

# Pipelines for Energy, Interests for Companies and Great Powers

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*“The EU–Russia energy dialogue is dominated by ghosts and unfounded fears of dependency rather than an appreciation of the real interdependency.”*  
*(Jérôme Guillet)*

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## **Introduction**

EUROPE IS currently importing most of its energy based on fossil fuels from the post-Soviet space. This dependency has never been too appreciated and there were plans aiming to reduce it—for instance, finding other suppliers from the Middle East or North Africa until the usage of renewable energy is fully developed. Given the Russian-Ukrai-

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nian dispute that broke out in 2006, this need became more acute for strategic considerations. Thus, among others the Southern Gas Corridor initiative was born. At the same time, nowadays, energy supplies are undergoing a process of diversification. New and ecological sources of energy are introduced in the circuit of energy supplies, but the most important and reliable sources—from an economic point of view—are still represented by oil and gas. This aspect is especially true in the case of Eastern and Central Europe, where economic development and rising living standards require relatively greater energy resources. The importance of the natural gas supplies for the European Union, on its central level, is illustrated by the Southern Gas Corridor initiative (Jarosiewicz 2015) of the European Commission (European Commission 2016), officially proposed in 2008 (Commission to the European Parliament 2008), which is intended to devise strategies for the transportation of natural gas to the EU territory from the Caucasus, Central Asia and the Middle East (Euractiv 2016). According to the definition given on the site of the TAP, “The Southern Gas Corridor (SGC) is a term used to describe planned infrastructure projects aimed at improving the security and diversity of the EU’s energy supply by bringing natural gas from the Caspian region to Europe” (TAP homepage 2016). This presentation will examine a special aspect of the new energy supplies game through the evolution of the concepts of a series of rival pipeline proposals, functional or failed.

As a Cold War tradition, the Soviet Union used to supply its allies-satellites in Central-Eastern Europe with oil and gas, and this trend survived the fall of the communist regime when the place of the Soviet Union was taken by the Russian Federation. However, the Mir pipeline had to pass through the territory of the newly independent Ukraine, and Russian-Ukrainian disputes (De Micco 2015, 4-6) unavoidably affected third parties (Horn 1999, 162). In their turn, newly independent countries in the Caucasus and Central Asia, which are rich in oil and gas deposits, like Azerbaijan, Turkmenistan or Kazakhstan, were trying to find an alternative way to transport their merchandise to avoid crossing the Russian territory (Cooley 2012; Cummings 2012; Hopkirk 1992; Johnson 2007; Kleveman 2004; Meyer and Blair Brysac 2000; Petersen and Barysch 2011; Rashid 2000; Cornell 2001; Peimani 2009; Anceschi 2009; King 2008; Hrair Dekmejian and Simonian 2001). The major challenge at the level of government policies, in the post-communist era, appeared during the 2005–2006 Russian-Hrair Ukrainian gas crisis, when the European Union and Central-Eastern European post-communist countries faced serious supply problems. In this context, ensuring energy supplies became a key priority for the European Union, as we can see in the case of the Southern Gas Corridor, and governments also devised their own strategies on a national level, for which they started to seek reliable partners. For example, in the case of Romania, a coherent Energy

Strategy was adopted by the Tăriceanu government, and Romania openly supported the PEOP, AGRI, and Nabucco pipeline projects (Chifu et al. 2011, 64–67 and 93–95) and is generally open toward all proposed pipelines which can pass through Romanian territory; as a consequence, the government ensured a direct supply for the needs of the national economy. In the following pages we will see which were—and in some cases, still are—the major projects, what were their strengths and weaknesses, what is the potential of the still active ones and, in the case of unsuccessful ones what were the reasons for their failure, or why they were abandoned after a while.

## Failed, Functional and Postponed Projects

ONE OF the most interesting projects—with very little chance to be put into practice in the context of the current crisis in the Middle East, even if it has great potential—is the so-called Persian pipeline, also known as the Iran–Turkey–Europe (ITE homepage 2016) pipeline. In 1996 Iran and Turkey signed a \$20 billion agreement that called for Iran to supply Turkey with natural gas for twenty-two years. Exports of Iranian gas to Turkey were slated to start in 1999 at an initial rate of 300 million cubic feet a day (mcf/d) and they were supposed to rise to a level of 1,000 mcf/d in 2005 (Bahgat 2013, 113). Even though the Turkish-Iranian relationship is not completely free of tensions and regional rivalry, on the main issues they are natural allies; for instance in the problems regarding Kurdish nationalism or avoiding energy security risks which could be rooted in domination over oil and gas production, respectively over trading routes of the Gulf states.

The idea was developed primarily by Iranian politicians, following the *détente* with the West, and the project was discussed for the first time in February 2014. The key transit country would be Turkey, thus the European part of the pipeline would avoid most of the Central-Eastern European countries, following a route through the territory of Greece, Italy, Austria, Switzerland, Germany, France, and Spain. The project was designed as a Built-Own-Operate type one, the National Iranian Gas Export Company being its main builder, operator and beneficiary, other companies being co-opted only with regional interests and reduced shares. The main beneficiary of the project, beside Iran, would be Turkey, where an important amount of the natural gas would remain for consumption. The ITE would represent a major competition for other pipelines built through American, Russian and European investments, having also major gains for Iran on a political level: the pipeline would definitely end Iran's image as a "rogue state" in Western Europe, would deepen regional cooperation

with another regional power of the Muslim world, Turkey, ending Iran's relative isolation in this community as well.

Even if Turkey is Iran's second largest power client, importing about 2,500 million kwh of electricity from Iran (Shaban 2015), and the economic relations between the two are much better than the highly political frictions show, it is very unlikely that Turkey will commit itself to such an Iranian initiative. With its commitment to NATO, Turkey is a close ally of one of Iran's main current enemies, the United States of America. The two Muslim regional powers also have rivaling interests in Iraq, Syria and, on a lesser scale, in the Armenian-Azeri conflict (de Waal 2003; Croissant 1998) and in the Kurdish issue (Kreyenbroek and Sperl 2000; Aslan 2014) (this latter being vital for Turkey's territorial integrity). Moreover, in the context of the Shia-Sunni religious conflict, once again radicalized following the Iranian-Saudi conflict of January 2016, on a short term any initiative similar to this is doomed to failure. On a long term however, the effects are incalculable as there are too many players and interests involved: the opposition of the USA, which can turn into support at any time, the political support of the Russian Federation for both countries, the Saudi rivalry with Qatar, common goals in the Kurdish question, but rivalry in case of Syria, and so on.

The euphonious name of South-Eastern Europe Pipeline is associated with a proposal designed to create a link in the transportation of natural gas from Eastern Turkey to Baumgarten an de March, Austria. The proposing company was British Petroleum (Bloomberg Business Week 2011; Conn 2011), which announced it publicly on 24 September 2011, and the pipeline's route was designed to pass through Turkey, Bulgaria, Romania, Hungary and Austria. This very practical proposal—called a “downsized Nabucco” (Socor 2011) by Vladimir Socor—was designed to have the shortest and economically most profitable route possible, and was planned to have its supplies from the Azerbaijani Shah Deniz natural gas field. However, on 28 June 2012, BP announced that it would direct its choice to one of the two more developed proposals, Nabucco West or the Trans Adriatic Pipeline; thus, the further development of the CEES ceased.

The Trans Adriatic Pipeline—also known as TAP (TAP homepage 2016)—seems to be the winner of the competition with the often more touted Nabucco project, and it represents an integral part of the Southern Gas Corridor project of the European Union. The project is operated through the Trans Adriatic Pipeline AG, its shareholders being British Petroleum, the State Oil Company of Azerbaijan Republic (SOCAR), Snam of Italy (which bought its share from Statoil of Norway), the Belgium-based Fluxys, the Spanish Enagás, and the Axpo holding from Switzerland, which later made the official announcement of the TAP initiative in 2003. The TAP has the political support of the central institu-

tions of the European Union, and most importantly the political support of the three countries it crosses, Greece, Albania, and Italy, these three countries being among the *relatively* neutral ones in the Russian-American-Western-European disputes and geopolitical games. Expected to be finalized by 2018, the TAP will represent probably an economic success for its operators, and from a political point of view, it is a rather neutral project, not affecting major great power interests. It is possible for it to represent a major gain for the small country of Albania, which has been considered an economic pariah of the European continent for a long time; many average European citizens look down on this small and beautiful country and associate it with the violent and insidious Albanian mafia. A possible—and, once the pipeline becomes functional, probable—future for this small country of the Western Balkans is to become the epicenter of Balkan gas politics. Also, the TAP can give Albania the possibility to diversify its energy security, since almost all of its production relies on hydropower (Geropoulos 2014). However, the TAP does not directly solve the issue of supplying most former socialist, currently EU-member countries which need a more direct and appropriate pipeline. Such a project could have been Nabucco, or the shorter and very practical AGRI project.

The Azerbaijan–Georgia–Romania Interconnector (AGRI) was designed to offer a practical and feasible way to transport Azeri natural gas to the Western shore of the Black Sea. According to the original plans developed in 2010 by high ranking officials of Azerbaijan, Georgia and Romania, natural gas would be transported from the Sangachal terminal in Azerbaijan to the Kulevi terminal in Georgia, which has direct access through its port to the Black Sea, the Kulevi oil terminal being operated in its turn by a subsidiary of SOCAR. Here the gas would be liquefied and then transported by tankers to the Romanian port of Constanța (Chifu et al. 2011, 93–95) where, following its re-gasification, it would be transported to customers from all over Romania and its neighboring countries. It is worth mentioning that this initiative is one of those where state officials settled the basic ideas, companies joining the development process only after that. The initiative was quickly welcomed by Hungary, with the possibility of Bulgaria joining as well, as SOCAR Vice-president Vitaly Beylarbeyov proudly said in 2011: “Oil and gas companies from Japan, Korea, Turkey, France and Norway show interest in the project” (En.trend.az homepage 2011). In 2011, the project was joined by five companies, including SOCAR, Romgaz, the Georgian Oil and Gas Corporation, and the Hungarian Magyar Villamos Művek group (MVM), the four corporations creating the AGRI LNG Co; each one of its founding members have 25% of shares and the company is registered in Romania. In the long term, supplies from Turkmenistan are also taken into consideration. However, since the Black Sea region became unstable due to the Russian

military intervention in Georgia, as well as to the Russian-Ukrainian and more recently the Russian-Turkish frictions, the short-term future of this initiative might be compromised.

FIG. 1. THE TURKISH PIPELINE AND THE AGRI



CARTOGRAPHY: Zsombor Bartos-Elekes, basemap: maps.google.com

White Stream (White Stream homepage 2005) came into being as a Ukrainian proposal, in 2005, and was largely promoted in the forthcoming years at conferences and bilateral meetings. Also called the Georgia–Ukraine–EU gas pipeline, it was built on the traditionally good relations of the Ukraine with Georgia—the two countries sharing lots of similarities in their Soviet and post-Soviet heritage—and it could serve the beneficiaries of the Orange Revolution in reducing their country’s dependence on Russian supplies, improve its position in the Caucasus region and gain importance in the eyes of the EU officials, a structure in which the Ukraine wants to be integrated. The plan was to start the pipeline from near Tbilisi, Georgia, from a branch of the South Caucasus Pipeline, to Supsa, the village port on the Black Sea. From here there are two possible routes for the pipeline which could pass under the Black Sea, one having its end at Constanța, Romania, and the second in Crimea. The Romanian network could also bring about major improvements in the Ukrainian-Romanian relations, the two countries often perceiving each other as regional rivals. For instance, during the last two decades there were a series of territorial and minority-related disputes, such as the Bistroe canal, the Serpent Island in the Black Sea, their policies towards the Republic of Moldova, the situation of the Romanian ethnic minority in the Ukraine. The White Stream Pipeline Company (GUEU) was founded in

London to manage the project but the composition of its consortium was never revealed. Around 2009, the importance of the White Stream project seemed to grow, in the aftermath of the events in Eastern Turkey. White Stream could have been crucial to reduce Russian positions in supply, also making Turkey lose a certain part of its capacity to put pressure on Europe through gas transit. Had everything happened according to plan, the pipeline would have become functional by 2016. However Ukraine's position in the region is seriously weakened by the Russian occupation of Crimea.

Turkish Stream (Gazpromexport homepage 2015; Turkstream.info homepage 2014) came into discussion following the unexpected demise of the South Stream project. Following the success of Blue Stream, supplying Turkey with Russian gas, and the demise of South Stream due to the attitude of Bulgaria, Russian officials and the Gazprom leadership came up with a new project, passing through the Black Sea directly to Turkey, from where it could supply part of Europe, but also countries from the Mediterranean such as Israel, Lebanon, Syria, and Cyprus. This project, being relatively new, has not been developed in detail until now, and as a Russian military airplane was shot down by the Turkish air force in November 2015, its future on a short term was compromised. Nevertheless, the building of Turkish Stream started in May 2017 and it will supply Turkey, Greece, Macedonia, and Serbia, before finally reaching Hungary and Austria. Serbia, as a candidate for full EU membership, has committed to respect the EU regulation stating that the owner, the operator and the supplier of the pipeline must be different market actors. Actually, Turkish Stream represents a partial revival of the South Stream project on an alternative trajectory with almost half the transit capacity (about 32 billion cubic meters per year). It would play a very important role in supplying Turkey, which is the second largest consumer of Russian gas after Germany, and presently is supplied by Blue Stream and the Balkan pipeline route. Another importance of Turkish Stream is its role of bypassing the Ukrainian route which is insecure, and very "hostile" towards Russia (Mészáros 2017). The building of the Russian portion of the pipeline started in May 2017. Both the Russian government and Gazprom are realizing—and express it through their doctrines—that Russian energy is a very useful and successful tool for the country's foreign policy and strategic interests, which determines its geopolitical influence. It can also be used as a weapon: between 1991 and 2006, Russia exerted pressure over other former republics of the Soviet Union by interrupting energy supplies 55 times (Szabó 2013, 225-231).

The Trans-Anatolian Pipeline or TANAP (TANAP homepage 2011) is a pipeline which will transport Azeri gas through Georgia and Turkey to Europe. The project was announced in 2011, the building of the pipeline started in 2015, and is expected to be finished in 2018. SOCAR is the main shareholder with 58%, followed by the Turkish BOTAS with 30% while British Petroleum has 12% of

the shares. According to the plans, the company which administers the pipeline will have its headquarters in the Netherlands, and it will start functioning in 2018. The Turkish-European route is still unclear. It is possible that the TANAP will be connected to the TAP, but alternative routes are also taken into consideration. The TANAP represents a main strategic gain for both Azerbaijan and Turkey, and the project was successful due to its simple planning and relatively risk-free geographic and geopolitical setting; Turkey and Azerbaijan have good relations, and their geographical connection is relatively risk-free, it does not involve hostile third parties (it is not a coincidence that no pipeline originating from Azerbaijan passes through Armenia) and, in both countries, cooperation between state leadership and great companies is crucial, usually the state being the dominant party. Due to its secure nature, it is also not a coincidence that the rivaling Nabucco and TAP projects both signed cooperation agreements with the TANAP in 2013 (Euractiv 2013).

If TANAP is designed to transport on the Azerbaijan–Turkey route, the Turkish-European route being still unclear, the Pan-European Oil Pipeline or PEOP (Transnafta 2002) would be a pipeline which is designed to start from the city port of Constanța, Romania, meant to transport oil through a pipeline system through Serbia, Croatia, Slovenia to Italy, also making a connection with the Transalpine Pipeline, running through Austria and Germany. The project was proposed in 2002, with the participation of Romanian, Serbian and Croatian investment, Italian and Slovenian companies being also encouraged to participate. The Pan-European Oil Pipeline Project Development Company was registered in London to manage the project, with the Romanian Conpet Ploiești and Oil Terminal Constanța, the Serbian Transnafta, and the Croatian JANAF as participants. In 2010, the JANAF froze its investment in the project; the Romanian-Serbian cooperation however is still active. This pipeline, planned for crude oil, in case of success, can be a model for a natural gas pipeline, too.

Two of the most publicized projects were the Nabucco and the South Stream projects (Bíró 2008; Lakatos et al. 2015), due to their political background and geopolitical importance. In the following pages, we will make a summary of how these two projects evolved until the moment of their demise.

Nabucco (Feller 2008, 50; Petersen 2001, 40–42; Rowley 2009, 72–73; Hoffstatner 2011) was planned to be a common investment of companies from the member states of the European Union, having strong support from American politics and business. The project was officially born in 2002, with the intention to reduce the dependency of the European Union and its future member states on the Russian Federation. The start of its construction was planned for 2011, and it was planned to be functioning at full capacity by 2014. As far as the original plans are concerned, the pipeline was planned to start at the gas field of Shah Deniz in Azerbaijan. The Azeri leaders perceived Nabucco as a very



useful tool for expanding the country's international profile and reducing its dependency on Russia (Mehdiyeva 2011, 10–14). Other sources could have been in Turkmenistan, Iraq, possibly Iran (Kuhn 2012, 77–78) or Kazakhstan. At a certain moment, Egypt was seriously planning to offer its resources for Nabucco as well, and the plans also contained a link to the Black Sea's resources. Due to insecurities at Turkey's eastern borders, the original plan was later modified and given the name Nabucco West. This plan was designed to start the pipeline from Turkish territory. This version was designed to be more secure, however, since the owners of the Shah Deniz field chose to supply the Trans Adriatic Pipeline project (TAP), the shareholders of Nabucco could not find a viable replacement for this source. As former Hungarian Prime Minister, Ferenc Gyurcsány said in 2007: "the Nabucco is a dream" (Luft and Korin 2009), and it remained just that. In order to coordinate the Nabucco project a multinational company, the Nabucco Gas Pipeline International GmbH, was founded in Vienna in 2002. Its initial shareholders were 5 major companies from the five participating countries: OMV (Austria) MOL (Hungary), Transgaz (Romania), BEH (Bulgaria) and Boas (Turkey). Initially the German RWE was also a founding member but it sold its share to the OMV in 2013. In Hungary, MOL was replaced by Földgázszállító Zrt., and French investors also bought some stock from OMV. The potential of Nabucco was illustrated by the interest of the Polish PGNiG, or the IPIC, a strong investment fund from Abu Dhabi. Officially, neither the USA nor the EU were participating in the project, apart from lending their full moral support; the EU financed Nabucco through a series of batches (with 250 million Euro in 2009 alone), and additionally the European Bank for Development was ready to finance 25% of the building costs, in case the actual building process was started. This never happened and the failure of Nabucco made the Azeri expert Ilgar Gurbanov state in 2014: "Since Nabucco failed, Gazprom will still continue to dominate the price-setting process and keep its monopoly position in Central Europe" (Gurbanov 2013, 5).

The main pro-Nabucco arguments were:

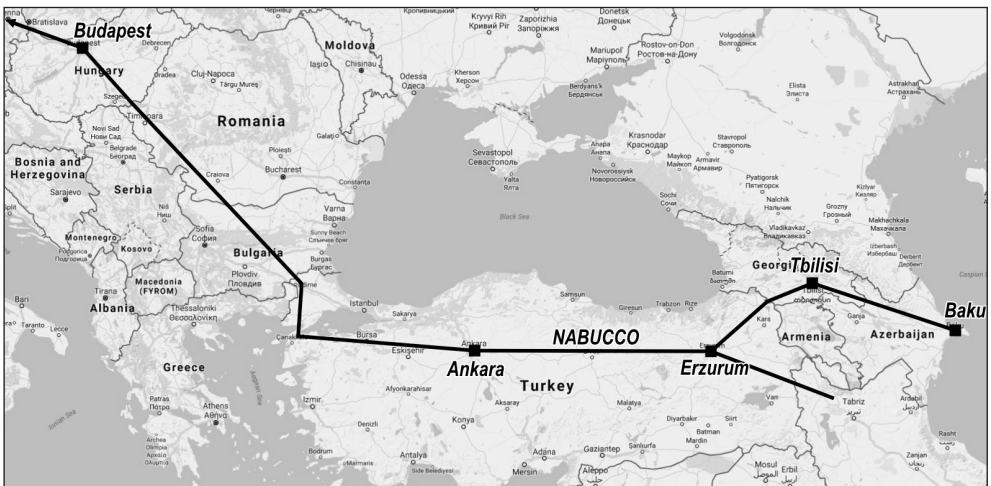
- granting the benevolence of American capital and military power;
- the diversification of Europe's supply of gas;
- the reduction of the dependence of the countries in the EU on Russian gas;
- the states of the Caucasus, Central Asia, and the Arab world could have developed a closer relationship with the EU, a fact that could have granted not only economic but also some political advantages;
- it could have deepened regional cooperation among often rivaling states in at least four distinct geographical regions: Central Asia, the Caucasus, the region of the Black Sea, and Central Europe.

On the other hand, the issues which compromised the building of the original Nabucco, and later of Nabucco West, proved to be more decisive. Among these, we have to mention:

- regional warfare and the high risk of terrorist attacks;
- the lack of perseverance of key companies and political forces in imposing the original plans;
- the great number of alternatives, like the TAP, mentioned above, or South Stream;
- because Nabucco was planned to supply only a limited number of countries, it lacked the deep involvement of great powers of the Western world;
- the project was criticized because of environmental and human rights issues by a series of NGOs.

The Nabucco project is not officially failed yet, but there is little chance for its building to start soon. Its fate can be best illustrated by the words of a Romanian diplomat, specialized in the Turkish world: “The Nabucco will be built when its name is Ivan Groznej” (personal discussion with the author during the summer of 2012). This sentence meant to illustrate the Russian influence in the region where the building of Nabucco was planned. In 2015, however, there appeared signs that the Austrian OMV company had different plans (Stoica 2015), so it might be too early to bury the Nabucco project as an initiative in itself.

FIG. 2. THE NABUCCO PIPELINE



CARTOGRAPHY: Zsombor Bartos-Elekes, basemap: maps.google.com

South Stream (South Stream homepage 2007), the project considered to be the main rival of Nabucco, was designed to serve the interests of Russian gas suppliers and, as a consequence, to promote Russian interests in Europe and to offer an alternative to Western initiatives, such as Nabucco. Its birth was officially announced in 2007, as a common initiative of the Russian Gazprom and the Italian Eni companies. South Stream AG was registered in Switzerland in January 2008, its objective being the building of the pipeline called South Stream, as a pair to Nord Stream, already functional, the pipeline which supplies Germany with Russian gas through the Baltic. Nord Stream functioned as a model for South Stream and the countries initially planning to participate in the South Stream project were: Russia, Bulgaria, Serbia, Hungary, Slovenia, and Italy. Electricité de France and the German Wintershall companies joined as investors in the global project, besides Gazprom and Eni. On a national level, Gazprom planned to build the pipeline in cooperation with its partner on the respective country's level, like Bulgargaz, Srbjagaz, MOL and the Slovenian Geoplin Plinodovi. The building of the Russian section started in 2012, but the project was canceled by Russia in December 2014 due to the hesitation of Bulgaria which was the result of heavy EU and American pressure because of the Crimean crisis.

The main advantages of South Stream (Popescu 2013, 143-153; Stratfor 2015; Richard 2015) were the following:

- Russia could reduce the blackmailing potential of the Ukrainian government;
- it could have deepened the regional cooperation, especially among Christian Orthodox states in the Balkans;
- it could have opened new perspectives for cooperation between Russia and states of the European Union, especially with Italy, but on the long term, also with Germany and France.

FIG. 3. THE SOUTH STREAM PROJECT



The project was replaced by the Turkish Stream project based on Russian-Turkish cooperation. This pipeline is planned to avoid small European states from South-East Europe, vulnerable when faced with Western pressures. But currently the future of this pipeline seems to be rather uncertain, and it is confronting a series of obstacles. A final blow to the South Stream project was given on 20 January 2016, when Gazprom officials announced the cancellation of the South Stream project. With some of its last efforts, the Obama administration tried to improve American-Turkish cooperation in the field of energy security by attracting Cyprus into the cooperation as well (Okumuş 2016, 41).

Germany plays a very interesting and contradictory role in the European energy policy, because the Germans are the main pivot of the European unification process, on the one hand, advocating the idea of a powerful EU, but, on the other hand, their intention to base their economy preponderantly on Russian gas does not serve the reduction of the European energetic dependency. Because Russian gas sources are relatively the cheapest for Germany, they decided to double the capacity of North Stream (55 billion cubic meters per year) collaborating in a consortium with Gazprom (among other European partners). No wonder that the US intention to find ways for the American LNG to enter the European market meets obstacles on both the Russian and the German side (Germany's dependency on Russian gas is 43% of the total consumption) (Pogonyi et al. 2014).

## Interests of States and Corporations

**B**UILDING THE pipelines involves major interests, the financial aspect involves billions of dollars of investment and considerably more in profits, but, at the same time, a series of risks and geopolitical interests are also important. To determine their role, in the following we will summarize the interests of major corporations, and of some of the great powers interested in the region.

For great oil-and gas companies, the goals are clear: first of all, to be the one that builds the first pipeline, which means that the competitors should not be faster in achieving the same goal. However, designing a pipeline is preceded by a series of feasibility studies, and the analysis of geopolitical risks, which—as we could see in the examples mentioned above—are plentiful.

For a better administration of this situation, often new companies are created, to be the operators of the project in which initiating companies affiliated to the project are shareholders. In such cases, the initiator generally owns the majority of stocks, local partners having also their share and crucial role, most

of them being nationally strategic companies from the small Central-Eastern European countries. The competition among rivaling pipeline projects is stiff and often involves great power interests.

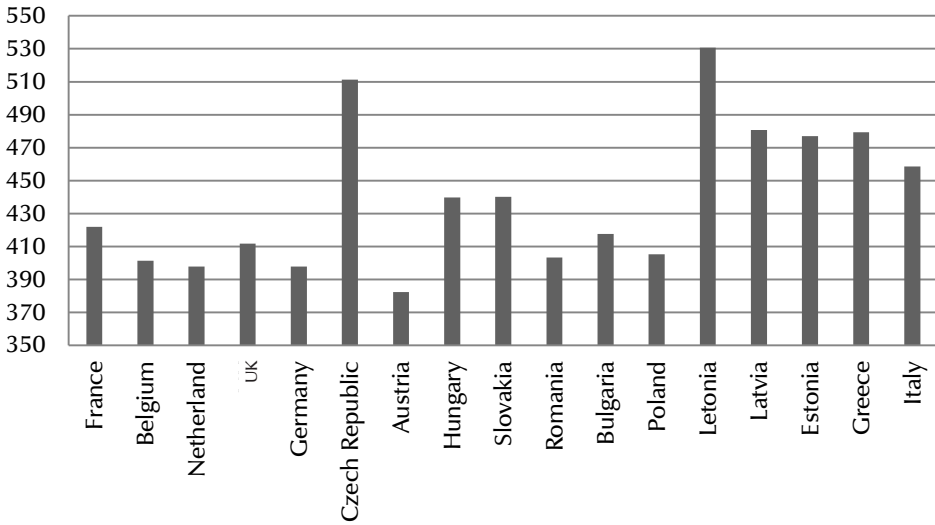
The structure most interested in developing some of the projects is the European Union, as the Southern Gas Corridor initiative illustrates. It is of strategic importance for Brussels to assure the energy supply of its poorer South-Eastern periphery, to improve their economic indicators, and, if possible, to decrease their dependency on solely Russian supplies by diversifying the sources. However, currently the EU is wrestling with a series of serious internal issues, like the refugee crisis, Brexit, and inequalities between its member states, and it is unlikely to be able to impose a coherent strategy in this field on the short term.

The EU managed to abolish the contractual isolation of the gas market in Eastern European EU members, which meant that Gazprom prohibited former socialist eastern EU-members to transfer the gas purchased from Gazprom to other EU countries. With this contractual prohibition, Gazprom would divide and conquer, and geopolitically manipulate the Eastern European countries through this strategic merchandise. The EU would have threatened Gazprom with huge fines if it maintained its oligopoly for this market manipulation. But there is also a lack of sufficient interconnection, especially between Western and Eastern European gas pipeline systems, which makes it difficult to maintain the security of supplies through re-exportation or gas-swaps. The better interoperability with Western European gas pipelines would be essential for Eastern Europe, because their exposure to Russian gas imports is still substantial. Only the Romanian gas consumption is less dependent on Russian import (10%), the Hungarian and Polish dependency is about 60–64%, while the Slovak, Czech, Bulgarian and the Baltic states' dependency is more than 90%, even as high as 100%. The most dependent states on imported Russian gas are paying the highest price for this merchandise, although the general dependency on imported gas could also make the prices rise (Mészáros 2017).

In any case, a gas war between Russia and the European Union makes no sense, as Jérôme Guillet noted, because nobody can win it: all parties lose—supplies, income, reputations, and trust—while remaining unavoidably linked by the pipeline. Guillet correctly emphasized: “The EU–Russia energy dialogue is dominated by ghosts and unfounded fears of dependency rather than an appreciation of the real interdependency” (Guillet 2011, 72).

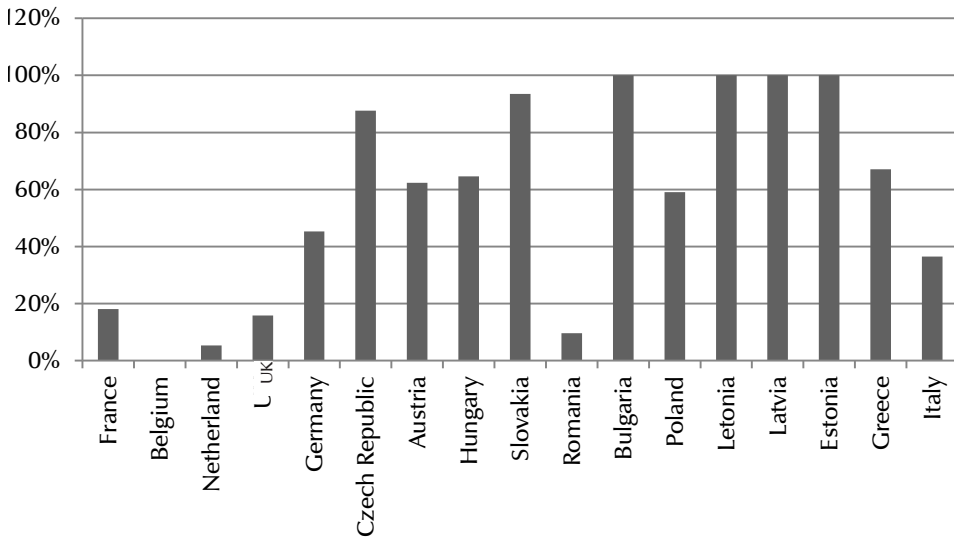
The United States of America, especially since the Ukrainian crisis, has similar interests with Europe, especially in weakening Russian economic interests and strategy. However, the prestige of the United States is not the same as it was during the nineties, and its influence can be balanced by the growing influence of Russia. The American-Russian new cold war has many aspects, in which the

FIG. 4. THE IMPORT GAS PRICE IN SELECTED EU MEMBER STATES  
(USD/1,000 m<sup>3</sup>, 2013)



SOURCE: European Commission, Eurostat.

FIG. 5. THE DEPENDENCY ON RUSSIAN IMPORTED GAS  
IN TOTAL GAS CONSUMPTION IN SELECTED EU MEMBER STATES (% , 2013)



SOURCE: European Commission, Eurostat.

issue of pipeline projects is important, but not primarily important. A certain loss of ground for American companies in this region can be noticed—no wonder that in the case of Nabucco, even if it was supported by the USA, European companies had to take the initiative—but this situation, if the situation in the region is stabilized once again, will just improve for American interests. However, in recent years the US has become a potentially important energy exporter due to the shale gas and shale oil revolution. Though the price of the US shale gas LNG is relatively high, the price of the imported gas imposed by Gazprom is quite high as well for the Eastern European countries, unlike the lower price offered to Western European countries, especially to Germany. Consequently, based on the present price level, the US LNG could be competitive, but the recent post-socialist EU members have a single LNG terminal in Poland (another one is under construction in Croatia). That is to say, the receiving capacity of LNG is still insufficient. At the same time, the US extended the sanctions against Russia in July 2017 due to an alleged Russian intervention in the US presidential election campaign, penalizing even those European energy companies which have joint pipeline-building projects with Russian energy companies. This could be evidence of the fact that the US has an aggressive expansionist policy in the context of energy-geopolitical games (Pogonyi et al. 2014).

The Russian Federation and its companies are seemingly in pole position, having the greatest influence in Central Asia and in the Caucasus. They are strong in capital and the region falls within their strategic interest, but often this does not seem to be enough, like in the case of South Stream and Turkish Stream. The pipelines based on Russian initiatives will be built as relative stability and regional security are re-established in the Black Sea region. The Russians still preserve the monopoly on the transfer of Central-Asian gas and oil to Western states via the Caspian Pipeline Consortium, between the Tengiz Field (Kazakhstan) and Novorossiysk (Russia), and through the widespread Russian gas pipeline network. Russia, together with China, is trying to put pressure on Kazakhstan to prevent the construction of a pipeline connecting its oil fields with the Baku–Tbilisi–Ceyhan pipeline, thus preventing Western-led oil and gas consortia from playing a leading role in new developments of Kazakh oil and bypassing Russian transit routes (Cohen 2006, 39).

The world's next superpower, China, is expanding its economic interests in the region, but not yet at the level of investments in fossil fuels. Unlike in Central Asia, where China has a primal strategic interest in energy supplies (Lakatos 2014, 143), Chinese companies are not at all active in the Black Sea region. The Chinese will make joint efforts with the Russians to exclude the USA and the EU from Central Asia, thus seriously limiting the sovereignty of the Central Asian

countries. But, on the other hand, in the new great game around the energy resources in Central Asia, in the future the Chinese can easily come into a serious conflict with Russia regarding supremacy in the region and the control of supply with fossil energy resources. The rise of China as the new global economic superpower might change this in the near future, because China has all the chances to become a global oil player, while Russia remains predominantly a regional one (Cohen 2006, 17).

For small Central-Eastern European countries, the equation is simple: each of them would prefer to have a pipeline crossing its territory, due to the financial and strategic gains. Both competition and cooperation are caused by this strategic goal, but they do not have the necessary capital to initiate actions. They can rely only on the existing projects of some great company.

## Conclusions

**A**S WE could see, most of the pipeline projects failed. The importance of the gas pipelines for Europe is a crucial issue, and it will remain so at least for a few years more. The rivalling economic interests of great companies and the geopolitical rivalry in the region which most of the pipelines should cross will however postpone or cancel most of their projects. We notice that usually the pipelines built without problems are those which have limited objectives and there is a small number of actors who reach an agreement more easily (e.g. North Stream—Russia and Germany), while the ones designed to serve major strategic goals and have almost decisive economic importance are experiencing a series of difficulties. In the latter cases they were discontinued because of insufficient investment capital, the impossibility of coordinating the interests of huge stakeholders, or the lack of strong buying commitment from the consumer side, the insecurity of sources, or they were simply (geo)politically killed (e.g. South Stream) (Guillet 2011, 72).

The objective consequences of gas pipelines are the following:

- Through the burning of natural gas, less CO<sub>2</sub> is released into the atmosphere than in the case of coal or oil. An alternative to fossil fuels could be the “green” sources of energy, but these still account for only a small percentage of energy consumption, since their permanency is reduced as compared to fossil ones.
- A pipeline is costly to build, but once it is finished, it is more economical than transporting gas by vehicles such as ships or trains. Its supply is also faster but, due to its length, it can also be very vulnerable to natural catastrophes or criminal attacks.



- The building of a pipeline can cause serious modifications to the environment where it will be placed. It is less likely that, let to their own devices, great companies will pay more attention to possible environmental issues than to their profit. This is the role of NGOs.

- Shale gas can be a viable alternative to natural gas, but due to the catastrophic and irreversible damages caused by its current technology of exploitation, it is not likely that great exploitations for shale gas will start in Europe in the near future. A good example for this is the case of Vaslui, Romania, where the Chevron Company was trying to exploit shale gas, but it was stopped by the popular protest of the locals, also supported by Greenpeace activists. Anyway, shale gas and shale oil exploitation was boosted so much in the last decade that it triggered a serious supply side boom, which considerably reduces the profitability of the oil and gas companies worldwide. That is the reason why these classic oil companies must reduce their investment costs, and they have to choose to execute only the most efficient pipeline projects due to the lack of sufficient financial resources (Horváth 2017).

- The building of two pipelines designed for the transport of natural gas, meant to supply Central-Eastern Europe and South-Eastern Europe with gas from Russia and/or the Caucasus and Central Asia, and which had the important characteristic that it avoided the unstable Ukraine, was doomed to failure. Their failure proves the lack of influence of the possible beneficiaries to promote their own interests and it is an indicator of instability in the region.

- In the following decades the lack of stable gas supplies will hang over the head of many of these states like a Sword of Damocles. However, this sword is very unlikely to fall and to cause a major crisis, due to the diversity of offers on the global energy market and the relatively low prices.

- An alternative to the reliable, but environmentally harmful and exhaustible fossil fuels could be the renewable sources of energy. Time and investments are required in order for these to be a competitive answer to the energy question, which can be rewarding only on a long term (Cebotari and Benedek 2017).

It is certain that the European Union and its Central-Eastern European member states definitely need one or more pipelines for the import of gas. What is not settled is which countries should be the main suppliers—because of political, geostrategic and geo-economic reasons—, and which companies should be the main beneficiaries for building and operating the system—economic interests are clashing, and not everybody can be a winner. Another factor, worthy of being taken into consideration, is that for building pipelines, a situation of relative security and peaceful international cooperation is required, which is not the case nowadays, neither in the Caucasus, nor in the European parts of the post-Soviet zone, nor in the Middle East. The situation could improve in the near future

and those companies that will operate their own pipeline project earlier will be in a winning position. Until then, however, we can only watch and analyze the evolution of the various pipeline projects.

Undoubtedly, the price formation process and all the trading processes with hydrocarbons are definitely influenced by geopolitical factors, to the same extent as real market factors have their influence as well. According to the opinion of J. Guillet, we are not sharing the simplistic statement of “armchair geo-politicians” that the whole “gas-trade game” between Russia and Europe is serving only the new Russian imperialism, ignoring the practical, technical and economic requirements of the energy industry. All in all, theoreticians cannot make projects that do not have a strong underlying financial and business rationale (Guillet 2011, 58).

The majority of the currently existing or proposed pipelines, with few exceptions, are based on Russian sources—consequently they do not serve the diversification of sources efficiently, though they can contribute to fostering the security of supply by diversifying the supplying routes, bypassing unstable or non-reliable countries. Anyway, Gazprom and Russia can put further geopolitical pressure on Eastern European states, since their supply sources are still quite one-sided, while Western Europe has enough energy autonomy by purchasing hydrocarbons from multiple sources. □

## References

- Anceschi, L. (2009). *Turkmenistan's Foreign Policy: Positive Neutrality and the Consolidation of the Turkmen Regime*. London–New York: Routledge.
- Aslan, S. (2014). *Nation Building in Turkey and Morocco: Governing Kurdish and Berber Dissent*. Cambridge: Cambridge University Press.
- Bahgat, G. (2013). *American Oil Diplomacy in the Persian Gulf and the Caspian Sea*. Gainesville: University Press of Florida.
- Bíró, Sz. Z. (2008). “A Déli Áramlat és a Nabucco.” *Nemzet és biztonság* 1, 4: 23–29.
- Bloomberg Business Week. (2011). *The BP to consider New Pipeline to transit Caspian Natural Gas to EU*. Available at <http://news.businessweek.com/article.asp?documentKey=1376-LS4NTA6JTSEI01-4JDLA9KIUMAV010HE67BDHCA39>. Accessed on 16.02.2012.
- Cebotari, S. and J. Benedek. (2017) “Renewable Energy Project as a Source of Innovation in Rural Communities: Lessons from the Periphery.” *Sustainability* 9, 4 (509).
- Chifu, I., Adriana Sauliuc, and Bogdan Nedea. (2011). *Energy Security Strategies in the Wider Black Sea Region*. 2<sup>nd</sup> ed. Bucharest: ISPRI.
- Cohen, A. (2006). *Kazakhstan: Energy Cooperation with Russia—Oil, Gas and Beyond*. London: GMB Publishing.

- Commission to the European Parliament. (2008). “The Council, the European Economic and Social Committee and the Committee of the Regions—Second Strategic Energy Review: an EU energy security and solidarity action plan.” {SEC(2008) 2870} {SEC(2008) 2871} {SEC(2008) 2872}. Available at <http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A52008DC0781>. Accessed on 06.01.2016.
- Conn, I. (2011). Available at <http://www.bp.com/en/global/corporate/press/speeches/natural-gas-azerbaijan-and-europe.html>. Accessed on 08.01.2016.
- Cooley, A. (2012). *Great Games, Local Rules: The New Great Power Contest in Central Asia*. New York: Oxford University Press.
- Cornell, S. E. (2001). *Small Nations and Great Powers: A study of ethnopolitical conflict in the Caucasus*. London–New York: RoutledgeCurzon.
- Croissant, M. P. (1998). *The Armenia-Azerbaijan Conflict: Causes and Implications*. Westport: Praeger.
- Cummings, S. N. (2012). *Understanding Central Asia: Politics and Contested Transformations*. New York: Routledge.
- De Micco, P. (2015). “Changing pipelines, shifting strategies: Gas in south-eastern Europe and the implications for Ukraine.” Belgium: European Parliament. Available at [http://www.europarl.europa.eu/regdata/etudes/IDAN/2015/549053/EXPO\\_IDA%282015%29549053\\_EN.pdf](http://www.europarl.europa.eu/regdata/etudes/IDAN/2015/549053/EXPO_IDA%282015%29549053_EN.pdf). Accessed on 11.01.2016.
- de Waal, T. (2003). *Black Garden: Armenia and Azerbaijan Through Peace and War*. New York: New York University Press.
- En.trend.az homepage. (2011). “Minister: Five companies claim to develop feasibility study of AGRI gas project.” Available at <http://en.trend.az/business/energy/1881628.html>. Accessed on 08.01.2016.
- Euractiv. (2013). “Euractiv One sure winner emerges in southern gas corridor race.” Available at <http://www.euractiv.com/energy/sure-winner-emerges-southern-cor-news-518361>. Accessed on 10.01.2016.
- . (2016). Available at <http://www.euractiv.com/topics/southern-gas-corridor-0>. Accessed on 10.01.2016.
- European Commission. (2016). “Gas and oil supply routes.” Available at <http://ec.europa.eu/energy/en/topics/imports-and-secure-supplies/gas-and-oil-supply-routes>. Accessed on 11.01.2016.
- Feller, G. (2008). “Prospects for nabucco pipeline appear anything but bright.” *Pipeline & Gas Journal*. 1 January.
- Gazpromexport homepage. (2015). Available at <http://www.gazpromexport.ru/en/projects/6/>. Accessed on 11.01.2016.
- Geropoulos, K. (2014). *Albania Counts on TAP for Gas Hopes*. Available at <http://neurope.eu/article/albania-counts-tap-gas-hopes/>. Accessed on 08.01.2016.
- Guillet, J. (2011). “How to Get a Pipeline Built: Myth and Reality.” In *Russian Energy Security and Foreign Policy*, eds. A. Dellecker and T. Gomart, 58–73. London: Routledge.
- Gurbanov, I. (2013). “Between TAP and the Nabucco: Who is the ‘Winner’? Azerbaijan or Russia?” Bilgesam–Wise Man Center for Strategic Studies.

- Hoffstätter, P. (2011). *The Nabucco Pipeline: Economic and Political Effects in Relation to the EU*. Saarbrücken: VDM Verlag.
- Hopkirk, P. (1992). *The Great Game: The Struggle for Empire in Central Asia*. New York: Kodansha International.
- Horn, Gy. (1999). *Azok a kilencvenes évek....* Budapest: Kossuth kiadó.
- Horváth, L. (2017). “Új kihívás előtt a szénhidrogénipar.” Available at <https://www.vg.hu/vallalatok/uj-kihivas-elott-szenhidrogenipar-2-565563/>. Accessed on 21.08.2017.
- Hrair Dekmejian, R. and H. H. Simonian. (2001). *Troubled Waters: The Geopolitics of the Caspian Region*. London: I. B. Tauris.
- ITE homepage. Available at <http://www.ite-pipeline.com/en/default.aspx>. Accessed on 08.01.2016.
- Jarosiewicz, A. (2015). “The Southern Gas Corridor: The Azerbaijani-Turkish project becomes part of the game between Russia and the EU.” Warsaw: Ośrodek Studiów Wschodnich.
- Johnson, R. (2007). *Oil, Islam, and Conflict: Central Asia since 1945*. London: Reaktion Books.
- King, C. (2008). *The Ghost of Freedom: A History of the Caucasus*. Oxford: Oxford University Press.
- Kleveman, L. (2004). *The New Great Game: Blood and Oil in Central Asia*. New York: Grove Press.
- Kreyenbroek P. G. and S. Sperl. (Eds.) (2000). *The Kurds: A Contemporary Overview*. London: Routledge.
- Kuhn, M. (2012). *Enabling the Iranian Gas Export Options: The Destiny of Iranian Energy Relations in a Tripolar Struggle over Energy Security and Geopolitics*. Berlin: Springer Verlag.
- Lakatos, A. (2014). “The New Game for Energy: Geopolitics of Central Asia.” *Prague Papers on the History of International Relations* 1: 140–154.
- Lakatos, A., E. Nagy, and B. Balogh. (2015). “Kortárs geoökonómiai kérdések Közép-és Kelet Európában: a Nabucco—és a Déli Áramlat kérdése és hatásai.” *Thinkonomy*, May. Available at <http://thinkonomy.ro/kortars-geookonomiai-kerdesek-a-nabucco-es-a-deli-aramlat-hatasai-i-resz/>. Accessed on 09.01.2016.
- Luft, G. and A. Korin. (Eds.) (2009). *Energy Security Challenges for the 21<sup>st</sup> Century: A Reference Handbook*. Santa Barbara: Praeger.
- Mehdiyeva, N. (2011) *Power Games in the Caucasus: Azerbaijan’s Foreign and Energy Policy Towards the West, Russia and the Middle East*. London: I. B. Tauris.
- Mészáros, R. T. (2017). “A németekkel karöltve masírozunk Putyin gázmennyországába.” Available at [http://index.hu/gazdasag/2017/08/01/gaz\\_foldgaz\\_moszkva\\_orszorszag\\_gazprom\\_magyarország\\_gazfuggoseg\\_szijjarto\\_gazimport\\_ukrajna\\_nemetsorszag\\_trump\\_ing/](http://index.hu/gazdasag/2017/08/01/gaz_foldgaz_moszkva_orszorszag_gazprom_magyarország_gazfuggoseg_szijjarto_gazimport_ukrajna_nemetsorszag_trump_ing/). Accessed on 24.08.2017.
- Meyer, K. E. and S. Blair Brysac (2000). *Tournament of Shadows: The Great Game and the Race for Empire in Central Asia*. New York: Little Brown.
- Okumuş, O. (2016). “How Ankara, Washington plan to achieve regional energy security.” *Al Monitor*. August.

- Peimani, H. (2009). *Conflict and Security in Central Asia and the Caucasus*. Santa Barbara, Calif.: Greenwood.
- Petersen, A. (2011). "The Nabucco Pipeline Project Is Dead." *Oil & Gas Journal* 109, 18: 40–42.
- Petersen, A. and K. Barysch. (2011). *Russia, China and the Geopolitics of Energy in Central Asia: Report*. London: Centre for European Reform.
- Pogonyi, Cs. G., P. Vargha, and Zs. I. Simon. (2014). "Ezért rossz ötlet a még több orosz gáz." Available at [http://index.hu/gazdasag/defacto/2014/11/10/ezert\\_rossz\\_otlet\\_a\\_meg\\_tobb\\_orosz\\_gaz/](http://index.hu/gazdasag/defacto/2014/11/10/ezert_rossz_otlet_a_meg_tobb_orosz_gaz/). Accessed on 22.08.2017.
- Popescu, M. B. (2013). "Identitatea Rusiei în 'era Putin' și problema securizării pe dimensiunea energetică." *Sfera politicii* (Bucharest) 20, 1(173): 143–153.
- Rashid, A. (2000) *Taliban: Islam, Oil and the New Great Game in Central Asia*. Ashland: Blackstone Audio.
- Richard, H. (2015). "Why Russia canceled South Stream." *Le Monde diplomatique*. June. Available at <http://mondediplo.com/2015/06/07/south-stream>. Accessed on 10.01.2016.
- Rowley, M. (2009). "The Nabucco Pipeline Project: Gas Bridge to Europe?" *Pipeline & Gas Journal* 236, 9: 72–73.
- Shaban, I. (2015). "Why Turkey Rejects Doubling Iranian Gas Imports." Available at <http://www.naturalgaseurope.com/why-turkey-rejects-doubling-iranian-gas-import-23219>. Accessed on 08.01.2016.
- Socor, V. (2011). "South-East Europe Pipeline: A Downsized Nabucco Proposed by BP." *Eurasia Daily Monitor* 8, 22.
- South Stream homepage. (2007). Available at <http://www.south-stream-transport.com/>. Accessed on 12.01.2016.
- Stoica, A. (2015). "Comeback after two years: Nabucco pipeline, once more on the European map?" *Petroleum Industry Review*. Available at <http://www.petroleumreview.ro/magazine/2015/february/53-july-august-2015/743-comeback-after-two-years-nabucco-pipeline-once-more-on-the-european-map>. Accessed on 10.01.2016.
- Stratfor. (2015). "How the Game Is Played: The Life and Death of the South Stream." Available at <https://www.stratfor.com/analysis/how-game-played-life-and-death-south-stream>. Accessed on 10.01.2016.
- Szabó, N. L. (2013). *Puterea și actorii sistemului internațional contemporan*. Cluj-Napoca: Eikon.
- TANAP homepage. (2011). Available at <http://www.tanap.com/tanap-project/why-tanap/>. Accessed on 12.01.2016.
- TAP homepage. (2016). Available at <http://www.tap-ag.com/the-pipeline/the-big-picture/southern-gas-corridor>. Accessed on 06.01.2016.
- Transnafta. (2002). "For an official description of the project, made by the direct interested ones." Available at [http://www.transnafta.rs/en/home/dev\\_projects/peop/](http://www.transnafta.rs/en/home/dev_projects/peop/). Accessed on 10.01.2016.
- Turkstream homepage. (2014). Available at <http://www.turkstream.info/>. Accessed on 11.01.2016.

White Stream homepage. (2005). Available at <http://www.white-stream.com/>. Accessed on 11.01.2016.

**Abstract****Pipelines for Energy, Interests for Companies and Great Powers**

Europe is currently dependent on fossil fuels from the post-Soviet space. With the outbreak of the Russian-Ukrainian dispute in 2006, this dependency became more relevant for strategic considerations, and thus the Southern Gas Corridor initiative was born. The North Stream pipeline—which supplies Germany from Russia, through the northern seas—is fully operational. The same cannot be said concerning pipelines which are meant to supply the former communist, currently EU member countries and the Balkans, due to rivalling economic (policies of big companies) and geopolitical interests. This article will analyze the most important pipeline projects, their economic and political background; it will also look into the reasons why some of these projects were unsuccessful while analyzing the possible outcomes of the projects that are still functional. The analysis will be placed in the context of current international relations and geopolitics, taking into consideration the Ukrainian crisis, the turmoil in the Middle East, and the frozen conflicts of the Caucasus and its vicinity.

**Keywords**

gas pipelines, geopolitics, geo-economics, Central-Eastern Europe, South-Eastern Europe