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## Is dependence really interdependence? Gas strategies seen from central-Eastern Europe

*Attila Virág*

**Abstract:** *This article explores the dependencies between the European Union and its eastern member states and Russia. The EU-27 and Moscow formulate their energy security target-systems following two considerably different strategic energy approaches. The parties might initially appear to be interdependent in the examined field. This view, however, would only have relevance if the energy policies of the European Union were unified and regulated at Union level, and this is not the case. Hence it is a more substantive question to ask what relationships separate member states maintain with Russia concerning gas affairs. The second half of this article concerns itself with an in-depth analysis of the central-eastern European member states of the European Union. It demonstrates, on the basis of historical and geographical factors and recent discussions regarding gas and gas lines, that the interdependence of countries in the eastern part of the Union and Moscow is asymmetric. Accompanying risks are even more severe, since the two regions, central-eastern Europe and Russia, are separated from each other by so-called gatekeeper countries.*

**Keywords:** *energy policy, security policy, supply security, European Union, Russia*

### Introduction

Energetics is an idiosyncratic frontier between politics and economics. In this era of economic globalization, the long-term target systems and strategies of international and corporate spheres should be formulated considering specific environmental impacts. Since the end of the 20th century, the spatial integration of markets and the convergence of operational regulations and their institutions have been taken as an empirical fact. Although changes primarily take place in the economic world, global and local politics play an important role in their motivation, coordination and restriction at all times.

In the case of the energy market the emphasis of state activity is laid on energy security. Present crises in the extractive and transit countries, unusual and unpredictable natural relationships, unequal geographical distribution of hydrocarbons, dropping reserves, rising energy prices and the increasing demand for energy as a result of economic growth also contribute to the players of world

politics formulating new energy policy, and accordingly creating new targets and strategies.

Economic and market players are also interested in sustaining energy security, since both the economic competitiveness of society and domestic welfare strongly depend on the security of energy supply. This is particularly true for the hydrocarbons market, since retail customers' propensity to pay for this product is proven to be high<sup>1</sup>. According to László Varró several signs show that "the social value of energy-supply security is rising with economic development" (Varró, 2007: 64.). Therefore potential problems of energy supply may have a strong impact on economic development. This is particularly true for the service sector (commerce, banking, tourism), where temporary or permanent energy failure might result in lasting loss of consumer confidence.

Although it seemed that after the termination of the bipolar world system energy gradually became the topic of traditional economic policy instead of security policy or security strategy, the situation observed in the Cold War era has not substantially changed in the 21st century. There is no sign that this strategically managed field has come completely under the influence of market mechanisms, despite that fact that economic sciences primarily, and in many cases exclusively, deal with analyzing energy policy using their own narratives. This perspective, however, does not account for the direct and indirect military dimensions of hydrocarbons including natural gas, together with the strategic movement of players in the fields of economic policy and international politics. This only allows a limited, economically biased definition of the term 'energy security'. Hydrocarbons have become strategically important raw materials primarily due to their role in economic life; hence this is one of the reasons that their role in politics has also become strategically important<sup>2</sup>. So it can be argued that the energy security problem continues to be a determinant factor in the making of economic and security policy at the beginning of the new millennium.

This article examines the dependencies between the eastern part of the European Union and Russia. The first half discusses the energy policies of Brussels and Moscow. In my opinion the importance of the topic is derived from the fact that the two economic and world political players formulate their energy security target system following two considerably different energy strategy concepts. Both approaches lay emphasis on the term 'energy security' with different foci.

The second half of the article analyzes the gas dependence of central-eastern European Union member states on Russia. An attempt is also made to analyze the

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<sup>1</sup> See e.g. the results of a Hungarian Public Opinion Poll Institute (Tárki) – survey commissioned by the Hungarian Energy Bureau.

<sup>2</sup> Not considering the military consequences.

idiosyncratic gatekeeper role of countries that lie between central-eastern Europe and Russia – with special attention to Ukraine, in regard to security policy power-play and planned gas line projects.

### **Piped gas Line of Business as a special energetic field**

Examining the problem of energy security in the case of natural gas, a great number of idiosyncrasies can be noticed that are exclusively characteristic to this energy resource. The natural gas market is one of the most dynamically growing branches of energy supply within fossil energy resources due to its competitive price and its widespread industrial and household consumption. It has an advantage compared to the other non-renewable energy sources in that it has relatively fewer environmentally polluting effects. “The recently activated new generation Combined Cycle Gas Turbines (CCGT) produce energy with favourable contamination emissions and higher efficiency and economy compared to coal or oil-fuelled power plants” (Íjgyártó, 2006: 86.).

The value, usability, transportability and marketability of natural gas is different from that of crude oil in many ways. Therefore the gas Line of Business (LOB) and related policies are also substantially different. Its energy content is less than that of crude oil; however its delivery costs are higher<sup>3</sup>. The Cost, Insurance, Freight (CIF) element appears more significantly in the case of natural gas. Its delivery in piped form is technologically complex and costly. Although certain pressure-fluctuation is acceptable in the pipelines, restoration of supply after service-failure is more difficult than in the case of electricity. Furthermore it has far fewer transit alternatives compared to crude oil; consequently gas trade is less secure. Natural gas is storable, however only in expensive facilities expressly established for this purpose.

Inter alia due to the above features<sup>4</sup> it can be argued that the establishment of an effective market in the case of piped gas LOB is not simple. The required pipeline system is a “natural monopoly, its duplication is not possible. Hence “third party access” is a prerequisite for competition: the owner of the network makes it available for all market players as a public infrastructure at a non discriminative network tariff” (Varró, 2007: 68.).

The gas market is regional, therefore the price is determined on the basis of individual agreements between extractors, suppliers and customers; the actual crude oil and Diesel-oil price in the region is rather informative. It is characterized by strong seasonal consumption; however, owing to its wide utilization, supply problems

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<sup>3</sup> ”From the cost of delivering an energy unit in the form of natural gas from the North Sea to the European continent the same energy content in crude oil could be delivered twice around the world.” (ÍJGYÁRTÓ, 2006: 86.).

<sup>4</sup> Primarily due to the required special infrastructure.

immediately have an effect. As a result of high investment and operational costs it is worth operating the pipelines at full capacity<sup>5</sup>, so extractors are also interested in the ownership of the pipelines (UNEP–WORLD BANK, 2003; INTERNATIONAL ENERGY AGENCY, 1995).

### **Supply-oriented energy policy of the European Union (reasons, opportunities and limitations)**

International, primarily western scholars in energy policy literature attempt to define energy strategy fundamentally considering the provision and security of supplying a given economic or political region. Accordingly, the mission and objective of energy strategy is to sustain the continuity of energy supply with the help of different political and economic tools. Regions having limited or no energy resources, including hydrocarbon reserves, are particularly characterized by this strategy. The energy strategy of such importers is determined by forced long-run import<sup>6</sup>. This strategy in practice coincides with the energy policy of the European Union (EU).

The most important reason for supply-oriented energy policy is falling gas reserves in Europe. Furthermore the continent has to account for increasing natural gas demand. “According to estimates the natural gas demand of European Union countries might reach 601 billion cubic metres by 2015, of which 195 billion cubic metres would be used in energy production” (ÍJGYÁRTÓ, 2006: 87.). This is primarily due to the fact that the role of natural gas within the energy sector has been escalating since Brussels set the reduction of carbon dioxide emissions as an objective. Although in the coming decades the highest dynamism is expected in the field of renewable energy sources (around 74 per cent growth between 2000 and 2030), gas-consumption is still placed second at 64 per cent, since the role of the latter within the energy-balance could increase from 16 to 32 per cent, thereby approaching the role of oil falling from 40 to 35 per cent (LUDVIG, 2006: 151.).

Within the framework of supply-oriented energy policy, the EU has specified a number of objectives such as reducing energy-dependence, creating diversified energy-supply, achieving sustainable development through technological developments and increasing energy efficiency, together with inspiring regional solidarity and cohesion through formulating and implementing unified standards<sup>7</sup>. The latter is argued to be the greatest limitation to supply-oriented energy policy.

<sup>5</sup> The unit cost doubles if a 51mm line operates in 50 per cent efficiency.

<sup>6</sup> The strongest exception is the United States of America, who became a crude oil importer in the 1950s, and had been crude oil exporter until 1948. In 1959 the American administration introduced a formal import quota system to protect its domestic crude oil extraction (Mikdashi et al., 1970).

<sup>7</sup> More in-depth description can be found in the energy policy documents of the Union, specifically in the Energy Charter and in the Green Books as of 2000 and 2006 (EUROPEAN COMMISSION, 2000A; 2000B; 2006).

Regarding the defensive energy strategy of the Union, it is essential to briefly mention the documents and regulations providing the framework for EU-level natural gas policy. The first document is the so-called Energy Charter. It is the first initiative with the intended aim of summarizing the principals of European energetic cooperation. The Charter was signed in The Hague in December 1991<sup>8</sup>, though at that time it could be regarded as a cooperation agreement; it became a legally binding international treaty after Russia signing in 1994, and came into effect in 1998. The Charter was later added into the *aquis communautaire*.

The document was fundamentally aligned to World Trade Organization (WTO) standards. It aimed to remove discrimination in the fields of investments, extraction, processing and delivery. It declared the principle of national or most favourable treatment in the case of investments among the signatories, and laid warranties against nationalization and appropriation. Furthermore it declared the right of investors to repatriate profit, and to select managers and employees (Romanova, 2002: 59.). The Charter also deals with transit deliveries together with infrastructural operation; accordingly it prescribes the creation of access to pipelines without discrimination for all the signing and third parties.

The fulfilment of the actions laid out in the document has, however, come up against severe difficulties, of which the most outstanding is that Russia has not ratified the contract. Its primary reason is that the range of incorporated countries was remarkably wide, hence “the Russian supplier Gazprom did not intend to lose the political and economic weapon of providing access to the pipelines in favour of its competitors” (Ludvig 2006: 150.).

The Green Book 2000 and 2006 are fundamental documents in understanding the energy strategy of the European Union (EUROPEAN COMMISSION, 2000B; 2006). In the document issued in 2000 the Union considers available energy sources, anticipates acquisition and energy consumption tendencies by 2030, and faces the energy consequences of growing demand. The aforementioned reasons for the supply oriented energy strategy of the EU are presented. Furthermore the document presents the key energy goals as follows: sustainability, competitiveness and provision of supply.

## **Prospects of Russian demand-oriented energy policy**

The supply-oriented approach expresses just one side of the energy strategy. The geographically unequal distribution of energy resources prioritized in the era of Cold War, primarily hydrocarbons, resulted in a diversity of energy strategies. Hence for countries having large hydrocarbon reserves – likely exporters – the

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<sup>8</sup> Apart from all the European Union member states the United States of America, Canada, Japan and Australia also signed the Charter.

above strategy does not make sense. In this case the mission and objective of energy strategy is to provide the security of demand, and to use the income derived from supply-provision for different political and/or economic goals. Accordingly tools are not ordered to provide security of supply – instead income from providing energy supply (energy export) is rearranged to serve political and/or economic goals. However, these goals are not generally linked to the energy industry, but are mostly linked to economic or foreign policy. This concept clearly reveals the primary objective of Russian energy policy in the piped gas LOB.

What characterizes Russian gas policy at present? The answer can be found in the “Energy Strategy of Russia to 2020” document. Although this strategy had already been formulated in 2000, it was only approved in 2003<sup>9</sup>. The framework of the Russian energy strategy can be discerned from this document, and is well characterized by the earlier discussed term ‘demand oriented energy strategy’ in the field of gas LOB.

The essence of Russian demand-oriented energy policy can be unravelled from supply and demand sides. The continent-sized country possesses one third of the world's natural gas reserves. Furthermore, substantially expanding production capacity and increasing exports are expected.

The magnitude of exploitable reserves in 2005 came to 47.820 billion cubic metres, from which the volume under extraction was 598 billion cubic metres (BRITISH PETROLEUM, 2006). This is expected to increase by 25–30 per cent by 2020 according to the Russian energy strategy concept. Natural gas exports are expected to reach 275–280 billion cubic metres compared to the 185 billion cubic metres as of 2002 (MINISTRY OF ENERGY OF THE RUSSIAN FEDERATION, 2003). Russia plans to expand its markets, which based on the fact that beyond Europe substantial demand is expected for natural gas in the Pacific-region and in south Asia.

Perceived tendencies in the demand and supply sides of gas LOB raise not only the opportunity for but also the barriers against Russia applying a more offensive energy strategy. Russia has to account for more dilemmas arising in its long-term energy policy, which seem to be multiplied by the world economic crisis. The first goal of implementing an offensive energy strategy is to provide the long-term demand for Russian natural gas<sup>10</sup>. Furthermore other factors also influence the feasibility of a proactive energy policy: 1. When will Russian reserves deplete? 2. Is Russia able to control its great natural gas reserves in the long run? 3. Is it able to control the majority of the gas line system? 4. Is it able to accomplish the necessary technological developments adequately (fundamentally without outside assistance)? 5. How will the global hydrocarbon price develop in the long-run?

<sup>9</sup> Government resolution No. 1234 as of 28 August 2003.

<sup>10</sup> Solvent, adequate size, predictable, available in the long-run, diversified.

Stability in the Russian economy is based on the permanent hydrocarbon trade, namely gas exports. The share of budgetary income derived from the sale of energy resources is extraordinary high, which sets limits on establishing an offensive energy policy. Although the Russian energy strategy to 2020 attempted to double the annual natural gas export from the 185 billion cubic metre level as of 2003 to 275–280 billion, export in recent years has decreased instead of increasing. It raises the question of what changes the deepening crisis might generate for Russian outlooks.

Russia might compensate for interruptions with price-increases or market extension. In the former case in internal markets – where for social and economic reasons gas was sold at extraordinarily low prices before the crisis – the Kremlin should expect serious public dissatisfaction. In western markets the prevailing price is fixed to a price formula laid out in long-term contracts, which is *inter alia* based on the prevailing Brent crude oil price. The situation is different and not positive from the viewpoint of Moscow, in countries within the Commonwealth of Independent States (CIS) where the parties have so far counted on depressed prices compared to global market prices. Changing pricing systems and price increases may lead to gas wars, supply problems, and, what is most severe for Russia, the failure of expected revenues (see *inter alia* the difficulties derived from the receivables of Naftogas). This means that an offensive gas pricing policy within the Russian sphere of interest could easily generate the unsettlement of existing (western) markets.

Other anomalies can be discerned with respect to market expansion. The Russian energy strategy to 2020 does not resolve the discrepancy between the magnitude of investment requests and the Russian reservations against incorporating external funds, with regard to both existing markets and potential new buyers.

“Among the greatest uncertainty factors of Russian hydrocarbon supply security are currently the weakness, the capacity and particularly the maintenance problems of delivery infrastructure” (Ludvig, 2006: 168.). Besides modernization and maintenance the modernization of research, extraction, gas production and processing becoming more and more costly also creates difficulties for Russia.

Though the Russian energy strategy sets the diversification of hydrocarbon markets as an objective, thereby underpinning the sustainability of offensive economic policy, effective implementation is not guaranteed, particularly in this era of economic crisis when the expected gas demands in the future cannot be easily predicted.

Prevailing price is also a central element of Russian energy strategy. As long as prices are high, state budget revenue will also be high. However, if prices dramatically drop, and the situation seems to be durable, then Russia might become a raw



material projection of developed western and eastern countries from the viewpoint of energy policy.

### **Is dependence interdependence?**

Based on the above, the relationship between the European Union and Russia is characterized by interdependence in the field of piped gas LOB, and is expected to remain so in the future. Hence the deputy Chief Executive Officer of Gazprom, Alexander Medvedev is correct when arguing that “Europe depends on Russian gas, and likewise Russia depends on European gas procurement. This interdependence guarantees a strong commercial partnership and the long-term stability of supply” (CROOKS, *Financial Times*, 9 November 2007). The former German chancellor Gerhard Schröder expressed a similar viewpoint in his interview given to the Hungarian political journal *Népszabadság* in 2008. “70 per cent of Russian export is directed to Europe, whereas one quarter of Russian state revenue is derived from gas and oil selling. Russia depends on the customers and Europe on gas. This is interdependence” (GERGELY, *Népszabadság Online*, 12 April 2008).

These standpoints could possibly gain relevance if the energy policy of the European Union in gas affairs were unified and energetics were regulated as a community level policy, or the member states at least followed similar strategies in this field, however this is not the case.

The Union has little latitude for manoeuvring, since energy policy is not regulated at Union level, i.e. the authorities of the Energy Committee have not enabled the implementation of a unified Union level energy policy. Consequently member states mostly politicize against one another and Brussels. Bilateral contracts are signed instead of community level agreements<sup>11</sup>. Since the Union cannot be regarded as unified in the field of energy policy, it cannot act in a unified and expedient manner concerning its strategic goals. Hence in this sense it cannot be regarded as an independent entity, and so the above mentioned EU-Russian interdependence does not have substantive, practical support. Hence it is a more substantive question to ask what relationships separate member states maintain with Moscow concerning gas affairs.

### **The situation in central-eastern Europe**

The markets of European countries on the two sides of the former ‘iron-curtain’ were considerably different from each other. While members of the former European

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<sup>11</sup> The greatest example of this might be the German-Russian agreement in relation to the Nord Stream gas line, which had been a high priority Union programme; however, its planned trace displeased more EU members and Brussels.

Community (EC) are located between the gas-fields of the North Sea and North Africa and generally possess extensive coastlines, making them natural customers of Liquefied Natural Gas (LNG) even today, the energy demand of former CMEA12 countries has become even more exposed to Russian natural gas. The energy dependence of eastern Europe on Russia (in particular considering natural gas) can be grounded not only in geographical but also in historical reasons.

The energy poverty of states in the former Soviet sphere of influence represented one of the milestones of CMEA relationships. It was a determinant process between 1958 and 1965 in the rapid integration of the satellite states of the Soviet Union into the aforementioned organization, which initially had the main goal of accomplishing the economic-strategically key energy and raw material programme. It was in the interests of the Soviet Union“ to eliminate energy and raw material poverty hindering production growth derived from the earlier unplanned and disproportional development, and to fulfil the energy and raw material requests necessary for smooth, planned growth” (Szakács, 2002: 233).

Estimations and plans were made between 1957 and 1958 to explore the demands within CMEA. The rearrangement of the energy structure by increasing crude oil and natural gas import to accomplish the DIP<sup>13</sup> programme seemed to be inevitable. This was facilitated by the discovery of the enormous West Siberian crude oil and natural gas reserves at the end of the 1960s. Accordingly a number of large investments were made in the energy industry. The preparation and implementation of unified electricity, crude oil and natural gas systems were begun at that time<sup>14</sup>.

With the establishment of the system the central European CMEA countries became the stable markets of Soviet hydrocarbon export. Moscow was able to predictably calculate export volume, which was mostly dictated by its trading area. It was based on, firstly, the Soviet-friendly leadership of these markets and secondly the establishment of the aforementioned hydrocarbon line system, which at the same time excluded the possibility of central-eastern European CMEA countries fulfilling their energy demand from other sources.

Although in the beginning Moscow offered favourable hydrocarbon prices for CMEA members, in reality considerable discrimination was applied against these countries. Examining the period between 1955 and 1960 it emerges that the price of Russian crude oil exported to CMEA countries exceeded the export price applied for

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<sup>12</sup> Council for Mutual Economic Assistance. In was founded in 1949 as a counterpoint to the Marshall-plan and the European Economic Community. In the cold war it functioned as a consultation organization of the eastern orbit and as a mediator organization of Soviet military and economic will.

<sup>13</sup> DIP (*dognat' i pieriegnat'*), i.e.“reaching and exceeding”, which was assumed to be a vision and programme to implement the transformation to communism.

<sup>14</sup> Inter alia the Hungarian section of“Friendship” crude oil line was opened in October 1962.

countries outside of the CMEA by an average of fifty per cent. “While within CMEA, the average barrel price was 3.31 dollars, it was elsewhere 2.2 dollars” (The Seven Sisters, 1975: 362–364.). “The oil price explosion had diametrically contrary effects on the terms of trade of the Soviet Union and the hydrocarbon importing European CMEA countries: while the Soviet Union as an exporter managed to effect significantly improving terms of trade, the importer CMEA countries experienced dramatically worsening terms of trade in the 1970s” (Szemerényi, 2007: 25.).

After the oil crisis in 1973 the hydrocarbon business directed towards the CMEA generated substantial budgetary overload, which can be explained by the “hard currency price” of external, primarily western European markets. Accordingly the earlier CMEA target markets became transit countries assuring access to western markets. By the middle of the 1970s, in parallel with increasing western exports, decreasing Soviet energy deliveries were experienced in many countries in the Soviet orbit (The Petroleum Economist, 1976).

The pipeline system was established to deliver Soviet gas west; hence the east-west directed pipeline system was built in the central European region, i.e. the Belarus-Poland-Germany, Ukraine-Slovakia-Austria/Czech Republic and Ukraine-Hungary lines. This infrastructure did not change significantly after changes to the central-eastern European political system. Dependence on Russian gas has remained the idiosyncrasy of the region.

This situation should make countries in the region realize that regional cooperation is essential also in the field of energy policy. Accordingly the establishment and intensification of north-south cooperation may primarily help central-eastern EU members to increase energy security.

The European Union and Russia are in an interrelated relationship with each other concerning the piped gas LOB, however – primarily due to the fact that the energy policy of the EU is not implemented at Union level – the question cannot be neglected as to whether the relationship between the two economic and world political players is symmetric or asymmetric considering dependence in terms of a regional breakdown. For that purpose it is worthwhile to compare the gas dependence of the former EU-15 and the central-eastern European countries that joined after 2004 on Russia.

It can be concluded that the two regions are significantly different from each other in terms of their gas dependence on Russia (Kaderják, 2008). This differentiated situation is analyzed in Table 1 which was assembled using the data of the British Petroleum Statistical Review of World Energy 2008.

**Table 1a: Trade Movements in 2007 by Pipeline to EU**

From where	Western European exporters									
	Belgium		Germany		Netherlands		Norway		Great-Britain	
To where	bn m <sup>3</sup>	(%)	bn m <sup>3</sup>	(%)	bn m <sup>3</sup>	(%)	bn m <sup>3</sup>	(%)	bn m <sup>3</sup>	(%)
Austria			1,1	14,71			0,78	10,43		
Belgium			1,6	8,27	7,1	36,71	9,5	49,12	0,64	3,31
Great-Britain			1,8	6,43	1,6	5,71	8,2	29,29	16,4	58,57
Finland										
France	1,9	5,63	0,1	0,3	8,92	26,42	15,11	44,76	0,1	0,3
Greece										
Netherlands			5,5	29,16			7	37,12	1,82	9,65
Ireland									4,15	100
Luxemburg	0,8	53,33	0,7	46,67						
Germany					19,13	22,85	23,74	28,36	2,9	3,46
Italy			1,5	2,1	6,11	8,43	8,99	12,41	0,75	1,04
Portugal										
Spain							2,15	19,63		
Sweden			0,15	13,51						
Bulgaria										
Czech Republic							2,2	25,49		
Poland			0,8	8,6						
Latvia										
Lithuania										
Hungary			0,83	7,92						
Romania			1,3	27,08						
Slovakia										
Slovenia										
Total IMPORT	2,7	0,8	15,38	4,55	42,86	12,68	77,67	22,97	26,76	7,91
West IMPORT	2,7	0,93	12,45	4,29	42,86	14,78	75,47	26,03	26,76	9,23
East IMPORT	0	0	2,93	6,08	0	0	2,2	4,56	0	0

Note: Except for Estonia, Denmark, Malta and Cyprus

Table 1b: Trade Movements in 2007 by Pipeline to EU

From where	Russia		Other European & Eurasian		North African exporters				Total EXP.
					Algeria		Libia		
To where	bn m <sup>3</sup>	(%)	bn m <sup>3</sup>	(%)	bn m <sup>3</sup>	(%)	bn m <sup>3</sup>	(%)	(%)
Austria	5,6	74,87							7,48
Belgium	0,5	2,59							19,34
Great-Britain									28
Finland	4,3	100							4,3
France	7,63	22,6							33,76
Greece	2,89	100							2,89
Netherlands	2,3	12,2	2,24	11,88					18,86
Ireland									4,15
Luxemburg									1,5
Germany	35,55	42,46	2,4	2,87					83,72
Italy	23,8	32,85			22,1	30,5	9,2	12,7	72,45
Portugal					1,39	100			1,39
Spain					8,8	80,37			10,95
Sweden			0,96	86,49					1,11
Bulgaria	3,1	100							3,1
Czech Republic	6,43	74,51							8,63
Poland	6,2	66,67	2,3	24,73					9,3
Latvia	1,6	100							1,6
Lithuania	3,4	100							3,4
Hungary	7,85	74,9	1,8	17,18					10,48
Romania	2,5	52,08	1	20,83					4,8
Slovakia	5,8	100							5,8
Slovenia	0,56	50,91	0,1	9,09	0,44	40			1,1
Total IMPORT	120,01	35,49	10,8	3,19	32,73	9,68	9,2	2,72	338,11
West IMPORT	82,57	28,48	5,6	1,93	32,29	11,14	9,2	3,17	289,9
East IMPORT	37,44	77,66	5,2	10,79	0,44	0,91	0	0	48,21

Note: Except for Estonia, Denmark, Malta and Cyprus

Table 1a, 1b summarizes the countries participating in European international piped gas trade<sup>15</sup>. Importer countries were divided into two groups. The first block contains former EU-15 countries in need of import. Their summary figures can be found at the bottom of the table denoted by 'West IMPORT'. The second block involves countries which have joined the EU since 2004<sup>16</sup>. Exporters were divided into five categories: 1. western European exporters including Belgium, Germany, the Netherlands, Norway and Great-Britain, 2. Russia, 3. Turkmenistan, 4. other European and Eurasian exporters, and 5. finally North African exporters.

The table clearly demonstrates the different trading areas of western and eastern importers. While the so-called western importers acquired 54.26 per cent of their natural gas demand from Western Europe, in particular from the fields of the North Sea<sup>17</sup>, according to the data from July 2007, this rate in case of eastern importers hardly exceeds 10 per cent. Furthermore from the examined nine countries, only four has an import rate above 10 per cent<sup>18</sup>.

The situation is similar with North African sources. While the western countries acquire 14.31 per cent of their natural gas from here, the eastern countries acquire only 0.91 per cent. This value is attributable to one country, Slovenia, where 40 per cent of its import comes from Algeria. However, it should be noted that only three Mediterranean countries of the former EU-15 are affected by such trade, but in high proportion (Italy imports 43.2 per cent, Spain 80.37 per cent and Portugal 100 per cent from Algeria). Therefore the energy dependence on Russia cannot be practically interpreted as a problem in these countries; furthermore opening to the east might be useful from the viewpoint of diversification.

The situation is considerably different in the group of countries containing so-called eastern importers. Here 77.66 per cent of the imported natural gas arrives from Russia. This ratio in Western Europe is 28.48 per cent. From the examined nine eastern states, four fully depend on Russian gas (Bulgaria, Latvia, Lithuania, and Slovakia). Slovenia possesses the lowest dependency rate: 50.91 per cent, the others range between 52.08 and 74.9 per cent.

It can be therefore being concluded that the diverse features of geographical and historical endowments resulted in the formulation of different energy security approaches, primarily in the area of diversification. The relating alternative perspectives can be clearly demonstrated by the struggle of establishing gas

<sup>15</sup> Except for Estonia.

<sup>16</sup> Again except for Estonia.

<sup>17</sup> There are altogether three countries which depend on Russian gas mostly or completely (Austria in 74.82 per cent, Finland and Greece completely.).

<sup>18</sup> Czech Republic (25.49 per cent), Poland (8.6 per cent), Hungary (7.92 per cent), and Romania (27.08 per cent).

lines in recent years. The Nabucco versus Nord/South Stream debate reflects the actual “power relations” concerning the interdependence between the Union and Russia.

All three planned lines mostly affect countries in the eastern region of the European Union. It is worthwhile to separate these countries into two groups. The first group consists of central-eastern European member states which are affected both by Nabucco and/or South Stream lines: Austria, Bulgaria, Hungary and Romania. The second group incorporates the North-eastern European Union members – Estonia, Latvia, Lithuania and Poland – affected by the implementation features of the Nord Stream line.

There is a common feature of the two regions, namely one-sided Russian energy dependence. From the countries in the first group, Bulgaria is 100 per cent dependent on Russian import, Austria 74.87 per cent and Hungary 74.9 per cent. The situation is comparable in the second group. Latvia and Lithuania completely depend on Russian gas, and two thirds of Polish natural gas imports are provided by Moscow.

The central-eastern European countries (first group) are firmly interested in the diversification of their natural gas imports. The South Stream and Nabucco lines might also contribute to this, however not to the same extent. While the South Stream would facilitate route-diversification, Nabucco would also provide source-diversification in the case of its implementation. It should not be forgotten that there are some central-European EU member states which are left out of the projects, and accordingly their dependence on Russia is not mitigated<sup>19</sup>.

### **The South Stream and Nabucco**

1. The Caspian-region and countries in the Middle-East, having large natural gas reserves, represent a high security policy risk for countries participating in the Nabucco project.
2. Russia does everything possible to block central Asian countries lest they should open to the old continent, bypassing Moscow.
3. Energy policy in the European Union is not regulated at Union level, which hinders and decelerates the unified action of member states in supply or security issues. Union members often politicize against the interests of EU.
4. Russia – making use of the above situation – signs bilateral agreements with central and south-eastern European countries within the framework of the

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<sup>19</sup> According to the current situation Romania only participates in the Nabucco project, and Slovakia, having 100 per cent Russian dependence, does not participate in either project, so neither gas line will go through the country.

South Stream project, thereby currently having an advantage over the Union from the viewpoint of diversification<sup>20</sup>.

In the case of North-eastern European countries (second group) the situation is very similar – however, no competitive lines can be found here. The question is rather what route the planned line should follow to reach its destinations, and which countries might have access to Russian gas through transit fees and new infrastructure.

### **Participating and non-participating countries in the Nord Stream**

1. The possibility of diversification from source-side is minimal in the North-eastern EU members. Primarily the allocation of a gas route from Russia may mitigate supply security risks.
2. Energy policy in the European Union is not regulated at Union level, which hinders and decelerates the unified action of member states in supply or security issues. Union members often politicize against the interests of the EU.
3. Russia – making use of the above situation – signed a bilateral agreement with Germany within the framework of the Nord Stream project, thereby having an advantage over the Union from the viewpoint of diversification<sup>21</sup>.

In summary it can be concluded that, although an interdependent relationship exists between the European Union and Russia in the field of the piped gas LOB, it can still be argued to be asymmetric in the eastern part of the Union.

### **Ukraine as the gatekeeper**

The asymmetric gas dependence of the eastern part of the EU on Russia also encumbers the energy relationships of the region with Moscow in another way. A determinant element of this problem is that the two world political and economic players are separated from each other by so-called gatekeeper countries, such as Georgia, Turkey, Belarus and Ukraine. These countries cannot be avoided when considering European exports. Their locations may afford them serious economic and political leverage.

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<sup>20</sup> The South Stream project meets diversification goals from the viewpoint of routing, however, from the viewpoint of sources, countries in the region will depend on Russian gas to an even greater extent than today, and Moscow could more firmly link countries in the Balkans and Central-Eastern Europe to itself.

<sup>21</sup> Although Germany gains an advantage from the project, since it receives the gas directly from Russia, the currently planned variant of the Nord Stream line earlier supported by the Union may withdraw the transit fees and/or the opportunity for route-diversification from countries which have a one-sided dependence on Russia. Latvia, Lithuania and Finland acquire their gas imports from Russia exclusively. Two thirds of Polish natural gas imports are supplied by Moscow.



The theory of transactional costs approaches this problem as follows: “The management and coordination of transactions involving special capital assets (in this case piped gas-trade) cannot be committed to market automatism due to their risk and accompanying uncertainty... The contract between the supplier and the customer becomes much more complex compared to those on the competitive market, and requires protection against the opportunism of the other party” (Mátyás, 1996: 620–621.). In this sense the supplier expects collateral from the customer to ensure that they do not terminate the contract before expiration, and do not misuse the dependence of the supplier on the customer. In the same way the customer expects from the supplier that they appropriately meet the contractual undertakings. A great number of such requests are usually extended to the implementation phase of the contract, which is a special risk factor, in particular when the contract becomes unfeasible due to external circumstances. The best example of this is the Russian-Ukrainian gas debates of 2006 and 2009, which inspired both Brussels and Moscow to review their energy strategy in the case of the piped gas LOB, and to formulate tactical steps different from the accustomed ones.

Unfortunately the parties have not dealt with the problems underpinning the Russian-Ukrainian gas price debate of 2006 by attempting to avoid expected disputes between Moscow and Kiev or resolving unexpected conflicts, but instead have completely and literally by-passed the existing problem.

Western countries sharply and uniformly criticized the energy policy of the Kremlin in January 2006. The conflict endangering the security of European energy supply encouraged the USA and the European Union to consider new tactical steps. A large number of publications and studies in the United States concluded that Moscow engaged the energy-weapon within the framework of an offensive energy strategy (Wallander, 2006). The European Union was also shocked by the situation that emerged, which was demonstrated by support for Ukraine and acceptance of Kiev’s standpoint. This could also be explained by the proximity of the events of the Orange Revolution. Turning off the gas taps in 2006 was often interpreted as a Russian political reckoning against western-friendly forces. A good example of the escalating anti-Russian morale in the Union is the article by the leading analyst of the Centre for European Policy Studies (CEPS), Michael Emerson (Emerson, 2006).

Although the Green Book issued by the European Commission in March 2006 laid out the necessity of a “new initiative” and the complexity of agreements between extractive and transit countries as opposed to bilateral and regional agreements, few of the conceptions were implemented by the end of 2008. The primary goal, the implementation of a pan-European energy community including the neighbourhood of the European Union, is still being awaited.

As a response to the Russian-Ukrainian gas price debate, the EU put forward the necessity of further diversifying acquisition sources (EUROPEAN COMMISSION, 2006).

Though the second Green Book continues to describe Russia as the primary partner country concerning the gas LOB, in the case of source diversification it mentions examples from among Moscow's competitors. Hence the document refers to North Africa, the Caspian-region and the Middle-East, and brings up the question of building up LNG terminals.

Reacting to the Russian-Ukrainian gas crisis at the turn of 2005/2006, the European Union urged the implementation of the Nabucco line. The most important political goal of the project was to give Europe an alternative to Russian gas, and to make import routes more diversified.

Russia is interested in sustaining and increasing European demand. To reach that goal its energy policy has been constructed on three main strategic pillars. 1. Blocking other demand-oriented countries that are, like itself, attempting to open to the west. 2. Sustaining/achieving/restoring relationships with gatekeeper transit countries that are favourable to Russia. 3. Possible diversification of transit lines.

In the first case the approach of Russia is the following: control of the natural gas reserves and transit routes of central Asian countries such as Kazakhstan, Turkmenistan and Uzbekistan, which narrows the latitude of the Nabucco project from the source-side, and thereby strengthens the Russian position in the European natural gas market.

The second pillar seems to be rather complicated. Europe has more existing and optional gatekeepers from the Russian point of view (Belarus, Ukraine, Turkey and Georgia, to mention only the most significant ones). However, Ukraine is unique as the greatest part of the Russian transit passes through it, making it necessary to modify the Russian energy strategy after the turn of 2005/2006.

It does not seem to be simple for the two countries to manage their relationship, as both have political and economic backgrounds that have the potential to sustain conflict. Russian and western-friendly forces have close to equal sway in Ukrainian interior policy. This makes the Ukrainian party system exceptionally unstable, which creates great risks not only for Russia, but also for Kiev and Brussels. The Russian-Ukrainian conflict at the turn of 2005/2006 has not been resolved and furthermore, it was inflamed to a great extent in January 2009. The relationship is further burdened by the crisis in world economics shadowing the economic outlooks of both countries.

It can also be attributable to the worsening Russian-Ukrainian relationship that it has become an emphasized goal of Moscow to build a gas line system bypassing Kiev. This purpose could be served by the Nord, Blue or South Stream projects which have the aim of delivering natural gas to Europe while excluding Ukraine.

All in all it can be argued that neither the European Union nor Russia have attempted to solve the problem (i.e. to pacify Ukraine as the gatekeeper country) in the past three years, but instead have strived for its exclusion, with limited success.

Recurrent crises since 2005 culminating in 2009 showed what serious consequences can arise when the gas pricing mechanism applied in the Union does not operate in Ukraine as a transit and at the same time gas consumption country. All-time high gas prices have been set as a result of political bargains between Russia and Ukraine. The situation was made even worse because the transactions were carried out through mediator organizations functioning amid non-transparent ownership.

Considering the fact that 80–85 per cent of Russian gas exports reach Europe through Ukraine, this central-eastern European country is an unavoidable factor in the gas imports of the Union. Although the agreement signed on 19th January 2009 seems to resolve both problems, according to which the parties convert to a quarterly accounting system similar to that of Union members, and the mediator role of RosUkrEnergO is terminated in gas trade, the debate still does not seem to be over, since the parties may have signed an agreement which substantially overloads the Ukrainian budget and economy already being in a bad state. It is anticipated that January 2009 was not the last chapter of Russian-Ukrainian gas debate.

## **Conclusion**

The gas crisis in January 2009 has revealed that the role of natural gas is of the utmost importance not only economically, but also politically. Accordingly, maintaining and increasing energy security have to be key fields of political strategy formulation. Examining the problem of natural gas, some idiosyncrasies might be uncovered as a consequence of which it can be concluded that the establishment of an effective market in the piped gas LOB is not a simple challenge. Due to the regional features of the market the all-time price is determined on the basis of individual agreements between extractors, suppliers and customers, which have not only business, but also political foundations.

The European Union and Russia – primarily due to their different endowments – formulate their energy security target system following two considerably different energy strategic approaches. The mission and objective of the former is to provide continuity of energy supply with the help of different political and economic tools, and that of the latter is to fulfil the demand, and to use the income from supply provision to realize different political and/or economic goals.

On the basis of these contradicting and supplementary goals it could be argued that the relationship between the European Union and Russia can be characterized by interdependence on the piped gas LOB. However, this viewpoint does not consider the fact that the Union has little room to manoeuvre, since its energy policy is not regulated at a community level, i.e. the authorities of the Energy Committee do not enable the implementation of a unified Union-level energy policy. It is reasonable

to analyze the relationship of the two entities, however a relevant picture can only be gained about the relationship between the two world political and economic players if the positions of the parties in the given field (in this case energy policy) are well distinguishable, and this is not the case.

Hence Moscow can take a convenient position. Since the Union does not have a significant negotiator in this field, Russia can insist on the interdependence between the two parties, and at the same time gain positions in the European markets by signing bilateral contracts. The Union assists and acquiesces to it, arguing that the community is so strong and unified that negotiations are held with Moscow on mutual terms.

This may disguise the substantive question: what relationships do separate member states keep with Moscow concerning gas affairs? The article has shown that the problem is twofold. On the one hand the eastern members of the European Union depend on Russia in an asymmetric way for several historical and geographical reasons, which are not substantially modified by the line projects currently in preparation phase. On the other hand the already overloaded relationship is further encumbered by the fact that the two world political and economic players are separated from each other by so called gatekeeper countries like Georgia, Turkey, Belarus and Ukraine. These countries cannot be avoided when considering European import, as their locations may give them the potential for serious economic and political leverage.

The situation is made even more complicated in that these countries frankly cannot be regarded as bastions of democracy. Confident relationships essential in the gas LOB are further burdened by the world-wide impact of the economic crisis, which may limit the free gas flow between extractors and customers not only due to extortive influences, but also owing to economic constraints, since emerging or incumbent gatekeepers might spontaneously counteract.

Neither the European Union nor Russia have attempted to solve the latter problem (i.e. to pacify Ukraine as a gatekeeper country) between 2006 and 2009, but have instead strived for its exclusion, with limited success.

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