

ESSAY

V4 ENERGY COOPERATION: FROM SLOVAKIAN PERSPECTIVE IN CONTEXT OF GLOBAL AND REGIONAL DEVELOPMENT

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ABSTRACT

The international political system is subject to both integration and fragmentation on regional and global level. As a result of deepening of the processes of globalization, internationalization and interconnection of the national economies, the individual states cannot effectively face global and regional challenges on their own in isolation of the surrounding. Therefore, they are grouping into wider integrational units based on geographical and cultural proximity and common interests. In the context of economization of international relations, asymmetric distribution of strategic raw materials, and the increasing pressure of the global market on economic efficiency, a safe and stable access to energy resources is essential for every well-functioning and competitive economy.

ENERGY COOPERATION OF V4 COUNTRIES
FROM SLOVAKIA PERSPECTIVE IN CONTEXT OF
GLOBAL AND REGIONAL DEVELOPMENT

The nature of security threats has been dynamically evolving since the end of the Cold War. State security is no longer endangered only by force-military actions but various environmental, economic, political or energy threats. The international political system is subject to both integration and fragmentation on regional and global level. As a result of deepening of the processes of globalization, internationalization and interconnection of the national economies, the individual states cannot effectively face global and regional challenges on their own in isolation of the surrounding. Therefore, they are grouping into wider integrational units based on geographical and cultural proximity and common interests. In the context of economization of international relations, asymmetric distribution of strategic raw materials, and the increasing pressure of the global market on economic efficiency, a safe and stable access to energy resources is essential for every well-functioning and competitive economy.

INTRODUCTION

Energy security plays an increasingly important role in European Union policy, given the limited endogenous natural gas reserves and declining production. Special attention is paid to the countries of Central and Southeastern Europe, which are predominantly dependent on the import of natural gas from Russia. The concept of interdependence in Eurasia is a historical and geographic fact. However, the V4 countries started to consider this mutual interdependence as a negative one after the gas crisis of 2009. Energy

security of the V4 countries is, in addition to the energy policy of the EU and Russia, also determined by development in the global market. Slovakia was one of the most affected countries by the interruption of gas supplies from the Ukrainian territory. Therefore, it is one of the main goals of the Slovak energy to build alternative routes that would secure stable gas supplies in the case of another “chess match” between Russia and Ukraine and also limit the dependence on Russian energy policy. At the same time, is in the interest of Slovakia to gain access to the cheapest supplies of strategic energy resources that are environmental friendly. On the other hand, Slovakia benefits from the Soviet pipeline infrastructure as an important transit corridor between Russia and western EU states. Russian energy interest is to bypass the Ukrainian territory via building the northern or southern gas corridor that would minimalize the geopolitical and economical value of Slovakia as energy transport hub. Therefore, the second main goal of the Slovak energy is to adapt to the changing European pipeline map in order to maintain the strategic transit role of its territory.

The cooperation among V4 countries proved to be very beneficial in the pre-entry process into the Euro-Atlantic structures. This platform was especially important for Slovakia, which lagged behind other V4 countries in the accession negotiations with the EU and NATO, due to political isolation during the – “Mečiar period”. Slovakia was provided with valuable know-how in meeting the requirements in the pre-accession period and also diplomatic support for accelerated integration effort. However, by successful integration into Euro-Atlantic structures the V4 countries have lost their core common goal that was encouraging closer cooperation. The level of cooperation has decreased to only limited and vaguely proclaimed plans that were

realized only on the paper sheets. New impulse to reestablish an effective cooperation on V4 level was the 2009 gas crises. Strengthening energy security has become a new motivating target for V4 countries to act as one united unit in promoting common interests.

GLOBAL DEVELOPMENT

From the global perspective the global development in LNG market and shale digging have the most crucial aspect on the European gas market and also on V4 countries. USA is due to „shale gas revolution” continuously turning from gas importer to gas exporter status. This has a significant impact on the global LNG market. With the combination of rising amounts of produced LNG, the exporters had to reorient their supply direction from Northern Amerika to Europe. The V4 counties profit from it in two ways. The first is that, the seedily rising amount of traded LNG on European spots and hubs developed pressure on the gas pricing system in long term contracts, that are based on oil prices in the favor of market mechanism – gas on gas (see map n. 1a-1b). That was one of aspects that determined the fall of gas prices in 2014-2015 in our region. The second benefit is hat the V4 counties can access the LNG trade via terminal in Poland and planned terminal in Croatia, which enhance their energy security in the term of supplier’s diversification.

NORTH-SOUTH GAS CORRIDOR

One of the main priorities of the V4 countries immediately after the gas crisis was to build gas infrastructure in north-south direction. The aim of the project is to enhance the diversification of routes and suppliers by connecting to the Western Europe infrastructure, global LNG market and potential unconventional resources in Poland. The

North-South gas corridor is of particular relevance to Slovakia, because it strengthens the transit character of Slovak territory. Crucial points of the project are LNG terminals in Polish Świnoujście and Croatian Adria LNG on Krk island as well as the pipeline interconnectors between the V4+ countries. Slovakia took preventive measures by building the interconnectors between Slovakia-Hungary and Czech-Poland as well the installing of the reserve flow mechanism on the pipeline with Austria and CR to minimize the negative affect in the case of similar crisis as in 2009 would occur. A key phase for Slovakia is to build the interconnector with the Polish site, which is scheduled to be finished around 2020 and is being financed by EU funds. In 2010 the company Polskie LNG was created to build, own and operate the LNG terminal. Poland signed a deal with Qatar on import of 1,6 bcm gas until 2034. Imported amount of LNG was doubled in a new agreement in 2017 to supply Polish market with 3,2 bcm from 2018. Poland with an average annual consumption of 16 billion bcm pursues the long-term goal of reducing dependence on Russian gas despite the higher financial costs of LNG.

New opportunities for penetration into Central European gas market, lower building cost and new technologies have created a comfortable condition for investments into the long time planned Adria LNG. The demand for LNG has increased from Ukraine, which has been buying mostly Russian natural gas from opposite direction- from European gas network since 2014. LNG supplies could potentially be able to move across the Hungarian territory equally on the Ukrainian market. Great interest on building the Croatian LNG have also Slovenia and Austria, where the rest of the LNG that is not destined for Croatian consumption will most probably end. The terminal should

have a capacity of 3 bcm, and its commercial operation is scheduled for the end of 2019.

Competitor for Slovakia's energy ambitions and benefits in context of North-South gas project is Austria, which is seeking to increase its transit role on Slovakia's expense directly by AUS-CR project BACI and indirectly by CR-POL project STORKII (see map n. 2). The BACI gas pipeline will connect the Czech Lanžhot hub with the Austrian Baumgarten hub in both directions. BACI builds on the planned Moravia pipeline, which will connect the CR and Austria with underground gas storage facilities in the territories of both countries. These planned pipeline inter-connections are also important for Poland, which would also connect it with Baumgarten via Czech territory. The CR-POL project STORK II involves the construction of the second inter-connector between both countries with the capacity 7,5 bcm. Both project are on the EU PCI (Project of Common Interest) list. Slovakia and other V4 countries managed to strengthen their energy policy in terms of suppliers and route diversification by the progress in implementation of the North-South pipeline project.

A critical point of this project is the economical dimension of energy security. The gas market had shown that the inter-connectors between SR-HUN or SR-Pol have little or none value for commercial use. In other words: the amount of money invested in the interconnectors are not profitable. The question is, if we do really need interconnector with the between SR-Pol with no commercial interest, when we can build on already more developed infrastructure between POL-CR-SR.

UNCONVENTIONAL GAS DRILLING IN POLAND

According to IEA estimation, Poland has a vast unconventional- shell

gas resources on its territory. Initial assumption in 2011 were somewhere around 5,3 tcm. After two years the estimation of technically recoverable shale gas resources were drop by 20% to 4,1 tcm. The Polish Geological Institute is even more critical with the assumption and provides two version of the potential resources: conservative version - 346-768 bcm, and optimistic version- 1,9 tcm. Despite the reduction of the initial projection, the Polish government made a lot of effort in order to push the shale production with hope of similar success as the unconventional drilling in US. Poland is by supporting the exploration on shell resources pursuing two fundamental objectives. The first is to reduce the dependence on Russian gas or to, in a very positive scenario, become a gas exporter. And particularly the positive scenario would be beneficial to other V4 states, which could import Polish gas. The second objective foresees a similar trend as in the US, where cheap and cleaner shale gas replaced “dirty” coal-fired power in the energy mix. However, the exploration wells have not reached any major achievements, and large gas companies such as Exxon-Mobil, Marathon Oil, Talisman Energy, and Eni decided to leave the potential market. Simultaneously, the level of new establish exploration wells has been gradually decreasing. In 2013 there were only 12 new wells recorded, which is half the number of last year.

The main reason for the unsuccessful drilling are geological prerequisites. Unlike the US resources, the Polish resources are located deeper under the 1000m border, which increases the costs associated with drilling, increases the likelihood of local earthquakes and groundwater pollution. Also the shell quality proved to be essentially lower with greater proportion of clay mixtures compared to North America conditions.

Another reasons are environmental aspects. Environmental legislation at national level and in the EU generally creates greater administrative barriers and obligations for companies in the shell drilling sector than in North America. Unconventional resources in Poland are located in areas with relatively high population density. Following the experience from UK or Germany, shale drilling is almost always associated with protest of the local population. US resources are unlike in European condition located in peripheral regions.

We also have to keep in mind that the localization and exploration of the resources are only the first stage of the production chain, followed by the construction of drilling facilities, pipeline construction, transport to processing facilities, wastewater and material disposal... The shale production in US was unlike in Poland already from the beginning linked to an existing gas industry infrastructure. Investments in the construction of gas pipelines increase the overall costs at the very start of production and thus increase the investment risk.

Technology, know-how and experience in natural gas production also determine the level of production. The gas industry in America belongs to traditional industries. However, Poland does not have any experience with the unconventional drilling or the necessary know-how for the effective application of new technologies. Production also depends on the quality of the subcontracting sector, which is also not sufficiently developed in Poland. This all are minor reasons that are increasing the investments at the start of the production.

The unfavorable conditions have not stop some companies to continue their exploration work on shale gas. In 2014 the company BNK has

announced a successful exploration of one of their well with the potential to commercial drilling, but because of the price drop of natural gas all the activities around shale gas were “frozen”.

Despite the global dynamic of technology development, the decrease in costs associated with unconventional drilling, and the determination of the Polish government to support investment in exploration wells, we do not expect significant production of shale gas in Poland over the next 10 years. Even if the commercial production of shale gas in Polish territory still started, we cannot expect it to have a significant impact on the markets of other V4 countries.

EASTRING

Slovakia gas transmission system operator Eustream responded to planned changes of the gas map of Europe by introducing the Eastring pipeline. The ambition of the project is to interconnect the Central European countries with the Southeast European region. And by realization of the project would Slovakia significantly increase the transit character of its territory. Eastring has also a potential to offer diversification of routes as well as suppliers in the region. In the first phase the gas would be transport from Western Europe across the Balkans to the Turkish border. In its final phase would be possible to transport gas in both directions and so opens up the possibilities of transporting gas through the Romanian and Turkish territories from the Caspian Sea, Iran, or potential Romanian gas fields in Black See coast. The planned capacity in the first phase is 20 bcm, and in the final phase 40 bcm.

The routing of the pipeline was initially considering only 2 alternatives (A/B). The pipeline would start in Slovak compression station Velké Kapušany then continue through the territory of

Hungary, Bulgaria and Romania and end in the Turkish gas hub Malkoclar. In the present the Eastring routing has been adapting to the emerge of new numerous pipeline project in Balkan by presenting 3 more alternatives (see map n. 3). One of Easting's competitors in this region is the Tesla gas pipeline, which crosses the territories of Turkey, Greece, Macedonia, Serbia, Hungary and ends in Baumgartner- Austria. This is essentially an extension of the Russian Turkish Stream, whose construction is mainly in interest of Russia. The Eastring reaction on the Tesla project is the E version routing. The main competitor of Eastring project is the BRUA pipeline (see map n. 4), that cross the territory of Romania, Bulgaria, Hungary and end in Baumgarten hub. Unlike the Tesla project, there is no doubt that BRUA is a project of diversification of suppliers. Work on gas pipeline construction should start at the end of 2017 and are estimated to be finished around 2020. The completion of the construction is directly linked to the planned gas extraction of Exxon and Petrom OMV in the coastal shelf of Black Sea. The BRUA project is clearly the priority project of Romania.

Southeast Europe is characterized by a low level of gas infrastructure. The Balkan region was heavily affected by the 2009 gas crisis. The priority of the countries of the region is therefore the construction of necessary gas pipelines. From an energy strategy point of view, we expect the Southeast Europe states to generally support any pipeline project that would strengthen the critical infrastructure situation. Therefore, the best chance in the context of great competition in the region has project, that is able to progress with the construction as soon as possible and will be financially reasonable. Eastring pipeline is in both these pre- conditions in disadvantage. Firstly, it is a project of large financial investments. Secondly the progress of construction

is in compare to initial plan and also to BRUA pipeline in delay. A realistic scenario could be a project of building small inter-connectors pipeline between the Balkan countries, which are cheaper and progress faster in compare to large project such as Eastring, Tesla or BRUA. All these above mentioned factors decrease the possibility of the project Eastring to be build. However, the Eastring project could play an important role in potential supply of the Southeastern European gas market from Russian Northern gas corridor – in case the Nord Stream II is build.

RUSSIAN ENERGY POLICY AND NORD STREAM

II

The Russian National Security Strategy until 2020 openly underscores that energy security plays a crucial role in the Russian national strategy and most importantly in the foreign relations of Russia. Energy policy is during the Putin administration regularly used as a tool on achieving foreign policy goals. This strategy fully reflects the pragmatic principles of so called “realpolitik” and is being pursued by Putin since the beginning of its government. Therefore, the Russian energy actions cannot be considered by EU as surprising or in-legitimate. In the discussions on the energy security the position of exporting countries is often being neglected. The priority for exporting countries such as Russia is to secure a share in the energy supply market at reasonably stable prices and high demand. Key importance in the long term perspective are diversification of costumer’s (EU, Turkey, China) and minimization of the security threats and cost by diversification of the routes to the end-markets (by-passing of Ukraine).

The construction of the Nord Stream I (NSI) and planning of South

Stream (SS) has underlined the lack of cooperation in energy security in V4. Every country was rather following its own national interest and benefits: Hungary was seeking to increase the transit role of its territory by promoting SS project and CR had benefited from NS I by constructing the Gazela pipeline (see map n. 5). Poland together with Ukraine and the Baltic states were the only countries that opposed NSI. Polish officials compared the agreement on building NSI between Russia and Germany to Molotov–Ribbentrop Pact, where the two countries agreed on dividing Poland between themselves in Second World War. Many authors are criticizing the EU and also Slovakia to not openly oppose the project. But we have to remember, that the construction work on the pipeline was ongoing only short after the devastating gas crisis in 2009. Many countries were therefore officially or silently welcoming the Russian “solution” of “problematic” Ukrainian territory in form of Northern corridor.

In the case of NS II, Central and Eastern European states were building united ground to oppose the project. Slovakia has accomplished that the NS II was one of the main topics discussed at the European Council Summit in 2015. The Slovak Ministry of Economy estimates the loss of transport fees by building the NSII for the state around at 400 -800 mil. EUR. The Baltic countries, Romania, Poland, Hungary and Slovakia sent a letter to the President of the European Council Donald Tusk in November 2016 requesting the suspension of NS II plans under the current legislation and the creation of an EU energy union. The project is also being criticized by countries that were interested in construction of South Stream project – like Italy and Bulgaria. Czech Republic did not join the other countries and is similar as in the NSI case following its national interest to enhance the transit status of its territory.

Although the construction of the South Stream gas pipeline has been canceled, Russia has nevertheless managed to create disputes and spread mistrust among EU member countries. European Commission has however only very little legal tools to block the project. First of all, the EU laws from Third energy package are not explicitly applying to off-shore territory – so the routing of NSII is in so called “grey zone”. Secondly the NS I case could play a role of legal precedent.

Energy sector of Ukraine is by building of NSII affected at most. If the project is successful, we expect a significant reduction of the Russian gas flow through the Ukrainian territory. According to projections, the capacity of Russian gas flow via Ukraine in 2014 was about 59 bcm. The new capacities of NSII could limit the flow of Ukrainian pipeline infrastructure in east-west direction far below 30 bcm. This would reduce the revenue from transit fees and most importantly, it would not be profitable for Ukraine to operate his large and outdated pipeline infrastructure at such a low flow. Such developments would definitely not help Ukraine to find investments in the pipeline infrastructure, which urgently needs reconstruction and modernization.

Significant economic and geopolitical benefits have the construction of NS2 for Germany, where the gas pipeline ends. Germany would by construction of NSII become the most important transit and distribution country of Russian gas to European market. German energy companies and state budget would benefit from this thanks to transit fees and taxes.

Recent agreement between Gazprom and Eustream suggests also changing of Slovakia’s position. Slovakia is adapting to the more and more realistic possibility of construction of NS II and gas supplying route in west-east direction. The Russian gas company has bought the

transport capacity in Germany at the level of 58 bcm per year on entry, another about 45 bcm per year in the Czech Republic and Slovakia. Eustream and the Czech company Net4Gas are therefore planning to increase capacity on the cross-border pipeline connection Lanžhot towards Slovakia.

We have to keep in mind that Russian Gazprom is the only company in EU that is capable of such a vast economic investment, that are profitable in the long ran. Another important factor in V4 cooperation and Russian energy policy context is, that every country is in some extend looking forward to gain economic benefits from transit of Russian gas. The NSII underlines the lack of cooperation among V4 countries in energy security and the tendency, that every state is perusing its own national energy interest.

MAPS

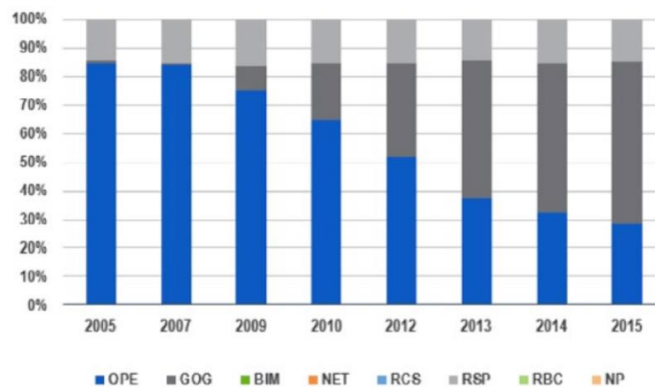
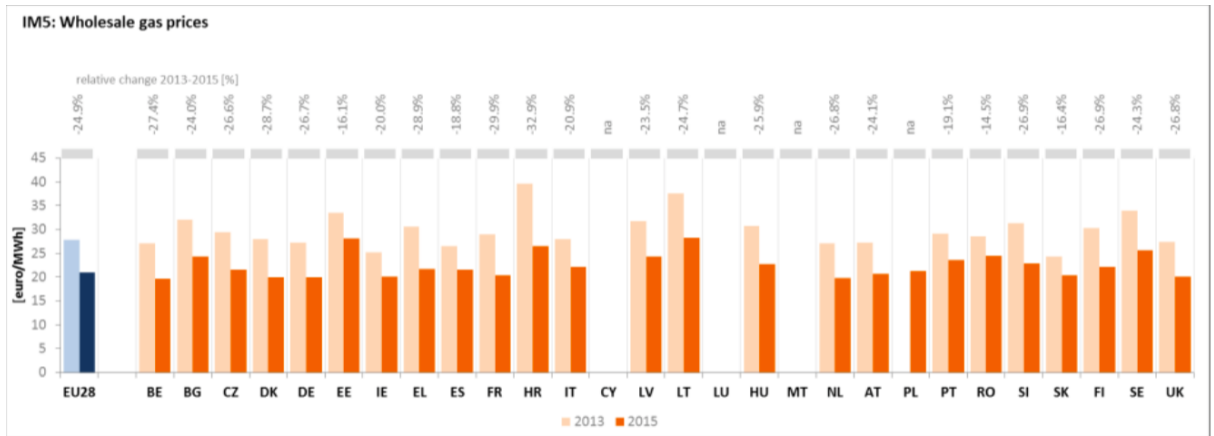
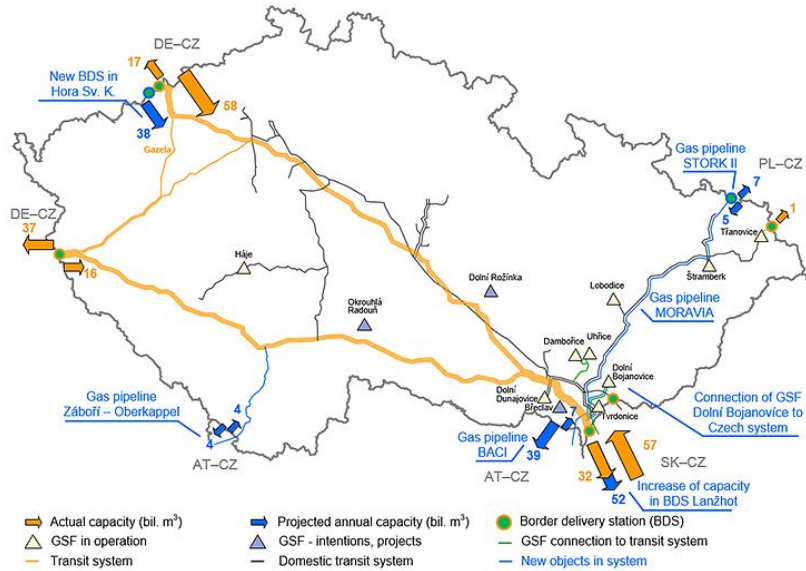


Figure 5.6: Central Europe Price Formation 2005 to 2015

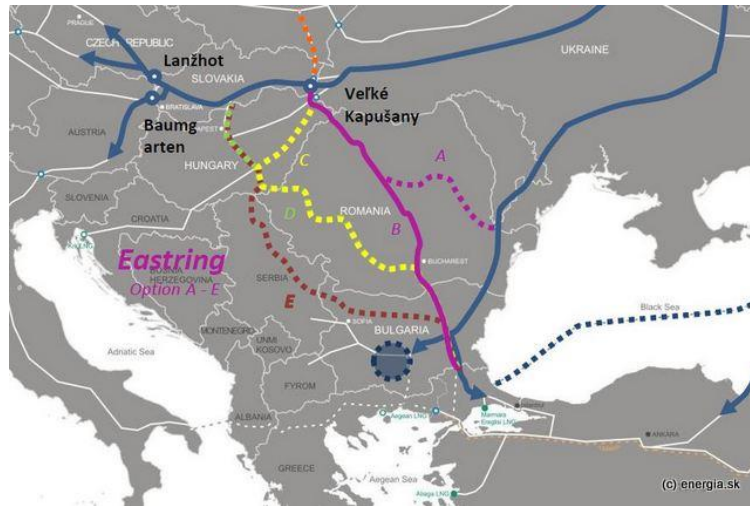
1st Image: Map Number 1a): Central Europe Gas Formation 2005-2015



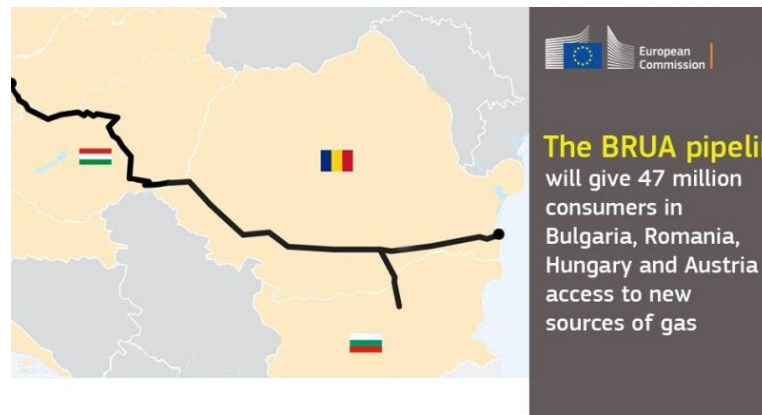
2nd Image: Map Number 1b) Drop of gas prices 2013-2015



3rd Image: Map Number 2) BACI and Stork II interconnector and Moravia Pipeline.



4th Image: Map number 3) Eastring Routing Alternatives



5th. Image: Map Number 4) BRUA Pipeline.



6th Image: Map Number 5 Gazela Pipeline.