity and thus gain a significant advantage against Nabucco partners in their search for potential buyers. This was in line with an antagonistic reading of EU-Russia trade relations, which was further reinforced by Russia's refusal to ratify the Energy Charter Treaty. This Treaty, signed in December 1994 in Lisbon by the EU and most Central European, Eastern European and Soviet successor states, aimed to integrate the energy sectors of the signatory parties and allow free third-party access to domestic pipeline networks. Russia did not seem willing to give up its privileged position between Central Asian exporters and European importers of natural gas which allowed it to extract significant brokerage gains.

Nevertheless, forecasts about the growth of Russian natural gas production are not optimistic. It is questionable whether the natural gas to-be-pumped to the European market via the South Stream would in fact be "new gas", namely additional to the current supply to the European market, or simply be redirected from the old land pipelines crossing Ukraine and Belarus on their way to Eastern Europe. Lack of necessary investment in the upstream sector, which could lead to discoveries of new fields and increase productivity, could result in limitations in Russia's ability to increase its production. This would spell no good omens for its ability to meet its contractual commitments and increasing demand in the domestic market, in the emerging Far East

market, as well as the EU market, its biggest trade partner.

### Conclusions-Policy Recommendations

Planning the construction of three natural gas pipelines in Southeastern Europe has underlined the strategic significance of the region as a hub for the transport of natural gas towards the European market. In addition, these projects have forged regional cooperation. The TGI project has become possible through extensive Greek-Turkish economic cooperation and comprises an example of the paradigmatic shift that has characterised Greek-Turkish relations since the late 1990s. Both Greece and Turkey were aware of the strategic and economic significance of pipeline projects in Southeastern Europe in the 1990s; yet these projects were devised in a mutually exclusive way. Greece and Turkey were trying to circumvent each other. The construction of the TGI pipeline though manifested that both countries came to realise that their strategic interests could be complementary.

Energy is one of the policy areas where the strategic importance of Turkey's EU membership becomes most pronounced. Turkey appears as a strategic asset for the EU helping Europe gain access to increase and diversify its natural gas supply and thus improve its energy security. Nonetheless, Turkey's refusal to ratify the Energy Community Treaty for Southeastern Europe undermines the role that it could play as an energy security provider for Europe. By refusing its entry to the European Energy Community, Turkey misses an opportunity to manifest its commitment to European interest at the very moment its European identity is questioned.

To meet an ever increasing European demand for natural gas, European authorities need to follow a two-pronged policy, which will reduce European energy dependency on Russia and increase the supply of natural gas in the European market. To meet the first target, projects such as the TGI and the Nabucco, which contribute to the diversification of the EU energy supply should meet with persistent European support. In addition, the diversification of natural gas supply should also be furthered through the construction of LNG terminal facilities and the upgrade of existing ones. European access to non-Russian natural gas resources would not only further energy security by improving diversification of energy supply. It would also contribute to the increase of natural gas quantities available as well as the improvement of market competition. To meet the second target, namely increase of natural gas supply, the European authorities need to collaborate with all major natural gas exporters, not least of which is Russia, the biggest exporter of natural gas in the world. Although meeting Europe's increasing natural gas needs from Russia is not desirable – in terms of energy supply diversification – or even possible – in terms of Russia's own ability to provide additional natural gas quantities – Russia will remain a key supplier of the European natural gas market. Improving the infrastructure of natural gas transport from Russia to the European market will enable the import of additional natural gas quantities from Russia, in addition to natural gas originating from the Caspian Sea or the Middle East, if these quantities become available to the European market. In that respect, the

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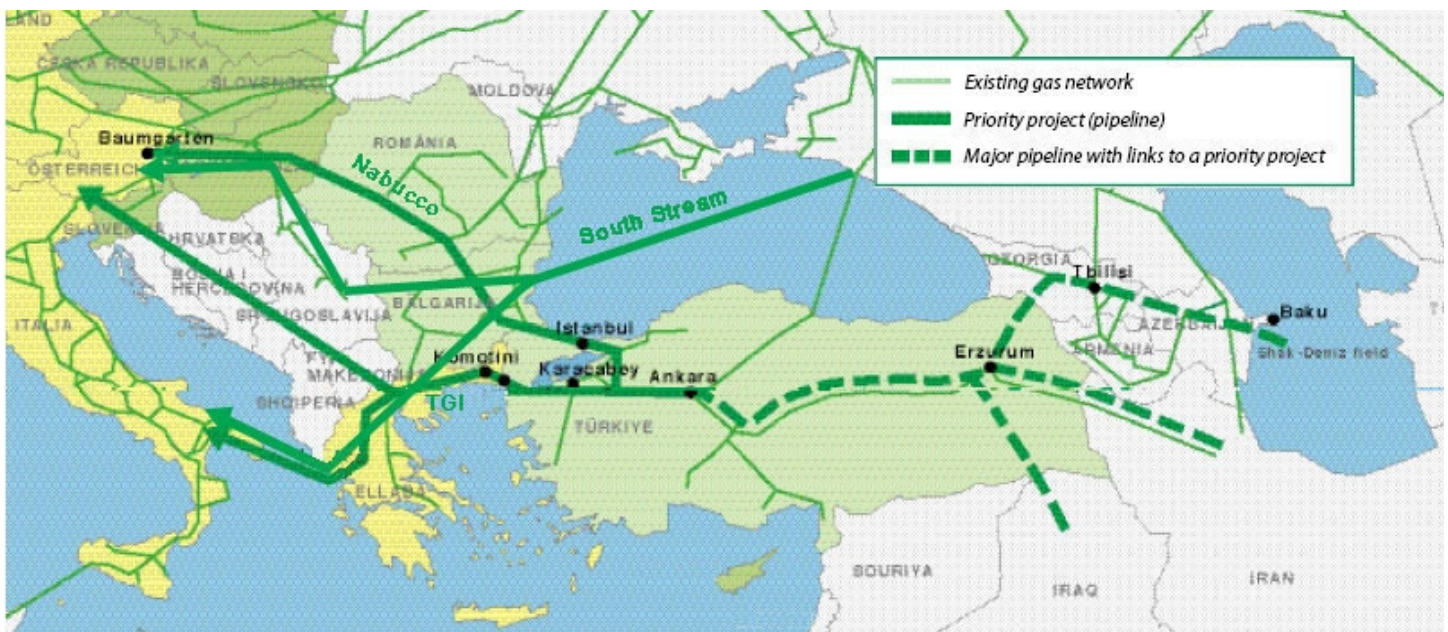
South Stream project could be seen not as competing but as complementary to the Nabucco and TGI. On a similar vein, both Russia and the EU would benefit from a reconsideration of their energy relationship on more cooperative terms. Energy is a field where a clear interdependency case can be made. Russia needs European natural gas demand as much as the EU

needs Russian natural gas supply. Existing disputes need to be addressed through bilateral talks, and the ratification of the Energy Charter Treaty by Russia is a useful starting point. Instead of being a hindrance, energy could comprise the foundation of a vibrant EU-Russia partnership.

**Further Readings:**

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Figure 1. Pipeline Projects in Southeastern Europe (edited version of a map from [www.transatlanticpolitics.com](http://www.transatlanticpolitics.com))



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