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Energy security of visegrad group countries: Geopolitical and strategic determinants of current state and prospects for regional development

The article is dedicated to analyzing the energy security of Visegrad countries, especially in the aftermath of the annexation of the Crimea by Russia and the outbreak of hostilities in Eastern Ukraine in 2014. The paper outlines the geopolitical and strategic determinants of the current state and prospects of energy security in the region. Based on the appeal to the energy problems in the region, the author outlined the options for converting "normal" size of the Visegrad Group into the "advanced" one, including through close cooperation with Ukraine.

Key words: energy security, Visegrad Group, Ukraine, region, Central and Eastern Europe, Russia.

Енергетична безпека країн вишеградської групи: Геополітичні та стратегічні детермінанти сучасного стану і перспективи для розвитку регіону

Стаття присвячена аналізу енергетичної безпеки країн Вишеградської групи, особливо в період після анексії Криму Росією та початку воєнних дій на Сході України в 2014 р. В роботі окреслено геополітичні та стратегічні детермінанти сучасного стану і перспектив енергетичної безпеки в регіоні. На підставі апелювання до енергетичних проблем у регіоні було розглянуто варіанти перетворення «звичайного» формату Вишеградської групи у «розширений», зокрема за рахунок тісної співпраці з Україною.

Ключові слова: енергетична безпека, Вишеградська група, Україна, регіон, Центрально-Східна Європа, Росія.

The Visegrad Group (Poland, Slovakia, the Czech Republic and Hungary), as well as other countries of Central-Eastern and Eastern Europe (especially Bulgaria, Romania and Ukraine) has rather significant political and economic importance in regard to current international and regional relations. Namely these countries are home for transport routes connecting Europe and Russia; therefore they are essential in the context of security of energy supply not only for

the Visegrad Group, but also for other European countries. The point is that for Europe, "Gazprom" is a key partner in gas trading. It supplies a third of net imports to the EU and makes a quarter of its consumption¹. This, as shown in history and practice, is of great importance within the frames of regionalization processes, which have been started in Central and Eastern Europe, since the collapse of the USSR, and which resulted in formation of the Visegrad Group. The fact is that the countries of the Visegrad Group not only have common historical and cultural roots, but also face a number of mutual problems and threats: transit, diversification and change of energy supply means and routes. Since the second half of the first decade of the 21st century the issue of energy security has become one of the most crucial priorities of the developed countries' strategies and policy. Potential risks and threats, connected with energy security, are mainly based on two reasons: predicted upcoming peak of hydrocarbons production, which is vital for modern economy and security of their supply. Over the past years two factors have dramatically transformed the energy sector. The first one is – the world economic crisis, and the second one – strategic shock from the increase in volume of non-traditional hydrocarbon production.

This is proved by the results of studies and scientific research made by the following authors V. Milina², J. M. Barroso³, A. Belogorev⁴, V. Bushuev and A. Mastepanov⁵, T. Friedman⁶, N. Slobodyan and P. MakHrat⁷, F. Groome⁸, M. Kuhn and F. Umbach⁹, G. Luft and A. Korin¹⁰,

According to the Eurostat data, 31,9 % of the EU natural gas import outside the EU-27 in 2012 was supplied by Russia. Moreover, it is known that Russian gas composed 25,6% of gas consumption in the EU in 2011, according to the Congressional Research Service. For more detail, see: M. Ratner, P. Belkin, J. Nichol, S. Woehrel, Europe's Energy Security: Options and Challenges to Natural Gas Supply Diversification, Congressional Research Service 2013.

² V. Milina, Energy Security and Geopolitics, "Connections: The Quarterly Journal" 2007, vol 6, nr. 4, s. 27–46.; V. Milina, Jenergeticheskaja bezopasnost': izmenenie paradigmy, "Connections: The Quarterly Journal" 2013, s. 87–115.

³ J.M. Barroso, Energy Challenges and Policy: Commission contribution to the European Council of 22 May 2013, European Commission 2013.

⁴ A. Belogorev, Jenergeticheskie problemy v Kaspijskom regione: riski i potencial dlja Rossii, Pjatyj Kaspijskij Jenergeticheskij Forum 2012.

V. Bushuev, A. Mastepanov, Global'naja jenergetika i ustojchivoe razvitie (Belaja kniga), Wyd. Mezhdunarodnyj centr ustojchivogo jenergeticheskogo razvitija 2009.

⁶ T. Friedman, *The First Law of Petropolitics*, "Foreign Policy" 2006, vol 54, s. 28–39.

N. Slobodyan, P. MakHrat, Chy proyde Vyshehrads'ka chetvirka perevirku na mitsnist' Pivnichnym potokom?, "Yevropeys'ka pravda" 08 sichnya 2016, źródło: http://www.eurointegration.com.ua/experts/2016/01/8/7042882/ [odczyt: 1 maja 2016].

F. Groome, From Contradiction to Cooperation: A New Legal and Diplomatic Foundation for Energy Policy in the EU, "Journal of Energy Security" April 2012, źródło: http://www.ensec.org/ [odczyt: 1 maja 2016].

M. Kuhn, F. Umbach, The Geoeconomic and Geopolitical Implications of Unconventional Gas in Europe, "Journal of Energy Security" September 2011, źródło: http://www.ensec.org/ [odczyt: 1 maja 2016].; Umbach F., Kuhn M., Unconventional Gas Resources: A Transatlantic Shale Alliance?, [w:] Transatlantic Energy Futures: Strategic Perspectives on Energy Security, Climate Change and New Technologies in Europe and the United States, Wyd. Center for Transatlantic Relations, Johns Hopkins University—SAIS 2012.

G. Luft, Energy Self-Sufficiency: Reality or Fantasy?, "Journal of Energy Security" November 2012, źródlo: http://www.ensec.org/index.php?option=com_content&view=article&id=394:energy-self-sufficiency-reality-or-fantasy&catid=130:issue-content&Itemid=405 [odczyt: 1 maja 2016].; G. Luft, The Energy-Security Paradox, "The National Interest" 28 March 2013, źródlo: http://nationalinterest.org/commentary/the-energy-security-paradox-8281 [odczyt: 1 maja 2016].; G. Luft, A. Korin, The Folly of Energy Independence, "American Interest" 10 June 2012, vol 7, nr. 6, źródlo: http://www.the-american-interest.com/2012/06/10/the-folly-of-energy-independence/ [odczyt: 1 maja 2016].; G. Luft, A. Korin, Turning Oil into Salt: Energy Independence Through Fuel Choice, Wyd. BookSurge Publishing 2009.

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They state, that nowadays policy in the sphere of energy security requires paradigm alteration and a new model of factors/conditions for its realization. The acute problem of energy security and its separate issues are on the governments' agenda in V4 countries, as well as other European states (especially after the annexation of the Crimea by Russia in 2014 and aggravation of relations between Russia and Europe as a result of mutual sanctions, stipulated by the occupation of Eastern Donbas in 2014-2015), as a problem of energy security under current conditions is the most significant element of national security and is the most urgent issue among the threats of the so-called "mild danger". The point is, that annexation of the Crimea by Russia and its hostilities in Ukraine challenge feasibility and, in fact, the very notion of mutual energy security, the origins of which extends back to the "cold war" times. Dependence of the EU members (in particular the countries of the Visegrad Group) on Russia's deliveries of energy resources and their vulnerability to the latter considerably affects national security. Resuming disputes over the gas prices and gas transit "has revived a ghost" of Russian-Ukrainian 2006 and 2009 gas crises, again showed that Russia is an unreliable supplier and the state, which can use "energy resources as weapon". Consequently, the members of the European Union (namely Poland, the Czech Republic, Slovakia and Hungary), which are NATO members increasingly realize that it is not possible to do business as usual. The fact that Russia resorts to force means for the consumers, that it would be rather clever to make active steps towards the following diversification of gas supplies and radical reduction of dependence on Russia. However, who will come off a loser if again energy becomes weapon, used in a conflict over Ukraine? It is quite obvious, that in a short-term prospect this is the European Union and especially its sensitive members in Central-Eastern and Southern-Eastern Europe and the Baltic Region. Even despite a considerable progress in matters of their integration into the EU single energy market and their mutual interrelatedness, as their dependence on Russian gas supplies is as fundamental as it was earlier. Therefore, common and national approaches to energy security are among the key priorities for the EU members' economies and states/policy and, in particular, for the Visegrad

¹¹ R. Metais, Ensuring Energy Security in Europe: The EU between a Market-based and a Geopolitical Approach in EU Diplomacy Paper, Wyd. College of Europe 2013.

¹² K. Westphal, Energy Policy between Multilateral Governance and Geopolitics: Whither Europe?, "Internationale Politik und Gesellschaft" 2006, vol 4, s. 44–62.

A. Dik, D. Naumenko, G. Shul'cova, P. Salai, Energetichna bezpeka v Central'nij ta Shidnij Evropi: v poshukah edinogo pidhodu, Kyiv 2013.

P. Kovács, K. Szczerski, P. Binhack, Energy security of the V4 countries. How do energy relations change in Europe, The Kosciuszko Institute 2011.

A. Nosko, Regional Energy Security: Visegrad Finally At Work?, CENAA Analysis, źródlo: http://cenaa.org/analysis/regional-energy-security-visegrad-finally-at-work/ [odczyt: 1 maja 2016].

M. Minárik, Energy Cooperation in Central Europe: Interconnecting the Visegrad Region, Wyd. Energy Charter Secretariat 2014.

M. LaBelle, The Russian rock: Re-landscaping CEE energy (in)dependence, "The Energy SCEE" 29 September 2013, źródlo: http://energyscee.com/2013/09/29/the-russian-rock-re-landscaping-cee-energy-independence/[odczyt: 1 maja 2016].

countries, taking into consideration geopolitical and regional contexts¹⁸. This is stipulated by the next points and is manifested in the following:

- 1. The Visegrad countries do not possess hydrocarbons energy resources in plenty to completely supply their needs (see Table 1), though production of non-conventional energy resources, for instance, shale gas is rather promising and in future may partially meet the necessity of their national economies¹⁹. Thus, the Visegrad countries do not have sufficient resource base for diversification of energy products²⁰. Consequently, at the current stage of their development the countries of the Visegrad Group cannot solve the energy problem alone. When it comes to matters of energy supplies and energy security within the Visegrad countries, one can single out some other ways of solving the problem. In particular, under the conditions of diversification of energy sources, the states of the region rely on nuclear energy industry, but in virtue of insufficient funding, bureaucratization of the process of licenses issuance and political non-confidence in new technologies, the countries currently limit themselves to some small-scale local projects nevertheless every country has potential for developing nuclear power generation industry. On the other hand, members of the European Union assume that construction of new nuclear power stations and old NPS life extension (build in accordance with the Soviet projects) increase the level of danger on the basis of ecological, economic and political considerations²¹. Consequently, nuclear energy industry in fact cannot fully satisfy power consumption of the Visegrad Group countries' economies.
- 2. The Visegrad countries are among those, which depend on the import of strategic energy sources from Russia and other European countries. Moreover, Russian hydrocarbons composes a considerable part of energy capacity of the Visegrad Group countries. But dependence on one power supply source carries a threat for energy security, which can cause a number of economic and social problems. Amid the 2009 and the 2014-2015 gas crises between Russia and Ukraine, which led to cessation of gas supplies to the EU, the countries of the Visegrad Group, as to prevent such situation in future and to improve energy security, have been intensively trying to diversify external sources of energy supply and the ways of their transportation²². But on the

¹⁸ Ye. Kish, *Problemy rehional noho liderstva V jshehradá koji chetvirky u tsentral nojevropeyš komu rehioni*, "Naukovi zapysky Instytutu politychnykh i etnonatsional nykh doslidzhen NAN Ukrayiny" 2008, vol 38, s. 156–166; Ye. Kish, "*Yevropeyš ka karta" krayin V jshehradá koji chetvirky: istoriya rozvytku i format spivrobitnytstva*, "Naukovyy visnyk MNU. Istorychni nauky" 2012, vol 3, nr. 33, s. 259–267.

¹⁹ Declaration of V4 Energy Ministers, Visegrad Group, 25 January 2011, źródło: http://www.visegradgroup.eu/2011/declaration-of-v4-energy [odczyt: 1 maja 2016].

²⁰ Energy security of Visegrad region, Visegrad.info, źródlo: http://www.visegrad.info/energy-security-infrastrucutre/factsheet/energy-security-of-visegrad-region.html [odczyt: 1 maja 2016].

²¹ L. Lukshik, Rol' Vyshegradskoj gruppy v formirovanii obshhej jenergeticheskoj politiki Evrosojuza: Avtoreferat k.je.n., Mosskva 2011.

²² Energiabiztonság a négy visegrádi országban – Változó energetikai kapcsolatok Európában, Panenerg.hu, źródlo: http://www.panenerg.hu/szakmai-hirek/energiabiztonsag-a-negy-visegradi-orszagban---valtozo-energetikai-kapcsolatok-europaban [odczyt: 1 maja 2016].

back of geo-economic conditions the Visegrad Group cannot rely on diversification of power supply sources, though its members are trying to facilitate cooperation in power supply sphere with Norway and other countries. Supplies of liquefied natural gas by sea cannot be viewed as a real alternative, as among all countries of the region only Poland has access to the sea. In its turn, Poland has discovered deposits of gas schist and theoretically expects to transform from a gas importing into a gas exporting country²³. For the rest of the Visegrad countries there are no promising prospects to improve their power supply sources by means of internal non-conventional hydrocarbons sources, what means that they are to participate in various energy-related projects.

At the same time the Visegrad countries take part in the EU's and RF's projects on diversification of the oil and natural gas supply routes via pipelines, which allow to avoid unreliable transit countries. Thereby the Visegrad countries are interested in maintaining their transitional status, which guarantees them uninterrupted supply of energy products. A bright example is Hungary's two-track policy as to diversification of imported energy sources. On the one hand, earlier the country ardently supported construction of the "Nabucco" pipeline and on the other hand participated in Russian projects, which guarantee or guaranteed energy products supply, in case of any problems with traditional transit countries. As implementation of European and Russian projects transformed Hungary into one of the most important transit countries, the latter strives for achieving additional advantages of its geopolitical position – to become a gas distribution centre/hub, in particular to strengthen the Visegrad Group's competitiveness on the international scene (primarily its own significance) not only in Eastern Europe, but in the European region in general.

Besides, the Visegrad countries against the background of more and more liberalized and interrelated market of the EU have several variants of import diversification. Some of them require much time to achieve at least any result; some have already paid off, but all of them bear the risks and opportunities. First of all, it is referred to the project "Southern Stream", which is to supply Caspian gas to Europe 2019 onwards. The point is that in June 2013 Consortium Shah Deniz finally preferred Transatlantic Gas Pipeline to "Nabucco" pipeline as to provide gas supplies to Europe. "Nabucco" pipeline can be considered a dead one, and Caspian gas will not be supplied to Central-Eastern Europe in a short-term prospect. However, this pipeline can be revived in another form in future and finally achieve Central-Eastern Europe. The drawback is its long-term prospect with indefinite results. Secondly, the question also concerns LNG terminals on the Baltic shore of Poland, the Adriatic shore of Croatia and the Black Sea coast of Ukraine. The market of liquefied natural gas, which is transported by sea vessels, composes a quarter of European import. Such terminals are to become an alternative for Russian supplies in 2017, strengthen arguments during talks over prices with "Gazprom", and increase gas market

²³ L. Lukshik, Rol' Vyshegradskoj gruppy v formirovanii obshhej jenergeticheskoj politiki Evrosojuza: Avtoreferat k.je.n., Mosskva 2011.

liquidity. This variant also bears several economic risks, which must be solved. Eventually, this is referred to the fact that the trade model of "Gazprom" is becoming obsolete, due to normative impact and under the influence of market forces. Since long-term contracts become less and less connected with current gas trade in Europe, "Gazprom's" clients achieve a new window of opportunities: market prices for gas. However, before Central-Eastern Europe gets a benefit from gas market liquidity, it must surely lessen the threats as to a short-term trade. The abovementioned opportunities can be called specific and interrelated tendencies in European gas trade: diversification of suppliers, growth in liquefied natural gas import and transition to more short-term contracts. They undermine the leading role of "Gazprom", but allow building more liquid and competitive market, where economy dominates over politics. Relations between Europe and "Gazprom" are correlated and new economic challenges appear²⁴.

Thus, the Visegrad countries must be well-prepared to the gas market of future. They must be aware of the fact that to solve problems, connected with energy security, effectively, the Visegrad countries must apply common and national approaches, which are closely interrelated. The results show, that cooperation in specific spheres, such as natural gas and oil, stipulate formation of common interests in reliability of energy products supply to the countries of the Visegrad Group. In their turn, four countries have different resource bases, geographical position and use national approaches to provide their own energy security.

However, estimating prospects of the Visegrad Group countries' energy security, as of 2015-2016, it is quite interesting, whether the region will pass a test on strength of other alternative (non-Visegrad as to their logistics) energy projects, especially the "Nord Stream 2"25, which is implemented on the basis of avoiding the so-called "Ukrainian question". The point is that the process of promoting Russian and German gas transport project disunited the countries of the Visegrad Group. Thus, the Czech Prime-Minister B. Sobotka officially did not sign the letter against the construction of the "Nord Stream 2", addressed to the Euro commission vice-president M. Sefcovic upon the initiative of Slovakia and 6 other Central and Central-Eastern European countries. Though, the Czech Republic together with 9 other European countries has signed the petition to the President of the European Council D. Tusk seeking to include the issue of the "Nord Stream 2" project realization in the agenda of the European Union Summit in December (2015). As N. Slobodyan and P. MakHrat²⁶ state such differentiation of political positions within the Visegrad Group indicates, that the countries of the region are badly in need of ideas, concepts and grounds, which could unite them.

²⁴ A. Dik, D. Naumenko, G. Shul'cova, P. Salai, Energetichna bezpeka v Central'nij ta Shidnij Evropi: v poshukah edinogo pidhodu, Kyiv 2013, s. 11–12.

N. Slobodyan, P. MakHrat, Chy proyde Vyshehrads'ka chetvirka perevirku na mitsnist' Pivnichnym potokom?, "Yevropeys'ka pravda" 08 sichnya 2016, źródło: http://www.eurointegration.com.ua/experts/2016/01/8/7042882/ [odczyt: 1 maja 2016].

N. Slobodyan, P. MakHrat, Chy proyde Vyshehrads'ka chetvirka perevirku na mitsnist' Pivnichnym potokom?, "Yevropeys'ka pravda" 08 sichnya 2016, źródło: http://www.eurointegration.com.ua/experts/2016/01/8/7042882/ [odczyt: 1 maja 2016].

Consequently, it is sometimes believed that on the agenda there is even a question of preservation of the Visegrad Group as an active, self-sustainable regional union with common interests. That is why, the solution of the region's energy security can become a promising, unifying platform for further close cooperation in the four countries' various energy sectors (gas market, electrical energy, decarbonization of economy etc.), which, in the nearest future, will allow negotiating as to transforming the "usual" (V4) format of the Visegrad Group into the "extended" format (V4+). The point is that namely regional energy security is a unifying factor in the relations of the Visegrad Group, Baltic countries and Ukraine. Moreover, the Visegrad Group in prospect can become a kind of energy interconnector for the Baltic-Balkan region. An additional point is that readiness of Warsaw, Prague, Bratislava and Budapest to establish a regional energy hub immediately increases significance of Kyiv to participate in the project realization. The explanation is rather simple: within the frames of cooperation in a gas sphere Ukraine can offer the Visegrad Group common usage of its underground gas storages. Thus, for comparison, in Western Ukraine the capacity of the underground gas storages is 26 billion m³, and total volume of gas storages within the Visegrad group is a little more than 15 billion m³ (Poland – 2,8 billion; the Czech Republic – 3,3 billion; Slovakia – 3,0 billion; Hungary – 6,2 billion), while the annual average need in gas is 33–37 billion m³. Besides, usage of Ukrainian underground gas storages will let the Visegrad Group buy in gas during summer time at lower prices, increase reserve gas supplies etc.

Moreover, N. Slobodyan and P. MakHrat²⁷, as well as a number of energy and geo- and regional political analysts, state that the project of constructing the so-called interconnector on the border of Ukraine, Poland and Slovakia is worth noticing. It will give Ukraine an opportunity to export electrical energy to neighboring European countries and gradually to leave the common Russian and Belarus' energetic system, and to break "energetic colonial ties with Moscow".

Of great strategic importance for the Visegrad Group countries' energy security are infrastructure projects, for instance construction of the "Eastring" gas pipeline. The essence of the project is to create several key interconnectors and to unite the existent Turkish, Romanian, Bulgarian, Hungarian, Slovakian and Ukrainian pipelines, and later, to attach to them Azerbaijan, Iraq and Iran. For Kyiv this is a chance to integrate Ukrainian underground gas storages into the "Eastring" scheme, what will allow enlarging the format of cooperation with Central-Eastern European partners.

Additionally, it is referred to the construction of the so-called "Southern-Northern Energetic Interconnector", which connects the Baltic, Adriatic and Black Seas. Creation of the group of high-level experts on February 3, 2011 gave an official start to the project. On the regional level the countries of the Visegrad Group signed a Memorandum of Understanding,

N. Slobodyan, P. MakHrat, Chy proyde Vyshehrads'ka chetvirka perevirku na mitsnist' Pivnichnym potokom?, "Yevropeys'ka pravda" 08 sichnya 2016, źródło: http://www.eurointegration.com.ua/experts/2016/01/8/7042882/ [odczyt: 1 maja 2016].

when all countries agreed to support promotion of the "Southern-Northern Energetic Interconnector" and the gas pipeline "Nabucco" (still acting at that time). The general idea is to join the region to the alternative transportation routes (mainly from Western European countries and Northern Africa) and connect national distribution systems, allowing gas flows into two directions: Northern and Southern. Cooperation of the Visegrad countries concerning the "Northern-Southern Corridor" has been recently enlarged within the frames of V4+, with compulsory participation of Croatia and Romania. From the point of view of internal national networks, the corridor nowadays can be divided into the following projects:

- Baltic pipeline: Polish gas distribution company "Gas-System" carried out preparatory works to announce the Open Season in 2013. The pipeline gives opportunities for transporting natural gas from the Norwegian continental shelf to Poland and provides access for Scandinavian countries to the world market of liquefied gas;
- Interconnector Poland Slovakia: promising project 2016 onwards. At the end of 2010 the Memorandum of Understanding between National gas distribution companies was signed, aiming at defining the project and prepare its technical and economic justification;
- 3. Interconnector the Czech Republic Poland: 32-kilometer pipeline was launched in September 2011, its further enlargement is planned and carried out;
- 4. Reverse corridor the Czech Republic Slovakia: the project was launched in the midst of 2011 and provides physical reverse of gas flows from North-Western Europe to Eastern European countries, and the corridor finishes in Slovakia;
- 5. Interconnector Hungary Slovakia: the project had been finished till 2015, its capacity is 5 billion m³ per year;
- 6. Interconnector Croatia Hungary: has been working since the end of 2010 in the direction of Croatia;
- 7. Interconnector Hungary Romania: has been working since the end of 2010 in the direction of Romania²⁸.

Thus, an essential advantage of the corridor is its capacity. It is not a single, large-scale project which requires significant investments, but a number of small components, which eliminate mentioned infrastructure losses and provide deep interconnection of the whole region at minimum cost.

In political context, the consolidating task for the countries of the Visegrad Four and Ukraine is and will be resistance to the Russian propaganda. The fact is that Russia knows how to use internal disagreement of Central-Eastern European countries, concerning various issues, including problems in the energy sector. Thus, Moscow manipulates the discounts, temporary

A. Dik, D. Naumenko, G. Shul'cova, P. Salai, Energetichna bezpeka v Central'nij ta Shidnij Evropi: v poshukah edinogo pidhodu, Kyiv 2013, s. 29–30.

cancellation of the "take or pay" principle, occasionally whip up tension in the manner of "energy Armageddon" in Ukraine and collapse of gas transit to the European countries, trying, in this way, to destroy "solidarity" of the European countries, to form pro-Russian "Outposts" and escalate "the discussions" over vital issues within the EU.

In this context, the enlargement of the Visegrad Group is very promising, as it is extremely profitable both for the "Four" and, for instance, for Ukraine. For example, under the Ukrainian current situation, it is strategically important for us to implement the so-called "one voice energy policy" with the Visegrad countries (especially since they face the same challenges and problems), promote actively their energy interests in the region, initiate new models for cooperation, to become a leader of regional energy diplomacy, as well as to accelerate the pace of reforming national energy sector. The fact, which neutralizes the situation, is that the character of Ukrainian energy policy in 2015-2016 was rather introverted, since the Ukrainian governmental top-management focused on the internal problems of the sectors: reformation of the key branches, deoligarchization, and correspondence of the national energy market to the requirements of the "Third Energy Package", privatization and change of the administrative institution. At the same time Ukraine made awfully passive moves in the wake of global tendencies in energetic, inactively reacting to the external challenges to it energy security, for instance to the projects of constructing the gas pipelines "Nord Stream 2", "South Stream" or "Turkish Stream", Russia's statements concerning the cessation of gas transit through the territory of Ukraine in 2019 onwards. It means, that the prospect of the regional enlargement of the Visegrad Group is mainly a field of action namely for Ukraine, since it must position itself as a part of a single European energy market, but not as a country to transit gas to Europe. Consequently, development of cooperation between Ukraine and the Visegrad group testifies that the world transfers from the model of competition according to the "all against all" principle to close and effective cooperation.

In favor of prospects of energy and maybe political enlargement of the Visegrad Group signifies the history of cooperation between the "Four" countries and Ukraine in the energy sphere²⁹. The thing is that till 2013/2014 Slovakia, the Czech Republic, Poland and Hungary together with Ukraine had been the most significant transit countries and, obviously, its consumers. A substantial proportion of gas supplies from Russia to Europe (80 per cent of Russian and Central Asian gas to the European Union, which equals 40 per cent of overall gas amount imported to the EU) were conducted through their territories. Thus, there was (and even is) a dependence of the regional countries' economies on the Russian energy products: Slovakia – on 90 %, Poland – on 80 %, Hungary – on 80 %, the Czech Republic – on 70 % (circled to tenth). However, Ukraine nowadays (since 2014) has started switching to the world prices for

²⁹ I. Kutsyn, A. Krysak, Spivpratsya Ukrayiny ta Vyshehrads'koyi chetvirky v enerhetychniy sferi, Volyns'kymy instytut ekonomiky ta menedzhmentu, źródło: http://viem.edu.ua/ [odczyt: 1 maja 2016].

the energy products, as the Visegrad Group countries had done earlier, in particular trying to ensure its energy independence, and has started diversifying the ways of energy supply.

Table 1. Gas Consumption and Import by the Visegrad Countries and Ukraine as of 2012

Country	Gas Consumption (billion m³)	Gas import from Russia (billion m³)	Proportion of gas imported from Russia in consumption (%)	Proportion of gas imported from Russia in overall gas import via pipelines (%)
The Czech Republic	8,2	6,6	80	66
Hungary	9,7	4,8	49	81
Poland	16,6	9,0	54	83
Slovakia	6,0	3,8	63	93
Ukraine	49,6	29,8	60	100

Źródło: *BP Statistical Review of World Energy*, June 2013, źródło: http://www.bp.com/content/dam/bp-country/fr_fr/Documents/Rapportsetpublications/ statistical_review_of_world_energy_2013.pdf [odczyt: 1 maja 2016].; A. Dik, D. Naumenko, G. Shul'cova, P. Salai, *Energetichna bezpeka v Central'nij ta Shidnij Evropi: v poshukah edinogo pidhodu*, Kyiv 2013, s. 11.

Moreover, it is necessary to point out, that in historical retrospective within the idea of cooperation between Ukraine and the Visegrad Group countries, the proposition, made by Ukraine, concerning creation of the common Baltic-Black Sea Energy Space, introduced at the Energy Summit in Kyiv on May 22, 2008 is worth mentioning. The aim of the summit was to give an impulse to the development of common energy projects and improvement of common technical capabilities to produce, transit and supply hydrocarbons from the Caspian deposits and other countries to the European market. It was then, that the idea to react adequately in future to various "energy threats" from the side of hydrocarbons suppliers, especially Russia, was defined, in particular, to adjust coordinated common actions in the sphere of energy security. At the summit, the presidents of five countries (Azerbaijan, Georgia, Lithuania, Ukraine and Poland) announced the formation of the Single Caspian-Black Sea-Baltic Energy Transition Space and signed Kyiv declaration, concerning the principles of global energy security. The provisions of the declaration are the following: 1) cooperation in the sphere of global energy security must be based on the principles of transparency, mutual confidence, reciprocity and nondiscrimination; 2) none country has the right to use energy as a political weapon; 3) development of transparent, effective and competitive cooperation at the global level in the energy sphere – is the best way to achieve common goals, aiming at constant development and prosperity; 4) fair and market-based answers to the global challenges in the energy sphere must be used to prevent actions which would affect the development of energy products supplies, their transit and consumption, and which would contribute to formation of a secure basis for dynamic and constant world development in a long-term prospect; 5) access to energy resources and transit routes must be gained by means of a constructive dialogue and on the principles of market economy; 6) transit of energy products must be based on the

principles of transparency, security to consumers and non-discrimination; 7) clear, equal, stable and effective legislative and regulatory mechanisms, including sticking to own commitments under contracts, implementation of sufficient and adequate international investments in the sphere of energy resources production is crucial for global energy security; 8) diversification of energy supplies, consumption, energy sources, development of geographical and sectoral markets, routes and means of transition are key elements for a stable and secure functioning of the system of energy resources supply; 9) struggle with global challenges, caused by a climate change, further development of renewable and ecologically-safe energetic, nuclear energetic, as well as support for the measures, aimed at energy saving and energy efficiency both at a national and an international levels must become the essential part of national and world energy policy.

Another practical outcome of the summit was a common statement made by the presidents of the countries-participants concerning the project of the Euro-Asian Oil Transportation Corridor. Thus, the talks between the government of Ukraine, of the one part and the governments of Poland, the Czech Republic and Slovakia of the other part, as well as their companies were commenced as to creation and/or unification of common energy capacities. Correspondingly, cooperation between Ukraine and the Visegrad Group in the energy sphere became promising, mainly in the field of energy products export, transportation of hydrocarbons and implementation of new common energy transportation projects, in particular, it gave substance to the common Baltic-Black Sea Energy Space and development of the Euro-Asian Oil Transportation Corridor, (exclusively at that time) by means of completing the construction of the oil pipeline "Baku-Supsa-Odesa-Brody-Plotsk-Gdansk".

Speaking about the prospects of development of cooperation between the Visegrad Group and Ukraine, one should take into consideration the fact, that Ukraine is becoming a complement to the abovementioned "Northern-Southern Energy Interconnector". The analysts believe that this may increase the number of mutual benefits for the Visegrad Group countries and Ukraine in the following ways³⁰:

a) connection of the existent pipelines and projected interconnectors to the western part of Ukrainian gas transmission network and introduction of Ukrainian underground gas storages into the Northern-Southern Gas Corridor automatically reduces the necessity to construct additional adjoined pipelines in Central-Eastern Europe. In general, implementation of the idea cuts the cost of the projected interconnectors North-South (some capital must be invested in modernization of Ukrainian gas transmission network) and provides infrastructure of transit and storage for spot gas trade in the region. However, such connection can become a reality only when Ukraine implements normative decisions, concerning the rules of storage capacities division and third party access to transit and storage facilities in accordance with the EU legislation;

³⁰ A. Dik, D. Naumenko, G. Shul'cova, P. Salai, Energetichna bezpeka v Central'nij ta Shidnij Evropi: v poshukah edinogo pidhodu, Kyiv 2013, s. 30–31.

- 6) creation of the gas hub on the eastern border of the EU. Deep interrelation of the gas markets in Central-Eastern Europe and related to it opportunities for the free flow of gas both in East-West and North-South directions have been planned and therefore has given a chance to create a great East-European Gas Hub. Such trade platform will become a considerable step towards spot gas trade in the region, including new supplies of liquefied natural gas from the northern and southern directions and new supplies via pipelines from south.
- B) development of mutual policy for attracting necessary investments in infrastructure and search for the new ways of supply sources. The Visegrad countries must find necessary investment in construction of connective pipelines and terminals for liquefied natural gas, while Ukraine will be attracting investments in modernization of the existent gas transmission infrastructure and storages. Being a single project with clearly defined goals and mutual benefits for each of the parties, such initiative can become a powerful supporting factor to gain investments from the EU and international financial organizations.

Summing up the analysis, we realize that the Visegrad Group in its "usual" or maybe "extended" format has and implements various opportunities to become an energy union, which will take advantage of the geopolitical position of the country members and neighbors to coordinate transit policy. This approach must take into account several components of ensuring energy security in the region, aimed at diversification of energy products import, namely: diversification of suppliers, increase in import of liquefied natural gas, transition to more short-term agreements (which undermines dominant position of "Gazprom"), as well as extraction of "nonconventional" natural gas.

Radical changes in the sphere of production, transit and routes of natural gas supply to the countries of the Visegrad Group open new opportunities and challenges to the energy security in the region and Europe in general. The latest events include: a new European model of a gas market; implementation of the EU Third Energy Package; competition between the existing routes of gas transit and the new ways of its transportation. On this basis the Visegrad countries and their neighbors can get benefit in case of closer cooperation between the transit countries in the region under the condition of a new European regulation in the gas sphere. But to get ready to the new era of short-term prices, the Visegrad Group (either in its "usual" or "extended" formats) must solve two main tasks. Firstly, it has to determine the mechanism of funding a new infrastructure. If the countries of the Visegrad Group and Ukraine want to trade gas and continue transiting a great deal of Russian gas to Europe, they must invest in networks. But the reduction of contracts validity period on the liberalized market with a huge number of competitors complicates the return of investments. Secondly, the Visegrad countries must develop spot markets to carry out effective gas trade. For the time being, these

markets are not developed enough and can be easily manipulated, especially with a limited number of suppliers.

Thus, as the analysts state, the governments of the Visegrad countries and Ukraine must coordinate their national energy (security) policy and take into consideration the EU's energetic goals for the following decades. Security of supplies to region will be intensified due to the interconnectors with Ukrainian gas transmission system and access of the European gas traders to Ukrainian underground gas storages. That is why, introduction of gas trade on the eastern EU border on the basis of Ukrainian and "Visegrad" gas storages under the terms and conditions of the Third Energy Package can improve energy security in the region³¹. And to solve the problem of gas supply diversification the Visegrad countries must stimulate national companies to coordinate great infrastructure projects and together lobby for getting funding from the EU. They could create a regional market on the model of the European targeted gas pattern, constructing regional hubs for liquefied natural gas and interconnectors, moving towards harmonization of the market national regulation. New interconnectors will also contribute to the extraction of non-conventional gas.

Against this background, it is crucial to know, that diversification of Russian gas transit would mean further additions to the existing network, what lowers risks for the whole system. Taking into account new gas routes, which are being built now, Russia will be able to supply a great deal more of gas for the bigger amount of European consumers at a price equal to marginal variable costs. The point at issue is not only whether the EU will need Russian gas via diversified routes, but also whether Europe will be in want of Russian gas at all.

References:

- Barroso J. M., Energy Challenges and Policy: Commission contribution to the European Council of 22 May 2013, European Commission 2013.
- Belogorev A., Jenergeticheskie problemy v Kaspijskom regione: riski i potencial dlja Rossii, Pjatyj Kaspijskij Jenergeticheskij Forum 2012.
- 3. BP Statistical Review of World Energy, June 2013, źródło: http://www.bp.com/content/dam/bp-country/fr_fr/Documents/Rapportsetpublications/statistical_review_of_world_energy_2013. pdf [odczyt: 1 maja 2016].
- Bushuev V., Mastepanov A., Global'naja jenergetika i ustojchivoe razvitie (Belaja kniga), Wyd. Mezhdunarodnyj centr ustojchivogo jenergeticheskogo razvitija 2009.
- 5. *Declaration of V4 Energy Ministers*, Visegrad Group, 25 January 2011, źródło: http://www.visegradgroup.eu/2011/declaration-of-v4-energy [odczyt: 1 maja 2016].
- Dik A., Naumenko D., Shul'cova G., Salai P., Energetichna bezpeka v Central'nij ta Shidnij Evropi: v poshukah edinogo pidhodu, Kyiv 2013.

³¹ A. Dik, D. Naumenko, G. Shul'cova, P. Salai, Energetichna bezpeka v Central'nij ta Shidnij Evropi: v poshukah edinogo pidhodu, Kyiv 2013, s. 2.

- 7. Energiabiztonság a négy visegrádi országban Változó energetikai kapcsolatok Európában, Panenerg.hu, źródło: http://www.panenerg.hu/szakmai-hirek/energiabiztonsag-a-negy-visegradi-orszagban---valtozo-energetikai-kapcsolatok-europaban [odczyt: 1 maja 2016].
- 8. Energy security of Visegrad region, Visegrad.info, źródlo: http://www.visegrad.info/energy-security-infrastrucutre/factsheet/energy-security-of-visegrad-region.html [odczyt: 1 maja 2016].
- 9. Friedman T., *The First Law of Petropolitics*, "Foreign Policy" 2006, vol 54, s. 28–39.
- 10. Groome F, From Contradiction to Cooperation: A New Legal and Diplomatic Foundation for Energy Policy in the EU, "Journal of Energy Security" April 2012, źródło: http://www.ensec.org/index.php?option=com_content&view=article&id=343:from-contradiction-to-cooperation-a-new-legal-and-diplomatic-foundation-for-energy-policy-in-the-eu&catid=123:content&Itemid=389 [odczyt: 1 maja 2016].
- 11. Kish Ye., *Problemy rehional noho liderstva Vyshehrads koyi chetvirky u tsentral noyevropeys komu rehioni*, "Naukovi zapysky Instytutu politychnykh i etnonatsional nykh doslidzhen NAN Ukrayiny 2008, vol 38, s. 156–166.
- 12. Kish Ye., "Yevropeys'ka karta" krayin Vyshehrads'koyi chetvirky: istoriya rozvytku i format spivrobitnytstva, "Naukovyy visnyk MNU. Istorychni nauky" 2012, vol 3, nr. 33, s. 259–267.
- 13. Kovács P., Szczerski K., Binhack P., *Energy security of the V4 countries. How do energy relations change in Europe*, The Kosciuszko Institute 2011.
- 14. Kutsyn I., Krysak A., *Spivpratsya Ukrayiny ta Vyshehrads'koyi chetvirky v enerhetychniy sferi*, Volyns'kymy instytut ekonomiky ta menedzhmentu, źródło: http://viem.edu.ua/ [odczyt: 1 maja 2016].
- 15. Kuhn M., Umbach F., *The Geoeconomic and Geopolitical Implications of Unconventional Gas in Europe*, "Journal of Energy Security" September 2011, źródło: http://www.ensec.org/index.php?option=com_content&view=article&id=320:the-geoeconomic-and-geopolitical-implications-of-unconventional-gas-in-europe&catid=118:content&Itemid=376 [odczyt: 1 maja 2016].
- 16. LaBelle M., *The Russian rock: Re-landscaping CEE energy (in)dependence*, "The Energy SCEE" 29 September 2013, źródło: http://energyscee.com/2013/09/29/the-russian-rock-re-landscaping-cee-energy-independence/ [odczyt: 1 maja 2016].
- 17. Luft G., *Energy Self-Sufficiency: Reality or Fantasy?*, "Journal of Energy Security" November 2012, źródło: http://www.ensec.org/index.php?option=com_content&view=article&id=394:energy-self-sufficiency-reality-or-fantasy&catid=130:issue-content&Itemid=405 [odczyt: 1 maja 2016].
- 18. Luft G., *The Energy-Security Paradox*, "The National Interest" 28 March 2013, źródło: http://nationalinterest.org/commentary/the-energy-security-paradox-8281 [odczyt: 1 maja 2016].
- 19. Luft G., Korin A., *The Folly of Energy Independence*, "American Interest" 10 June 2012, vol 7, nr. 6, źródło: http://www.the-american-interest.com/2012/06/10/the-folly-of-energy-independence/[odczyt: 1 maja 2016].

- Luft G., Korin A., Turning Oil into Salt: Energy Independence Through Fuel Choice, Wyd. BookSurge Publishing 2009.
- 21. Lukshik L., Rol' Vyshegradskoj gruppy v formirovanii obshhej jenergeticheskoj politiki Evrosojuza: Avtoreferat k.je.n., Mosskva 2011.
- 22. Metais R., Ensuring Energy Security in Europe: The EU between a Market-based and a Geopolitical Approach in EU Diplomacy Paper, Wyd. College of Europe 2013.
- 23. Milina V., *Energy Security and Geopolitics*, "Connections: The Quarterly Journal" 2007, vol 6, nr. 4, s. 27–46.
- 24. Milina V., Jenergeticheskaja bezopasnost': izmenenie paradigmy, "Connections: The Quarterly Journal" 2013, s. 87–115.
- Minárik M., Energy Cooperation in Central Europe: Interconnecting the Visegrad Region, Wyd. Energy Charter Secretariat 2014.
- 26. Nosko A., *Regional Energy Security: Visegrad Finally At Work?*, CENAA Analysis, źródło: http://cenaa.org/analysis/regional-energy-security-visegrad-finally-at-work/ [odczyt: 1 maja 2016].
- 27. Ratner M., Belkin P., Nichol J., Woehrel S., *Europe's Energy Security: Options and Challenges to Natural Gas Supply Diversification*, Congressional Research Service 2013.
- 28. Slobodyan N., MakHrat P., *Chy proyde Vyshehrads'ka chetvirka perevirku na mitsnist' Pivnichnym potokom?*, "Yevropeys'ka pravda" 08 sichnya 2016, źródło: http://www.eurointegration.com.ua/experts/2016/01/8/7042882/ [odczyt: 1 maja 2016].
- 29. Umbach F., Kuhn M., Unconventional Gas Resources: A Transatlantic Shale Alliance?, [w:] Transatlantic Energy Futures: Strategic Perspectives on Energy Security, Climate Change and New Technologies in Europe and the United States, Wyd. Center for Transatlantic Relations, Johns Hopkins University–SAIS 2012.
- 30. Westphal K., Energy Policy between Multilateral Governance and Geopolitics: Whither Europe?, "Internationale Politik und Gesellschaft" 2006, vol 4, s. 44–62.